



齒研平齒車

Ground Spur Gears

商品記号の読み方 Reference of Catalogue Number

SG 50 S 50 B - 80 08
 SG 80 S 100 B * 08 20
 SG 2 S 40 B - 20 20
 SGE 3 S 80 B - 30 22

| 歯車の種類 Kind of Gear | モジュールの大きさ Module | 材質 Material | 歯数 Number of Teeth | 形状 Type | 穴仕上 Bores Processed | 歯幅 Face Width | 穴径 Bore Diameter |
|---|---|---|-----------------------|---|--|---------------------------------------|---------------------------------------|
| SG : 齒研平齒車 (JIS N5 級) GROUND SPUR GEARS (JIS class 5) SGE : 齒研平齒車 (JIS N7 級) GROUND SPUR GEARS (JIS class 7) | m : 0.5 0.8 1.0 1.5 2.0 2.5 3.0 Expressed the unit of module's size. Module 0.5 and 0.8 as multiple of 100. Example m0.5 → 50 m0.8 → 80 | SG : S : SCM435、440 齒部高周波焼入 HRC49 ~ 55 Material : Chromium Molybdenum Steel, complete with high frequency Induction Hardening. (HRC49 to 55). SGE : S : S45C 齒部高周波焼入 HRC47 ~ 53 Material : carbon steel Complete with high frequency Induction Hardening. (HRC47 to 53) | Z : 14 ~ 120 | L : 両軸付き 研削仕上 with Solid shaft on both side. B : 片ハブ付き with Hub on one side. | SG : 【-】: 研削仕上 Ground bore, without threaded hole / without Set Screw. 【*】: 研削仕上 2 箇所止めねじ付き with two threaded holes / without Set Screw. SGE : 【-】: 旋削仕上 Without Threaded hole / without Set Screw | 単位 : ミリメートル Dimension : millimeter | 単位 : ミリメートル Dimension : millimeter |

半導体製造装置などメカトロ分野並びに精密機器、工作機械の精密な動きを必要とするところに、“使いやすい精密齒車”です。

KG GROUND SPUR GEARS are useful for Mechatronic fields and Semiconductor manufacturing equipment, which require steady and accurate motion for Machine Tools and other precision instruments.

歯研平歯車

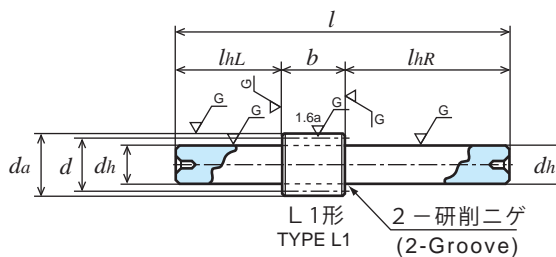
GROUND SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
 JIS B 1702-1 (ISO) 5 級
 System of accuracy: JIS B1702-1(ISO) class 5



New **ねじを2箇所 (120°配) にしました。**
締結力が1.6倍になりました。
 New item with two threaded holes (120°)
 Tightening power increased by 1.6 times.



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | キリ Tap Guide dr | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|-----------------------|----------------------|
| | | | | | | | | | | M | ls | | |
| SG50S 20L - 0806 | 20 | φ10 | φ11 | L1 | 8 | - | φ 6 (h7) | L22 R50 | 80 | - | - | - | 20.8 |
| SG50S 22L - 0808 | 22 | φ11 | φ12 | L1 | 8 | - | φ 8 (h7) | L22 R50 | 80 | - | - | - | 34.2 |
| SG50S 24L - 0810 | 24 | φ12 | φ13 | L1 | 8 | - | φ10 (h7) | L22 R50 | 80 | - | - | - | 51.1 |
| SG50S 25L - 0810 | 25 | φ12.5 | φ13.5 | L1 | 8 | - | φ10 (h7) | L22 R50 | 80 | - | - | - | 51.7 |
| SG50S 26L - 0810 | 26 | φ13 | φ14 | L1 | 8 | - | φ10 (h7) | L22 R50 | 80 | - | - | - | 52.4 |
| SG50S 28B - 0805 | 28 | φ14 | φ15 | B1 | 8 | φ5 | φ10 | 8 | 16 | - | - | - | 12.1 |
| SG50S 30B - 0805 | 30 | φ15 | φ16 | B1 | 8 | φ5 | φ12 | 8 | 16 | - | - | - | 15.6 |
| SG50S 30B - 0806 | 30 | φ15 | φ16 | B1 | 8 | φ6 | φ12 | 8 | 16 | - | - | - | 14.5 |
| SG50S 30B * 0806 | 30 | φ15 | φ16 | B1 | 8 | φ6 | φ12 | 8 | 16 | 2-M3 | 4 | - | 14.4 |
| SG50S 32B - 0805 | 32 | φ16 | φ17 | B1 | 8 | φ5 | φ12 | 8 | 16 | - | - | - | 17.2 |
| SG50S 32B - 0806 | 32 | φ16 | φ17 | B1 | 8 | φ6 | φ12 | 8 | 16 | - | - | - | 16.1 |

セットスクリューはついておりません。 [*] : Gear with Two Thread holes / without Set Screw.
 Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---|--------|--------|--------|--------|----------|----------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 20 | 8 | 108.04 | 216.08 | 324.12 | 405.15 | 486.18 | 675.25 | 810.30 |
| 22 | 8 | 124.31 | 248.63 | 372.94 | 466.17 | 559.41 | 776.95 | 932.34 |
| 24 | 8 | 140.85 | 281.70 | 422.54 | 528.18 | 633.81 | 880.30 | 1,056.36 |
| 25 | 8 | 149.23 | 298.46 | 447.69 | 559.61 | 671.53 | 932.68 | 1,119.22 |
| 26 | 8 | 157.67 | 315.34 | 473.01 | 591.26 | 709.51 | 985.43 | 1,182.52 |
| 28 | 8 | 174.71 | 349.41 | 524.12 | 655.15 | 786.18 | 1,091.91 | 1,310.30 |
| 30 | 8 | 191.83 | 383.66 | 575.50 | 719.37 | 863.24 | 1,198.95 | 1,438.74 |
| 32 | 8 | 209.19 | 418.38 | 627.57 | 784.46 | 941.35 | 1,307.43 | 1,568.92 |

歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|--------|--------|--------|--------|--------|--------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 25.17 | 50.59 | 76.25 | 95.65 | 115.17 | 161.15 | 194.36 |
| 30.61 | 61.55 | 92.81 | 116.45 | 140.25 | 196.36 | 236.91 |
| 36.59 | 73.62 | 111.05 | 139.38 | 167.91 | 235.22 | 283.88 |
| 39.79 | 80.07 | 120.81 | 151.65 | 182.72 | 256.03 | 309.05 |
| 43.13 | 86.81 | 131.00 | 164.46 | 198.18 | 277.76 | 335.34 |
| 50.22 | 101.12 | 152.66 | 191.71 | 231.06 | 324.02 | 391.30 |
| 57.86 | 116.57 | 176.05 | 221.13 | 266.60 | 374.03 | 451.82 |
| 66.06 | 133.15 | 201.17 | 252.76 | 304.79 | 427.81 | 516.93 |

The above numerical values are equivalent to JGMA formulas as reference only.
 動力の換算式は P26 をご参照ください。 Please refer to the conversion fomulas of power on page P26.

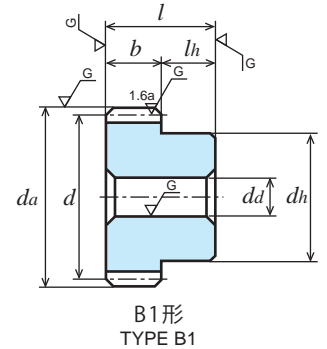
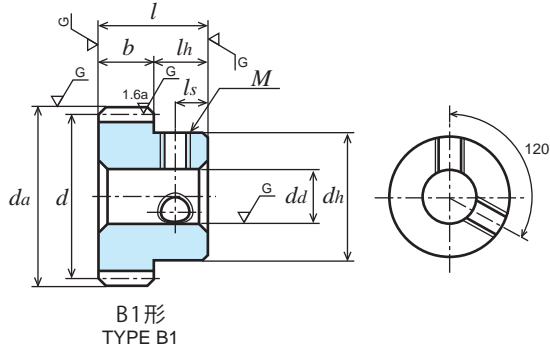
歯研平歯車 GROUND SPUR GEARS

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MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



御注文には必ず “フルネームで商品記号” を明記してください。
Please refer to the catalogue reference while ordering.



SCM435、440 クロムモリブデン鋼 (JIS G 4053) Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H7)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | キリ Tap Guide <i>dr</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|------------------------------|-----------------------------|
| | | | | | | | | | | <i>M</i> | <i>ls</i> | | |
| SG50S 35B - 0805 | 35 | φ17.5 | φ18.5 | B1 | 8 | φ5 | φ14 | 8 | 16 | - | - | - | 22.2 |
| SG50S 36B - 0806 | 36 | φ18 | φ19 | B1 | 8 | φ6 | φ16 | 8 | 16 | - | - | - | 24.9 |
| SG50S 36B - 0808 | 36 | φ18 | φ19 | B1 | 8 | φ8 | φ16 | 8 | 16 | - | - | - | 22.1 |
| SG50S 40B - 0806 | 40 | φ20 | φ21 | B1 | 8 | φ6 | φ16 | 8 | 16 | - | - | - | 28.6 |
| SG50S 40B - 0808 | 40 | φ20 | φ21 | B1 | 8 | φ8 | φ16 | 8 | 16 | - | - | - | 25.9 |
| SG50S 40B * 0808 | 40 | φ20 | φ21 | B1 | 8 | φ8 | φ16 | 8 | 16 | 2-M4 | 4 | - | 25.5 |
| SG50S 45B - 0808 | 45 | φ22.5 | φ23.5 | B1 | 8 | φ8 | φ16 | 8 | 16 | - | - | - | 31.1 |
| SG50S 48B - 0808 | 48 | φ24 | φ25 | B1 | 8 | φ8 | φ20 | 8 | 16 | - | - | - | 34.5 |

セットスクリューはついておりません。 [*] : Gear with Two Thread holes / without Set Screw.
Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|--------|----------|----------|----------|----------|----------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 35 | 8 | 235.49 | 470.97 | 706.46 | 883.07 | 1,059.69 | 1,471.79 | 1,766.14 |
| 36 | 8 | 244.32 | 488.63 | 732.95 | 916.18 | 1,099.42 | 1,526.97 | 1,832.36 |
| 40 | 8 | 279.89 | 559.78 | 839.67 | 1,049.58 | 1,259.50 | 1,749.30 | 2,091.76 |
| 42 | 8 | 297.82 | 595.64 | 893.46 | 1,116.83 | 1,340.19 | 1,861.38 | 2,217.10 |
| 44 | 8 | 315.62 | 631.24 | 946.87 | 1,183.58 | 1,420.30 | 1,972.64 | 2,340.50 |
| 45 | 8 | 324.64 | 649.28 | 973.91 | 1,217.39 | 1,460.87 | 2,028.99 | 2,402.69 |
| 48 | 8 | 351.79 | 703.58 | 1,055.38 | 1,319.22 | 1,583.07 | 2,190.95 | 2,588.62 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formulas of power on page P26.

歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|--------|--------|--------|--------|--------|----------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 79.42 | 160.18 | 242.14 | 304.34 | 367.11 | 515.63 | 623.27 | |
| 84.16 | 169.76 | 256.68 | 322.65 | 389.24 | 546.82 | 661.05 | |
| 104.51 | 211.00 | 319.25 | 401.49 | 484.56 | 681.25 | 821.03 | |
| 115.54 | 233.37 | 353.22 | 444.30 | 536.33 | 754.32 | 905.72 | |
| 127.15 | 256.91 | 388.98 | 489.39 | 590.86 | 831.31 | 994.49 | |
| 133.17 | 269.12 | 407.53 | 512.79 | 619.17 | 871.29 | 1,040.39 | |
| 152.08 | 307.52 | 465.92 | 586.43 | 708.29 | 993.65 | 1,184.13 | |

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RACKS

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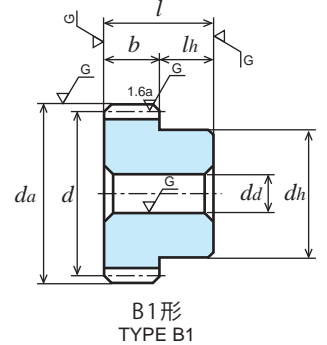
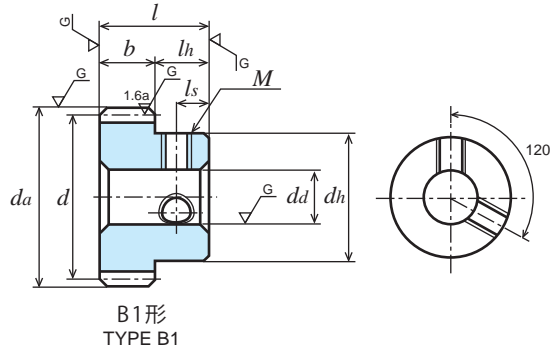
歯研平歯車 GROUND SPUR GEARS

モジュール 0.5 圧力角 20° (並歯)
MODULE 0.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



New **ねじを2箇所 (120° 配) にしました。**
締結力が 1.6 倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



SCM435、440 クロムモリブデン鋼 (JIS G 4053) Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | キリ Tap Guide dr | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|-----------------------|----------------------|
| | | | | | | | | | | M | ls | | |
| SG50S 50B - 0808 | 50 | φ25 | φ26 | B1 | 8 | φ 8 | φ20 | 8 | 16 | - | - | - | 43.9 |
| SG50S 50B - 0810 | 50 | φ25 | φ26 | B1 | 8 | φ10 | φ20 | 8 | 16 | - | - | - | 40.4 |
| SG50S 50B * 0810 | 50 | φ25 | φ26 | B1 | 8 | φ10 | φ20 | 8 | 16 | 2-M4 | 4 | - | 40.0 |
| SG50S 54B - 0808 | 54 | φ27 | φ28 | B1 | 8 | φ 8 | φ20 | 8 | 16 | - | - | - | 49.0 |
| SG50S 55B - 0808 | 55 | φ27.5 | φ28.5 | B1 | 8 | φ 8 | φ20 | 8 | 16 | - | - | - | 50.4 |
| SG50S 56B - 0808 | 56 | φ28 | φ29 | B1 | 8 | φ 8 | φ20 | 8 | 16 | - | - | - | 51.7 |
| SG50S 60B - 0808 | 60 | φ30 | φ31 | B1 | 8 | φ 8 | φ22 | 8 | 16 | - | - | - | 61.5 |
| SG50S 60B - 0810 | 60 | φ30 | φ31 | B1 | 8 | φ10 | φ22 | 8 | 16 | - | - | - | 58.0 |
| SG50S 60B * 0810 | 60 | φ30 | φ31 | B1 | 8 | φ10 | φ22 | 8 | 16 | 2-M4 | 4 | - | 57.6 |
| SG50S 64B - 0808 | 64 | φ32 | φ33 | B1 | 8 | φ 8 | φ22 | 8 | 16 | - | - | - | 67.6 |
| SG50S 70B - 0808 | 70 | φ35 | φ36 | B1 | 8 | φ 8 | φ22 | 8 | 16 | - | - | - | 77.4 |

セットスクリューはついておりません。 [*] : Gear with Two Thread holes / without Set Screw.
Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---|----------|----------|----------|----------|----------|----------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 50 | 8 | 369.97 | 739.94 | 1,109.91 | 1,387.38 | 1,664.86 | 2,296.66 | 2,711.92 |
| 52 | 8 | 388.21 | 776.41 | 1,164.62 | 1,455.78 | 1,746.93 | 2,402.07 | 2,834.73 |
| 54 | 8 | 406.49 | 812.98 | 1,219.47 | 1,524.34 | 1,829.21 | 2,507.08 | 2,956.93 |
| 55 | 8 | 415.65 | 831.31 | 1,246.96 | 1,558.70 | 1,870.44 | 2,559.46 | 3,017.83 |
| 56 | 8 | 424.83 | 849.65 | 1,274.47 | 1,593.09 | 1,911.71 | 2,611.72 | 3,078.57 |
| 60 | 8 | 461.62 | 923.25 | 1,384.87 | 1,731.08 | 2,077.30 | 2,819.79 | 3,320.04 |
| 64 | 8 | 498.57 | 997.13 | 1,495.70 | 1,869.62 | 2,242.66 | 3,023.11 | 3,559.67 |
| 70 | 8 | 554.23 | 1,108.46 | 1,662.69 | 2,078.37 | 2,475.56 | 3,332.20 | 3,927.74 |

歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|--------|----------|----------|----------|----------|----------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 165.41 | 334.61 | 507.12 | 638.42 | 771.20 | 1,078.73 | 1,284.96 | |
| 179.32 | 362.89 | 550.15 | 692.72 | 836.93 | 1,167.23 | 1,389.78 | |
| 193.81 | 392.37 | 595.01 | 749.36 | 905.50 | 1,259.13 | 1,498.55 | |
| 201.28 | 407.56 | 618.14 | 778.55 | 940.85 | 1,306.36 | 1,554.41 | |
| 208.89 | 423.05 | 641.73 | 808.33 | 976.92 | 1,354.43 | 1,611.25 | |
| 240.80 | 488.02 | 740.72 | 933.35 | 1,128.33 | 1,555.13 | 1,848.36 | |
| 275.06 | 557.86 | 847.18 | 1,067.84 | 1,290.76 | 1,769.21 | 2,101.33 | |
| 330.89 | 671.79 | 1,020.99 | 1,287.52 | 1,545.96 | 2,115.13 | 2,518.03 | |

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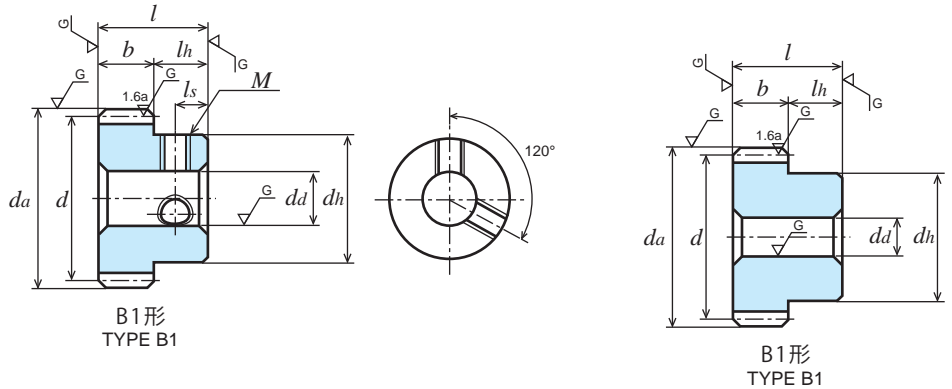
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単位 : mm
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| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | キリ Tap Guide dr | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|-----------------------|----------------------|
| | | | | | | | | | | M | ls | | |
| SG50S 72B - 0808 | 72 | φ36 | φ37 | B1 | 8 | φ 8 | φ25 | 8 | 16 | - | - | - | 87.8 |
| SG50S 75B - 0808 | 75 | φ37.5 | φ38.5 | B1 | 8 | φ 8 | φ25 | 8 | 16 | - | - | - | 93.2 |
| SG50S 80B - 0808 | 80 | φ40 | φ41 | B1 | 8 | φ 8 | φ25 | 8 | 16 | - | - | - | 102.7 |
| SG50S 80B - 0810 | 80 | φ40 | φ41 | B1 | 8 | φ10 | φ25 | 8 | 16 | - | - | - | 99.2 |
| SG50S 80B - 0812 | 80 | φ40 | φ41 | B1 | 8 | φ12 | φ25 | 8 | 16 | - | - | - | 94.9 |
| SG50S 80B * 0812 | 80 | φ40 | φ41 | B1 | 8 | φ12 | φ25 | 8 | 16 | 2-M5 | 4 | - | 94.1 |
| SG50S 90B - 0810 | 90 | φ45 | φ46 | B1 | 8 | φ10 | φ30 | 8 | 16 | - | - | - | 133.5 |
| SG50S 96B - 0810 | 96 | φ48 | φ49 | B1 | 8 | φ10 | φ30 | 8 | 16 | - | - | - | 147.1 |
| SG50S 100B - 0810 | 100 | φ50 | φ51 | B1 | 8 | φ10 | φ30 | 8 | 16 | - | - | - | 156.7 |
| SG50S 100B - 0812 | 100 | φ50 | φ51 | B1 | 8 | φ12 | φ30 | 8 | 16 | - | - | - | 152.4 |
| SG50S 100B * 0812 | 100 | φ50 | φ51 | B1 | 8 | φ12 | φ30 | 8 | 16 | 2-M5 | 4 | - | 151.5 |
| SG50S 108B - 0810 | 108 | φ54 | φ55 | B1 | 8 | φ10 | φ35 | 8 | 16 | - | - | - | 193.0 |
| SG50S 112B - 0810 | 112 | φ56 | φ57 | B1 | 8 | φ10 | φ35 | 8 | 16 | - | - | - | 203.8 |
| SG50S 120B - 0810 | 120 | φ60 | φ61 | B1 | 8 | φ10 | φ35 | 8 | 16 | - | - | - | 226.6 |

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 Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (W)

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|---------|---------|---|----------|----------|----------|----------|----------|----------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 72 | 8 | 572.84 | 1,145.69 | 1,178.53 | 2,148.17 | 2,552.72 | 3,433.30 | 4,049.63 |
| 75 | 8 | 600.84 | 1,201.61 | 1,802.41 | 2,253.02 | 2,667.98 | 3,584.01 | 4,231.63 |
| 80 | 8 | 647.54 | 1,295.08 | 1,942.62 | 2,419.70 | 2,858.90 | 3,839.99 | 4,532.93 |
| 90 | 8 | 740.43 | 1,480.87 | 2,221.30 | 2,740.03 | 3,231.68 | 4,345.90 | 5,120.65 |
| 96 | 8 | 796.77 | 1,593.54 | 2,389.35 | 2,931.46 | 3,453.87 | 4,647.97 | 5,470.63 |
| 100 | 8 | 834.38 | 1,668.76 | 2,494.32 | 3,058.06 | 3,600.58 | 4,847.65 | 5,701.55 |
| 108 | 8 | 909.75 | 1,819.50 | 2,702.70 | 3,308.89 | 3,893.39 | 5,243.00 | 6,135.59 |
| 112 | 8 | 947.51 | 1,895.02 | 2,806.16 | 3,433.16 | 4,042.91 | 5,438.74 | 6,345.45 |
| 120 | 8 | 1,023.12 | 2,046.24 | 3,011.40 | 3,679.20 | 4,339.67 | 5,826.04 | 6,757.02 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|----------|----------|----------|----------|----------|----------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 350.69 | 712.23 | 1,082.72 | 1,365.57 | 1,636.03 | 2,236.98 | 2,665.11 |
| 381.51 | 775.21 | 1,178.89 | 1,487.18 | 1,775.81 | 2,425.83 | 2,893.33 |
| 435.87 | 886.40 | 1,348.78 | 1,696.04 | 2,021.16 | 2,761.77 | 3,293.88 |
| 555.93 | 1,132.30 | 1,724.83 | 2,149.18 | 2,557.83 | 3,501.66 | 4,169.72 |
| 635.27 | 1,295.04 | 1,973.12 | 2,446.11 | 2,908.90 | 3,986.43 | 4,742.36 |
| 691.23 | 1,409.92 | 2,142.24 | 2,654.41 | 3,154.91 | 4,326.43 | 5,143.47 |
| 810.54 | 1,655.11 | 2,500.92 | 3,095.63 | 3,677.90 | 5,046.42 | 5,969.89 |
| 873.91 | 1,785.46 | 2,690.44 | 3,328.44 | 3,958.21 | 5,426.21 | 6,400.03 |
| 1,008.14 | 2,061.81 | 3,089.65 | 3,818.25 | 4,549.00 | 6,224.91 | 7,298.89 |

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 技術資料 REFERENCE DATA

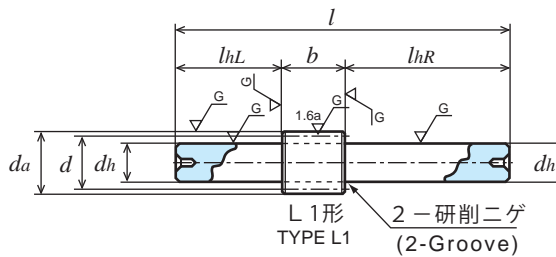
歯研平歯車 GROUND SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



New **ねじを2箇所 (120°配) にしました。**
締結力が1.6倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



SCM435、440 クロムモリブデン鋼 (JIS G 4053) Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | キリ Tap Guide dr | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|-----------------------|----------------------|
| | | | | | | | | | | M | ls | | |
| SG80S 15L - 0806 | 15 | φ12 | φ13.6 | L1 | 8 | - | φ 6 (h7) | L22 R60 | 90 | - | - | - | 25.1 |
| SG80S 16L - 0806 | 16 | φ12.8 | φ14.4 | L1 | 8 | - | φ 6 (h7) | L22 R60 | 90 | - | - | - | 26.1 |
| SG80S 18L - 0808 | 18 | φ14.4 | φ16 | L1 | 8 | - | φ 8 (h7) | L22 R60 | 90 | - | - | - | 42.3 |
| SG80S 20L - 0810 | 20 | φ16 | φ17.6 | L1 | 8 | - | φ10 (h7) | L22 R60 | 90 | - | - | - | 62.7 |
| SG80S 22B - 0806 | 22 | φ17.6 | φ19.2 | B1 | 8 | φ 6 | φ14 | 10 | 18 | - | - | - | 23.2 |
| SG80S 24L - 0810 | 24 | φ19.2 | φ20.8 | L1 | 8 | - | φ10 (h7) | L22 R60 | 90 | - | - | - | 68.3 |
| SG80S 24B - 0806 | 24 | φ19.2 | φ20.8 | B1 | 8 | φ 6 | φ16 | 10 | 18 | - | - | - | 29.8 |
| SG80S 25L - 0810 | 25 | φ20 | φ21.6 | L1 | 8 | - | φ10 (h7) | L22 R60 | 90 | - | - | - | 69.8 |
| SG80S 25B - 0806 | 25 | φ20 | φ21.6 | B1 | 8 | φ 6 | φ16 | 10 | 18 | - | - | - | 31.3 |
| SG80S 28B - 0808 | 28 | φ22.4 | φ24 | B1 | 8 | φ 8 | φ18 | 10 | 18 | - | - | - | 37.4 |
| SG80S 30B - 0810 | 30 | φ24 | φ25.6 | B1 | 8 | φ10 | φ20 | 10 | 18 | - | - | - | 41.7 |
| SG80S 30B * 0810 | 30 | φ24 | φ25.6 | B1 | 8 | φ10 | φ20 | 10 | 18 | 2-M4 | 5 | - | 41.3 |

セットスクリューはついておりません。 [*] : Gear with Two Thread holes / without Set Screw.
Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 15 | 8 | 0.17 | 0.35 | 0.52 | 0.66 | 0.79 | 1.10 | 1.32 |
| 16 | 8 | 0.19 | 0.39 | 0.58 | 0.73 | 0.88 | 1.22 | 1.46 |
| 18 | 8 | 0.23 | 0.47 | 0.70 | 0.88 | 1.06 | 1.47 | 1.76 |
| 20 | 8 | 0.27 | 0.55 | 0.82 | 1.03 | 1.24 | 1.72 | 2.07 |
| 22 | 8 | 0.31 | 0.63 | 0.95 | 1.19 | 1.43 | 1.98 | 2.38 |
| 24 | 8 | 0.36 | 0.72 | 1.08 | 1.35 | 1.62 | 2.25 | 2.70 |
| 25 | 8 | 0.38 | 0.76 | 1.14 | 1.43 | 1.71 | 2.38 | 2.85 |
| 28 | 8 | 0.44 | 0.89 | 1.34 | 1.67 | 2.01 | 2.79 | 3.31 |
| 30 | 8 | 0.49 | 0.98 | 1.47 | 1.84 | 2.20 | 3.05 | 3.61 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 0.036 | 0.075 | 0.11 | 0.13 | 0.16 | 0.23 | 0.28 |
| 0.041 | 0.084 | 0.12 | 0.15 | 0.19 | 0.26 | 0.32 |
| 0.053 | 0.107 | 0.16 | 0.20 | 0.24 | 0.34 | 0.41 |
| 0.066 | 0.133 | 0.20 | 0.25 | 0.30 | 0.42 | 0.51 |
| 0.080 | 0.162 | 0.24 | 0.30 | 0.37 | 0.52 | 0.63 |
| 0.096 | 0.193 | 0.29 | 0.36 | 0.44 | 0.62 | 0.75 |
| 0.104 | 0.211 | 0.31 | 0.40 | 0.48 | 0.68 | 0.82 |
| 0.131 | 0.266 | 0.40 | 0.50 | 0.61 | 0.86 | 1.03 |
| 0.15 | 0.30 | 0.46 | 0.58 | 0.70 | 0.99 | 1.18 |

歯研平歯車

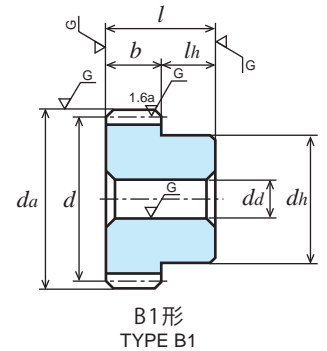
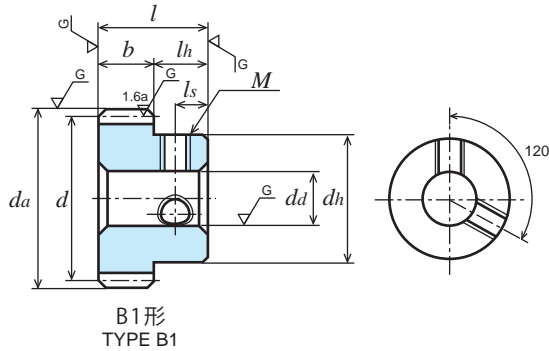
GROUND SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
 JIS B 1702-1 (ISO) 5 級
 System of accuracy: JIS B1702-1(ISO) class 5



御注文には必ず “フルネームで商品記号” を明記してください。
 Please refer to the catalogue reference while ordering.



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | キリ Tap Guide dr | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|-----------------------|----------------------|
| | | | | | | | | | | M | ls | | |
| SG80S 32B - 0810 | 32 | φ25.6 | φ27.2 | B1 | 8 | φ10 | φ20 | 10 | 18 | - | - | - | 45.6 |
| SG80S 35B - 0810 | 35 | φ28 | φ29.6 | B1 | 8 | φ10 | φ20 | 10 | 18 | - | - | - | 51.9 |
| SG80S 36B - 0810 | 36 | φ28.8 | φ30.4 | B1 | 8 | φ10 | φ20 | 10 | 18 | - | - | - | 54.1 |
| SG80S 40B - 0810 | 40 | φ32 | φ33.6 | B1 | 8 | φ10 | φ25 | 10 | 18 | - | - | - | 77.4 |
| SG80S 40B * 0812 | 40 | φ32 | φ33.6 | B1 | 8 | φ12 | φ25 | 10 | 18 | 2-M5 | 5 | - | 71.5 |
| SG80S 45B - 0810 | 45 | φ36 | φ37.6 | B1 | 8 | φ10 | φ25 | 10 | 18 | - | - | - | 90.8 |
| SG80S 48B - 0810 | 48 | φ38.4 | φ40 | B1 | 8 | φ10 | φ25 | 10 | 18 | - | - | - | 99.5 |
| SG80S 50B - 0810 | 50 | φ40 | φ41.6 | B1 | 8 | φ10 | φ25 | 10 | 18 | - | - | - | 105.6 |
| SG80S 50B * 0812 | 50 | φ40 | φ41.6 | B1 | 8 | φ12 | φ25 | 10 | 18 | 2-M5 | 5 | - | 100.0 |
| SG80S 54B - 0810 | 54 | φ43.2 | φ44.8 | B1 | 8 | φ10 | φ25 | 10 | 18 | - | - | - | 118.7 |
| SG80S 55B - 0810 | 55 | φ44 | φ45.6 | B1 | 8 | φ10 | φ25 | 10 | 18 | - | - | - | 122.1 |
| SG80S 56B - 0810 | 56 | φ44.8 | φ46.4 | B1 | 8 | φ10 | φ25 | 10 | 18 | - | - | - | 125.6 |
| SG80S 60B - 0810 | 60 | φ48 | φ49.6 | B1 | 8 | φ10 | φ25 | 10 | 18 | - | - | - | 140.1 |
| SG80S 60B * 0812 | 60 | φ48 | φ49.6 | B1 | 8 | φ12 | φ25 | 10 | 18 | 2-M5 | 5 | - | 134.8 |

セットスクリューはついておりません。 [*] : Gear with Two Thread holes / without Set Screw.
 Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 32 | 8 | 0.53 | 1.07 | 1.60 | 2.00 | 2.40 | 3.31 | 3.91 |
| 35 | 8 | 0.60 | 1.20 | 1.80 | 2.26 | 2.71 | 3.70 | 4.36 |
| 36 | 8 | 0.62 | 1.25 | 1.87 | 2.34 | 2.81 | 3.83 | 4.51 |
| 40 | 8 | 0.71 | 1.43 | 2.14 | 2.68 | 3.21 | 4.34 | 5.10 |
| 45 | 8 | 0.82 | 1.65 | 2.48 | 3.11 | 3.69 | 4.97 | 5.86 |
| 48 | 8 | 0.90 | 1.80 | 2.70 | 3.37 | 3.99 | 5.35 | 6.32 |
| 50 | 8 | 0.94 | 1.89 | 2.84 | 3.53 | 4.18 | 5.61 | 6.63 |
| 54 | 8 | 1.04 | 2.08 | 3.12 | 3.86 | 4.56 | 6.13 | 7.22 |
| 55 | 8 | 1.06 | 2.12 | 3.19 | 3.94 | 4.65 | 6.25 | 7.37 |
| 56 | 8 | 1.08 | 2.17 | 3.29 | 4.02 | 4.74 | 6.38 | 7.52 |
| 60 | 8 | 1.18 | 2.36 | 3.54 | 4.34 | 5.12 | 6.89 | 8.11 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion fomulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|------|-------|-------|-------|-------|-------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 0.17 | 0.35 | 0.53 | 0.67 | 0.81 | 1.13 | 1.34 | |
| 0.20 | 0.42 | 0.64 | 0.80 | 0.97 | 1.35 | 1.61 | |
| 0.22 | 0.44 | 0.68 | 0.85 | 1.03 | 1.43 | 1.70 | |
| 0.27 | 0.55 | 0.84 | 1.06 | 1.29 | 1.76 | 2.10 | |
| 0.35 | 0.71 | 1.08 | 1.36 | 1.63 | 2.23 | 2.66 | |
| 0.40 | 0.81 | 1.23 | 1.56 | 1.86 | 2.54 | 3.03 | |
| 0.43 | 0.88 | 1.34 | 1.69 | 2.02 | 2.76 | 3.29 | |
| 0.51 | 1.04 | 1.58 | 1.98 | 2.35 | 3.22 | 3.84 | |
| 0.53 | 1.08 | 1.64 | 2.05 | 2.44 | 3.34 | 3.98 | |
| 0.55 | 1.12 | 1.70 | 2.13 | 2.53 | 3.47 | 4.13 | |
| 0.63 | 1.29 | 1.97 | 2.44 | 2.90 | 3.98 | 4.74 | |

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 スプロケット SPROCKETS
 技術仕様書 REFERENCE DATA

歯研平歯車

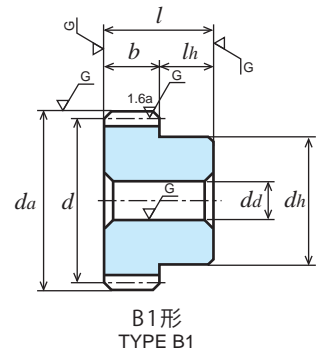
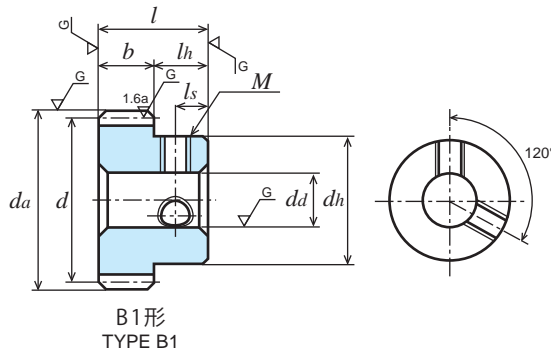
GROUND SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
 JIS B 1702-1 (ISO) 5 級
 System of accuracy: JIS B1702-1(ISO) class 5



New **ねじを2箇所 (120° 配) にしました。**
締結力が 1.6 倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | キリ Tap Guide dr | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|-----------------------|----------------------|
| | | | | | | | | | | M | ls | | |
| SG80S 64B - 0812 | 64 | φ51.2 | φ52.8 | B1 | 8 | φ12 | φ30 | 10 | 18 | - | - | - | 167.6 |
| SG80S 70B - 0812 | 70 | φ56 | φ57.6 | B1 | 8 | φ12 | φ30 | 10 | 18 | - | - | - | 192.9 |
| SG80S 72B - 0812 | 72 | φ57.6 | φ59.2 | B1 | 8 | φ12 | φ30 | 10 | 18 | - | - | - | 201.9 |
| SG80S 75B - 0812 | 75 | φ60 | φ61.6 | B1 | 8 | φ12 | φ30 | 10 | 18 | - | - | - | 215.7 |
| SG80S 80B - 0812 | 80 | φ64 | φ65.6 | B1 | 8 | φ12 | φ30 | 10 | 18 | - | - | - | 240.0 |
| SG80S 80B * 0815 | 80 | φ64 | φ65.6 | B1 | 8 | φ15 | φ30 | 10 | 18 | 2-M6 | 5 | - | 230.3 |
| SG80S 90B - 0812 | 90 | φ72 | φ73.6 | B1 | 8 | φ12 | φ35 | 10 | 18 | - | - | - | 313.2 |
| SG80S 96B - 0812 | 96 | φ76.8 | φ78.4 | B1 | 8 | φ12 | φ35 | 10 | 18 | - | - | - | 348.2 |
| SG80S 100B - 0812 | 100 | φ80 | φ81.6 | B1 | 8 | φ12 | φ35 | 10 | 18 | - | - | - | 372.8 |
| SG80S 100B * 0820 | 100 | φ80 | φ81.6 | B1 | 8 | φ20 | φ35 | 10 | 18 | 2-M6 | 5 | - | 344.9 |
| SG80S 108B - 0812 | 108 | φ86.4 | φ88 | B1 | 8 | φ12 | φ40 | 10 | 18 | - | - | - | 448.0 |
| SG80S 112B - 0812 | 112 | φ89.6 | φ91.2 | B1 | 8 | φ12 | φ40 | 10 | 18 | - | - | - | 475.6 |
| SG80S 120B - 0812 | 120 | φ96 | φ97.6 | B1 | 8 | φ12 | φ40 | 10 | 18 | - | - | - | 533.8 |
| SG80S 120B * 0820 | 120 | φ96 | φ97.6 | B1 | 8 | φ20 | φ40 | 10 | 18 | 2-M6 | 5 | - | 506.4 |

セットスクリューはついておりません。 [*] : Gear with Two Thread holes / without Set Screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 64 | 8 | 1.27 | 2.55 | 3.80 | 4.66 | 5.49 | 7.39 | 8.69 |
| 70 | 8 | 1.42 | 2.84 | 4.20 | 5.14 | 6.05 | 8.14 | 9.50 |
| 72 | 8 | 1.47 | 2.93 | 4.33 | 5.30 | 6.24 | 8.39 | 9.77 |
| 75 | 8 | 1.54 | 3.08 | 4.53 | 5.53 | 6.52 | 8.76 | 10.16 |
| 80 | 8 | 1.66 | 3.32 | 4.85 | 5.92 | 6.99 | 9.34 | 10.80 |
| 90 | 8 | 1.90 | 3.79 | 5.48 | 6.70 | 7.90 | 10.43 | 12.02 |
| 96 | 8 | 2.04 | 4.06 | 5.85 | 7.17 | 8.44 | 11.07 | 12.74 |
| 100 | 8 | 2.14 | 4.23 | 6.10 | 7.48 | 8.80 | 11.49 | 13.25 |
| 108 | 8 | 2.33 | 4.59 | 6.61 | 8.09 | 9.50 | 12.31 | 14.25 |
| 112 | 8 | 2.43 | 4.76 | 6.86 | 8.39 | 9.82 | 12.71 | 14.74 |
| 120 | 8 | 2.62 | 5.11 | 7.36 | 8.99 | 10.47 | 13.54 | 15.70 |

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| | | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|-----|---|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 64 | 8 | 0.72 | 1.48 | 2.24 | 2.78 | 3.30 | 4.53 | 5.38 |
| 70 | 8 | 0.87 | 1.79 | 2.69 | 3.33 | 3.96 | 5.43 | 6.40 |
| 72 | 8 | 0.93 | 1.89 | 2.85 | 3.52 | 4.19 | 5.74 | 6.75 |
| 75 | 8 | 1.01 | 2.06 | 3.09 | 3.82 | 4.55 | 6.22 | 7.30 |
| 80 | 8 | 1.15 | 2.36 | 3.52 | 4.34 | 5.18 | 7.06 | 8.25 |
| 90 | 8 | 1.47 | 3.02 | 4.45 | 5.51 | 6.56 | 8.83 | 10.29 |
| 96 | 8 | 1.68 | 3.43 | 5.06 | 6.27 | 7.46 | 9.98 | 11.61 |
| 100 | 8 | 1.83 | 3.73 | 5.48 | 6.80 | 8.09 | 10.78 | 12.56 |
| 108 | 8 | 2.15 | 4.35 | 6.40 | 7.94 | 9.42 | 12.45 | 14.57 |
| 112 | 8 | 2.32 | 4.68 | 6.89 | 8.54 | 10.10 | 13.33 | 15.62 |
| 120 | 8 | 2.68 | 5.37 | 7.92 | 9.80 | 11.53 | 15.20 | 17.82 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯研平歯車

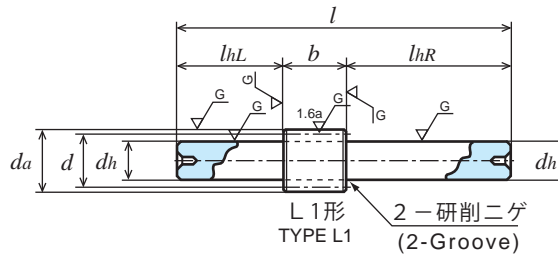
GROUND SPUR GEARS

モジュール
MODULE

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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | キリ Tap Guide dr | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|-----------------------|----------------------|
| | | | | | | | | | | M | ls | | |
| SG1S 14L - 1008 | 14 | φ14 | φ16 | L1 | 10 | - | φ 8 (h7) | L25 R60 | 95 | - | - | - | 45.3 |
| SG1S 15L - 1010 | 15 | φ15 | φ17 | L1 | 10 | - | φ10 (h7) | L25 R60 | 95 | - | - | - | 65.9 |
| SG1S 16L - 1010 | 16 | φ16 | φ18 | L1 | 10 | - | φ10 (h7) | L25 R60 | 95 | - | - | - | 67.8 |
| SG1S 17B - 1006 | 17 | φ17 | φ19 | B1 | 10 | φ 6 | φ12 | 10 | 20 | - | - | - | 22.1 |
| SG1S 18L - 1010 | 18 | φ18 | φ20 | L1 | 10 | - | φ10 (h7) | L25 R60 | 95 | - | - | - | 71.9 |
| SG1S 18B - 1008 | 18 | φ18 | φ20 | B1 | 10 | φ 8 | φ15 | 10 | 20 | - | - | - | 25.8 |
| SG1S 20B - 1008 | 20 | φ20 | φ22 | B1 | 10 | φ 8 | φ16 | 10 | 20 | - | - | - | 32.3 |
| SG1S 20B * 1008 | 20 | φ20 | φ22 | B1 | 10 | φ 8 | φ16 | 10 | 20 | 2-M4 | 5 | - | 32.0 |
| SG1S 20B * 1010 | 20 | φ20 | φ22 | B1 | 10 | φ10 | φ16 | 10 | 20 | 2-M4 | 5 | - | 27.7 |
| SG1S 21B - 1008 | 21 | φ21 | φ23 | B1 | 10 | φ 8 | φ16 | 10 | 20 | - | - | - | 34.9 |
| SG1S 22B - 1008 | 22 | φ22 | φ24 | B1 | 10 | φ 8 | φ18 | 10 | 20 | - | - | - | 41.7 |
| SG1S 23B - 1008 | 23 | φ23 | φ25 | B1 | 10 | φ 8 | φ18 | 10 | 20 | - | - | - | 44.4 |

セットスクリューはついておりません。 [*] : Gear with Two Thread holes / without Set Screw.
Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 14 | 10 | 0.30 | 0.61 | 0.92 | 1.15 | 1.38 | 1.92 | 2.30 |
| 15 | 10 | 0.34 | 0.68 | 1.03 | 1.29 | 1.55 | 2.15 | 2.58 |
| 16 | 10 | 0.38 | 0.76 | 1.14 | 1.43 | 1.72 | 2.39 | 2.87 |
| 17 | 10 | 0.42 | 0.84 | 1.26 | 1.57 | 1.89 | 2.63 | 3.15 |
| 18 | 10 | 0.46 | 0.92 | 1.38 | 1.72 | 2.07 | 2.87 | 3.45 |
| 20 | 10 | 0.54 | 1.08 | 1.62 | 2.02 | 2.43 | 3.37 | 4.03 |
| 21 | 10 | 0.58 | 1.16 | 1.74 | 2.17 | 2.61 | 3.62 | 4.32 |
| 22 | 10 | 0.62 | 1.24 | 1.86 | 2.33 | 2.79 | 3.88 | 4.60 |
| 23 | 10 | 0.66 | 1.32 | 1.98 | 2.48 | 2.98 | 4.14 | 4.89 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 0.062 | 0.12 | 0.19 | 0.23 | 0.28 | 0.40 | 0.48 |
| 0.072 | 0.14 | 0.22 | 0.27 | 0.33 | 0.46 | 0.56 |
| 0.082 | 0.16 | 0.25 | 0.31 | 0.38 | 0.53 | 0.64 |
| 0.093 | 0.18 | 0.28 | 0.35 | 0.43 | 0.60 | 0.73 |
| 0.105 | 0.21 | 0.32 | 0.40 | 0.48 | 0.68 | 0.82 |
| 0.130 | 0.26 | 0.39 | 0.50 | 0.60 | 0.85 | 1.02 |
| 0.144 | 0.29 | 0.44 | 0.55 | 0.67 | 0.94 | 1.13 |
| 0.158 | 0.32 | 0.48 | 0.61 | 0.73 | 1.03 | 1.24 |
| 0.174 | 0.35 | 0.53 | 0.67 | 0.81 | 1.14 | 1.35 |

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GROUND SPUR GEARS

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MODULE

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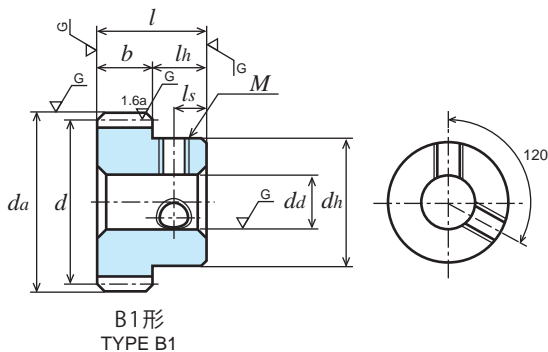
圧力角 20° (並歯)

20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



New **ねじを2箇所 (120° 配) にしました。**
締結力が 1.6 倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | キリ Tap Guide <i>dr</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|------------------------------|------------------------------|
| | | | | | | | | | | <i>M</i> | <i>ls</i> | | |
| SG1S 24B - 1008 | 24 | φ24 | φ26 | B1 | 10 | φ 8 | φ20 | 10 | 20 | - | - | - | 51.9 |
| SG1S 24B * 1008 | 24 | φ24 | φ26 | B1 | 10 | φ 8 | φ20 | 10 | 20 | 2-M4 | 5 | - | 51.4 |
| SG1S 24B * 1010 | 24 | φ24 | φ26 | B1 | 10 | φ10 | φ20 | 10 | 20 | 2-M4 | 5 | - | 47.1 |
| SG1S 25B - 1008 | 25 | φ25 | φ27 | B1 | 10 | φ 8 | φ20 | 10 | 20 | - | - | - | 55.0 |
| SG1S 26B - 1008 | 26 | φ26 | φ28 | B1 | 10 | φ 8 | φ20 | 10 | 20 | - | - | - | 58.1 |
| SG1S 27B - 1008 | 27 | φ27 | φ29 | B1 | 10 | φ 8 | φ20 | 10 | 20 | - | - | - | 61.3 |
| SG1S 28B - 1008 | 28 | φ28 | φ30 | B1 | 10 | φ 8 | φ20 | 10 | 20 | - | - | - | 64.7 |
| SG1S 30B - 1010 | 30 | φ30 | φ32 | B1 | 10 | φ10 | φ26 | 10 | 20 | - | - | - | 84.3 |
| SG1S 30B * 1010 | 30 | φ30 | φ32 | B1 | 10 | φ10 | φ26 | 10 | 20 | 2-M4 | 5 | - | 83.7 |
| SG1S 30B * 1012 | 30 | φ30 | φ32 | B1 | 10 | φ12 | φ26 | 10 | 20 | 2-M4 | 5 | - | 78.5 |
| SG1S 32B - 1010 | 32 | φ32 | φ34 | B1 | 10 | φ10 | φ26 | 10 | 20 | - | - | - | 91.9 |
| SG1S 34B - 1010 | 34 | φ34 | φ36 | B1 | 10 | φ10 | φ26 | 10 | 20 | - | - | - | 100.0 |

セットスクリューはついておりません。 [*] : Gear with Two Thread holes / without Set Screw.
Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 24 | 10 | 0.70 | 1.40 | 2.11 | 2.64 | 3.16 | 4.38 | 5.18 |
| 25 | 10 | 0.74 | 1.49 | 2.23 | 2.79 | 3.35 | 4.63 | 5.46 |
| 26 | 10 | 0.78 | 1.57 | 2.36 | 2.95 | 3.54 | 4.87 | 5.75 |
| 27 | 10 | 0.83 | 1.66 | 2.49 | 3.11 | 3.73 | 5.12 | 6.04 |
| 28 | 10 | 0.87 | 1.74 | 2.62 | 3.27 | 3.93 | 5.37 | 6.33 |
| 30 | 10 | 0.95 | 1.91 | 2.87 | 3.59 | 4.31 | 5.85 | 6.89 |
| 32 | 10 | 1.04 | 2.09 | 3.13 | 3.92 | 4.70 | 6.34 | 7.46 |
| 34 | 10 | 1.13 | 2.26 | 3.40 | 4.25 | 5.07 | 6.83 | 8.05 |

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|------|-------|-------|-------|-------|-------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 0.190 | 0.38 | 0.58 | 0.73 | 0.88 | 1.24 | 1.48 | |
| 0.20 | 0.41 | 0.63 | 0.79 | 0.96 | 1.34 | 1.60 | |
| 0.22 | 0.45 | 0.68 | 0.86 | 1.04 | 1.45 | 1.73 | |
| 0.24 | 0.49 | 0.74 | 0.93 | 1.13 | 1.57 | 1.87 | |
| 0.26 | 0.52 | 0.80 | 1.01 | 1.22 | 1.69 | 2.01 | |
| 0.30 | 0.61 | 0.92 | 1.16 | 1.41 | 1.94 | 2.31 | |
| 0.34 | 0.69 | 1.05 | 1.33 | 1.61 | 2.21 | 2.62 | |
| 0.38 | 0.79 | 1.20 | 1.51 | 1.82 | 2.49 | 2.96 | |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion fomulas of power on page P26.

齒研平齒車

GROUND SPUR GEARS

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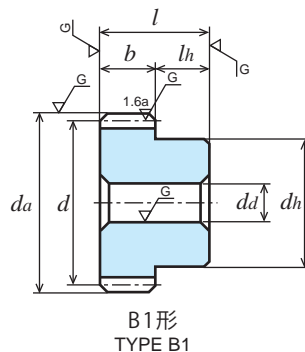
1

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | キリ Tap Guide <i>dr</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|------------------------------|------------------------------|
| | | | | | | | | | | <i>M</i> | <i>ls</i> | | |
| SG1S 35B - 1010 | 35 | φ35 | φ37 | B1 | 10 | φ10 | φ26 | 10 | 20 | - | - | - | 104.2 |
| SG1S 36B - 1010 | 36 | φ36 | φ38 | B1 | 10 | φ10 | φ26 | 10 | 20 | - | - | - | 108.6 |
| SG1S 38B - 1010 | 38 | φ38 | φ40 | B1 | 10 | φ10 | φ26 | 10 | 20 | - | - | - | 117.6 |
| SG1S 40B - 1010 | 40 | φ40 | φ42 | B1 | 10 | φ10 | φ26 | 10 | 20 | - | - | - | 127.1 |
| SG1S 40B - 1012 | 40 | φ40 | φ42 | B1 | 10 | φ12 | φ26 | 10 | 20 | - | - | - | 121.7 |
| SG1S 40B - 1015 | 40 | φ40 | φ42 | B1 | 10 | φ15 | φ26 | 10 | 20 | - | - | - | 111.8 |
| SG1S 42B - 1010 | 42 | φ42 | φ44 | B1 | 10 | φ10 | φ35 | 10 | 20 | - | - | - | 170.9 |
| SG1S 44B - 1010 | 44 | φ44 | φ46 | B1 | 10 | φ10 | φ35 | 10 | 20 | - | - | - | 181.4 |
| SG1S 45B - 1012 | 45 | φ45 | φ47 | B1 | 10 | φ12 | φ35 | 10 | 20 | - | - | - | 181.5 |
| SG1S 48B - 1012 | 48 | φ48 | φ50 | B1 | 10 | φ12 | φ35 | 10 | 20 | - | - | - | 198.5 |
| SG1S 50B - 1012 | 50 | φ50 | φ52 | B1 | 10 | φ12 | φ35 | 10 | 20 | - | - | - | 210.6 |
| SG1S 50B - 1015 | 50 | φ50 | φ52 | B1 | 10 | φ15 | φ35 | 10 | 20 | - | - | - | 200.6 |
| SG1S 50B - 1016 | 50 | φ50 | φ52 | B1 | 10 | φ16 | φ35 | 10 | 20 | - | - | - | 196.8 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 35 | 10 | 1.17 | 2.35 | 3.53 | 4.41 | 5.25 | 7.07 | 8.34 |
| 36 | 10 | 1.22 | 2.44 | 3.66 | 4.58 | 5.44 | 7.32 | 8.63 |
| 38 | 10 | 1.31 | 2.62 | 3.93 | 4.93 | 5.81 | 7.80 | 9.21 |
| 40 | 10 | 1.40 | 2.88 | 4.20 | 5.23 | 6.18 | 8.30 | 9.80 |
| 42 | 10 | 1.49 | 2.98 | 4.47 | 5.54 | 6.54 | 8.79 | 10.37 |
| 44 | 10 | 1.58 | 3.16 | 4.73 | 5.85 | 6.90 | 9.28 | 10.94 |
| 45 | 10 | 1.62 | 3.25 | 4.87 | 6.01 | 7.08 | 9.53 | 11.23 |
| 48 | 10 | 1.76 | 3.52 | 5.27 | 6.47 | 7.62 | 10.26 | 12.08 |
| 50 | 10 | 1.85 | 3.70 | 5.53 | 6.78 | 7.98 | 10.75 | 12.64 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 0.41 | 0.83 | 1.27 | 1.60 | 1.93 | 2.64 | 3.14 |
| 0.43 | 0.89 | 1.35 | 1.70 | 2.04 | 2.79 | 3.33 |
| 0.49 | 0.99 | 1.51 | 1.91 | 2.27 | 3.11 | 3.71 |
| 0.54 | 1.11 | 1.69 | 2.12 | 2.53 | 3.45 | 4.12 |
| 0.60 | 1.23 | 1.87 | 2.34 | 2.79 | 3.81 | 4.54 |
| 0.66 | 1.35 | 2.06 | 2.57 | 3.06 | 4.18 | 4.98 |
| 0.69 | 1.42 | 2.16 | 2.69 | 3.20 | 4.38 | 5.21 |
| 0.79 | 1.62 | 2.47 | 3.06 | 3.64 | 4.98 | 5.93 |
| 0.86 | 1.76 | 2.68 | 3.32 | 3.94 | 5.41 | 6.43 |

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かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

技術資料
REFERENCE DATA

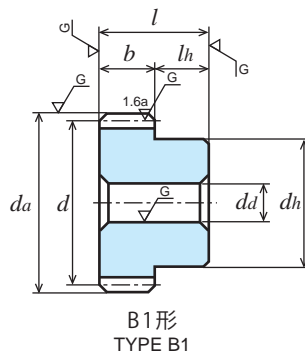
歯研平歯車 GROUND SPUR GEARS

モジュール
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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



SCM435、440 クロムモリブデン鋼 (JIS G 4053) Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>dd</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | キリ Tap Guide <i>dr</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|------------------------------|------------------------------|
| | | | | | | | | | | <i>M</i> | <i>ls</i> | | |
| SG1S 52B - 1012 | 52 | φ52 | φ54 | B1 | 10 | φ12 | φ35 | 10 | 20 | - | - | - | 228.4 |
| SG1S 54B - 1012 | 54 | φ54 | φ56 | B1 | 10 | φ12 | φ35 | 10 | 20 | - | - | - | 236.0 |
| SG1S 55B - 1012 | 55 | φ55 | φ57 | B1 | 10 | φ12 | φ35 | 10 | 20 | - | - | - | 248.1 |
| SG1S 56B - 1012 | 56 | φ56 | φ58 | B1 | 10 | φ12 | φ35 | 10 | 20 | - | - | - | 249.5 |
| SG1S 60B - 1012 | 60 | φ60 | φ62 | B1 | 10 | φ12 | φ40 | 10 | 20 | - | - | - | 300.9 |
| SG1S 60B - 1015 | 60 | φ60 | φ62 | B1 | 10 | φ15 | φ40 | 10 | 20 | - | - | - | 291.0 |
| SG1S 60B - 1018 | 60 | φ60 | φ62 | B1 | 10 | φ18 | φ40 | 10 | 20 | - | - | - | 278.9 |
| SG1S 64B - 1012 | 64 | φ64 | φ66 | B1 | 10 | φ12 | φ40 | 10 | 20 | - | - | - | 331.3 |
| SG1S 70B - 1012 | 70 | φ70 | φ72 | B1 | 10 | φ12 | φ40 | 10 | 20 | - | - | - | 380.6 |
| SG1S 72B - 1012 | 72 | φ72 | φ74 | B1 | 10 | φ12 | φ45 | 10 | 20 | - | - | - | 424.0 |
| SG1S 75B - 1012 | 75 | φ75 | φ77 | B1 | 10 | φ12 | φ45 | 10 | 20 | - | - | - | 451.0 |

Gear tooth surface completed with induction hhardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 52 | 10 | 1.94 | 3.88 | 5.78 | 7.09 | 8.34 | 11.23 | 13.18 |
| 54 | 10 | 2.03 | 4.06 | 6.04 | 7.39 | 8.70 | 11.71 | 13.71 |
| 55 | 10 | 2.08 | 4.16 | 6.16 | 7.54 | 8.88 | 11.95 | 13.97 |
| 56 | 10 | 2.12 | 4.25 | 6.29 | 7.70 | 9.06 | 12.19 | 14.23 |
| 60 | 10 | 2.31 | 4.62 | 6.79 | 8.30 | 9.79 | 13.14 | 15.24 |
| 64 | 10 | 2.49 | 4.99 | 7.29 | 8.90 | 10.51 | 14.04 | 16.24 |
| 70 | 10 | 2.77 | 5.54 | 8.03 | 9.82 | 11.58 | 15.34 | 17.69 |
| 72 | 10 | 2.86 | 5.73 | 8.28 | 10.12 | 11.94 | 15.76 | 18.16 |
| 75 | 10 | 3.00 | 5.99 | 8.64 | 10.58 | 12.47 | 16.39 | 18.86 |

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|------|-------|-------|-------|-------|-------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 0.94 | 1.91 | 2.90 | 3.59 | 4.26 | 5.85 | 6.94 | |
| 1.01 | 2.07 | 3.13 | 3.87 | 4.60 | 6.31 | 7.46 | |
| 1.05 | 2.15 | 3.24 | 4.01 | 4.77 | 6.54 | 7.73 | |
| 1.09 | 2.23 | 3.36 | 4.16 | 4.95 | 6.78 | 8.00 | |
| 1.26 | 2.58 | 3.86 | 4.77 | 5.69 | 7.78 | 9.12 | |
| 1.44 | 2.95 | 4.39 | 5.43 | 6.47 | 8.82 | 10.31 | |
| 1.73 | 3.56 | 5.26 | 6.50 | 7.75 | 10.47 | 12.20 | |
| 1.84 | 3.77 | 5.56 | 6.88 | 8.20 | 11.04 | 12.86 | |
| 2.00 | 4.09 | 6.03 | 7.47 | 8.90 | 11.93 | 13.88 | |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯研平歯車

GROUND SPUR GEARS

モジュール
MODULE

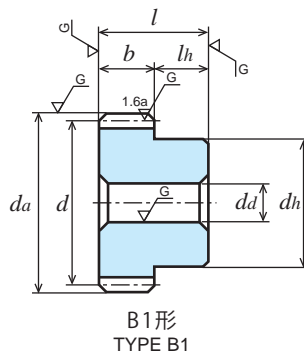
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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | キリ Tap Guide <i>dr</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|------------------------------|------------------------------|
| | | | | | | | | | | <i>M</i> | <i>ls</i> | | |
| SG1S 80B - 1012 | 80 | φ 80 | φ 82 | B1 | 10 | φ12 | φ45 | 10 | 20 | - | - | - | 498.5 |
| SG1S 80B - 1015 | 80 | φ 80 | φ 82 | B1 | 10 | φ15 | φ45 | 10 | 20 | - | - | - | 488.6 |
| SG1S 80B - 1020 | 80 | φ 80 | φ 82 | B1 | 10 | φ20 | φ45 | 10 | 20 | - | - | - | 467.1 |
| SG1S 90B - 1015 | 90 | φ 90 | φ 92 | B1 | 10 | φ15 | φ50 | 10 | 20 | - | - | - | 621.8 |
| SG1S 96B - 1015 | 96 | φ 96 | φ 98 | B1 | 10 | φ15 | φ50 | 10 | 20 | - | - | - | 690.2 |
| SG1S 100B - 1012 | 100 | φ100 | φ102 | B1 | 10 | φ12 | φ50 | 10 | 20 | - | - | - | 748.1 |
| SG1S 100B - 1015 | 100 | φ100 | φ102 | B1 | 10 | φ15 | φ50 | 10 | 20 | - | - | - | 738.2 |
| SG1S 100B - 1020 | 100 | φ100 | φ102 | B1 | 10 | φ20 | φ50 | 10 | 20 | - | - | - | 716.8 |
| SG1S 108B - 1015 | 108 | φ108 | φ110 | B1 | 10 | φ15 | φ50 | 10 | 20 | - | - | - | 840.1 |
| SG1S 112B - 1015 | 112 | φ112 | φ114 | B1 | 10 | φ15 | φ50 | 10 | 20 | - | - | - | 894.0 |
| SG1S 120B - 1015 | 120 | φ120 | φ122 | B1 | 10 | φ15 | φ50 | 10 | 20 | - | - | - | 1007.7 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 80 | 10 | 3.24 | 6.42 | 9.25 | 11.33 | 13.34 | 17.42 | 20.08 |
| 90 | 10 | 3.70 | 7.26 | 10.47 | 12.80 | 14.98 | 19.37 | 22.47 |
| 96 | 10 | 3.98 | 7.77 | 11.20 | 13.68 | 15.92 | 20.59 | 23.88 |
| 100 | 10 | 4.17 | 8.10 | 11.68 | 14.25 | 16.53 | 21.40 | 24.80 |
| 108 | 10 | 4.55 | 8.76 | 12.64 | 15.34 | 17.73 | 23.01 | 26.60 |
| 112 | 10 | 4.74 | 9.09 | 13.11 | 15.86 | 18.32 | 23.80 | 27.48 |
| 120 | 10 | 5.12 | 9.74 | 14.05 | 16.89 | 19.46 | 25.34 | 28.97 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 2.29 | 4.66 | 6.85 | 8.51 | 10.12 | 13.48 | 15.70 | |
| 2.92 | 5.90 | 8.69 | 10.77 | 12.74 | 16.80 | 19.69 | |
| 3.34 | 6.72 | 9.90 | 12.25 | 14.41 | 19.00 | 22.28 | |
| 3.64 | 7.29 | 10.74 | 13.28 | 15.57 | 20.56 | 24.07 | |
| 4.27 | 8.50 | 12.53 | 15.42 | 18.01 | 23.84 | 27.84 | |
| 4.61 | 9.13 | 13.48 | 16.53 | 19.29 | 25.55 | 29.80 | |
| 5.32 | 10.48 | 15.47 | 18.85 | 21.95 | 29.13 | 33.64 | |

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WORMS AND WORM GEARS

かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

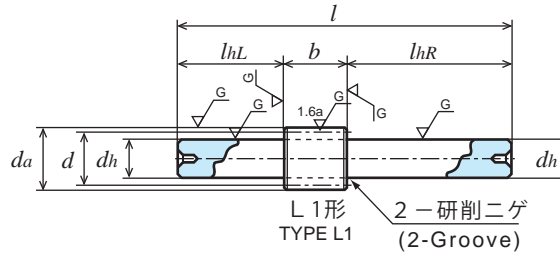
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歯研平歯車

GROUND SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
 JIS B 1702-1 (ISO) 5 級相当
 System of accuracy: JIS B1702-1(ISO) class 5



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| SG1.5S 14L - 1512 | 14 | φ21 | φ24 | L1 | 15 | - | φ12(h7) | L25 R60 | 100 | 0.12 |
| SG1.5S 15L - 1512 | 15 | φ22.5 | φ25.5 | L1 | 15 | - | φ12(h7) | L25 R60 | 100 | 0.12 |
| SG1.5S 15B - 1510 | 15 | φ22.5 | φ25.5 | B1 | 15 | φ10 | φ18 | 15 | 30 | 0.06 |
| SG1.5S 16L - 1512 | 16 | φ24 | φ27 | L1 | 15 | - | φ12(h7) | L25 R60 | 100 | 0.13 |
| SG1.5S 16B - 1510 | 16 | φ24 | φ27 | B1 | 15 | φ10 | φ18 | 15 | 30 | 0.06 |
| SG1.5S 18L - 1512 | 18 | φ27 | φ30 | L1 | 15 | - | φ12(h7) | L25 R60 | 100 | 0.14 |
| SG1.5S 18B - 1512 | 18 | φ27 | φ30 | B1 | 15 | φ12 | φ22 | 15 | 30 | 0.08 |
| SG1.5S 20B - 1512 | 20 | φ30 | φ33 | B1 | 15 | φ12 | φ22 | 15 | 30 | 0.10 |
| SG1.5S 22B - 1512 | 22 | φ33 | φ36 | B1 | 15 | φ12 | φ25 | 15 | 30 | 0.13 |
| SG1.5S 24B - 1515 | 24 | φ36 | φ39 | B1 | 15 | φ15 | φ30 | 15 | 30 | 0.16 |
| SG1.5S 25B - 1515 | 25 | φ37.5 | φ40.5 | B1 | 15 | φ15 | φ30 | 15 | 30 | 0.17 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 14 | 15 | 1.03 | 2.07 | 3.11 | 3.89 | 4.67 | 6.49 | 7.73 |
| 15 | 15 | 1.16 | 2.32 | 3.49 | 4.36 | 5.23 | 7.27 | 8.61 |
| 16 | 15 | 1.29 | 2.58 | 3.87 | 4.84 | 5.81 | 8.04 | 9.50 |
| 18 | 15 | 1.55 | 3.11 | 4.66 | 5.82 | 6.99 | 9.58 | 11.30 |
| 20 | 15 | 1.82 | 3.65 | 5.47 | 6.84 | 8.20 | 11.14 | 13.11 |
| 22 | 15 | 2.10 | 4.20 | 6.29 | 7.87 | 9.41 | 12.69 | 14.94 |
| 24 | 15 | 2.38 | 4.75 | 7.13 | 8.91 | 10.59 | 14.25 | 16.80 |
| 25 | 15 | 2.52 | 5.04 | 7.55 | 9.44 | 11.18 | 15.02 | 17.74 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 0.21 | 0.43 | 0.66 | 0.83 | 1.00 | 1.41 | 1.69 |
| 0.24 | 0.50 | 0.76 | 0.96 | 1.16 | 1.63 | 1.95 |
| 0.28 | 0.57 | 0.87 | 1.09 | 1.32 | 1.86 | 2.20 |
| 0.36 | 0.74 | 1.12 | 1.41 | 1.70 | 2.36 | 2.81 |
| 0.45 | 0.92 | 1.39 | 1.75 | 2.12 | 2.92 | 3.47 |
| 0.55 | 1.11 | 1.69 | 2.14 | 2.57 | 3.53 | 4.19 |
| 0.66 | 1.34 | 2.03 | 2.56 | 3.07 | 4.19 | 5.00 |
| 0.72 | 1.45 | 2.21 | 2.79 | 3.33 | 4.55 | 5.42 |

歯研平歯車

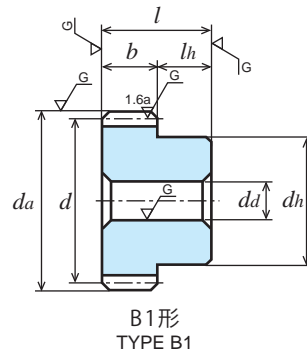
GROUND SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
 JIS B 1702-1 (ISO) 5 級
 System of accuracy: JIS B1702-1(ISO) class 5



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| SG1.5S 26B - 1515 | 26 | φ39 | φ42 | B1 | 15 | φ15 | φ30 | 15 | 30 | 0.18 |
| SG1.5S 28B - 1515 | 28 | φ42 | φ45 | B1 | 15 | φ15 | φ30 | 15 | 30 | 0.20 |
| SG1.5S 30B - 1515 | 30 | φ45 | φ48 | B1 | 15 | φ15 | φ35 | 15 | 30 | 0.26 |
| SG1.5S 32B - 1515 | 32 | φ48 | φ51 | B1 | 15 | φ15 | φ35 | 15 | 30 | 0.28 |
| SG1.5S 34B - 1515 | 34 | φ51 | φ54 | B1 | 15 | φ15 | φ35 | 15 | 30 | 0.31 |
| SG1.5S 35B - 1515 | 35 | φ52.5 | φ55.5 | B1 | 15 | φ15 | φ35 | 15 | 30 | 0.36 |
| SG1.5S 36B - 1515 | 36 | φ54 | φ57 | B1 | 15 | φ15 | φ40 | 15 | 30 | 0.37 |
| SG1.5S 40B - 1515 | 40 | φ60 | φ63 | B1 | 15 | φ15 | φ40 | 15 | 30 | 0.44 |
| SG1.5S 42B - 1515 | 42 | φ63 | φ66 | B1 | 15 | φ15 | φ40 | 15 | 30 | 0.47 |
| SG1.5S 45B - 1520 | 45 | φ67.5 | φ70.5 | B1 | 15 | φ20 | φ50 | 15 | 30 | 0.57 |
| SG1.5S 48B - 1520 | 48 | φ72 | φ75 | B1 | 15 | φ20 | φ50 | 15 | 30 | 0.63 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 26 | 15 | 2.66 | 5.32 | 7.98 | 9.96 | 11.77 | 15.81 | 18.67 |
| 28 | 15 | 2.95 | 5.90 | 8.84 | 10.97 | 12.96 | 17.41 | 20.54 |
| 30 | 15 | 3.24 | 6.47 | 9.71 | 11.98 | 14.13 | 19.00 | 22.39 |
| 32 | 15 | 3.53 | 7.06 | 10.59 | 12.99 | 15.30 | 20.59 | 24.24 |
| 34 | 15 | 3.83 | 7.65 | 11.42 | 13.99 | 16.47 | 22.18 | 26.08 |
| 35 | 15 | 3.97 | 7.95 | 11.83 | 14.49 | 17.05 | 22.97 | 26.94 |
| 36 | 15 | 4.12 | 8.25 | 12.25 | 15.00 | 17.64 | 23.76 | 27.81 |
| 40 | 15 | 4.72 | 9.45 | 13.90 | 16.98 | 20.03 | 26.90 | 31.19 |
| 42 | 15 | 5.03 | 10.05 | 14.72 | 17.97 | 21.22 | 28.40 | 32.85 |
| 45 | 15 | 5.48 | 10.96 | 15.94 | 19.47 | 22.98 | 30.55 | 35.27 |
| 48 | 15 | 5.94 | 11.87 | 17.16 | 20.98 | 24.74 | 32.67 | 37.64 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 0.78 | 1.58 | 2.40 | 3.02 | 3.60 | 4.92 | 5.87 |
| 0.90 | 1.84 | 2.80 | 3.51 | 4.18 | 5.71 | 6.81 |
| 1.04 | 2.12 | 3.23 | 4.03 | 4.80 | 6.57 | 7.82 |
| 1.19 | 2.43 | 3.70 | 4.59 | 5.45 | 7.47 | 8.89 |
| 1.35 | 2.75 | 4.18 | 5.18 | 6.15 | 8.44 | 10.03 |
| 1.43 | 2.93 | 4.43 | 5.49 | 6.52 | 8.94 | 10.60 |
| 1.52 | 3.10 | 4.69 | 5.80 | 6.90 | 9.46 | 11.19 |
| 1.89 | 3.87 | 5.79 | 7.16 | 8.53 | 11.67 | 13.69 |
| 2.09 | 4.28 | 6.39 | 7.89 | 9.41 | 12.83 | 15.01 |
| 2.41 | 4.94 | 7.33 | 9.06 | 10.81 | 14.65 | 17.10 |
| 2.76 | 5.66 | 8.34 | 10.32 | 12.30 | 16.56 | 19.29 |

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スプロケット
SPROCKETS

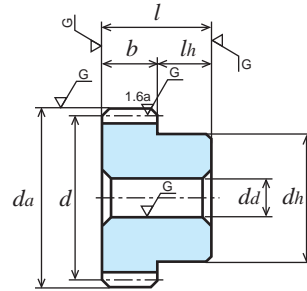
技術データ
REFERENCE DATA

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GROUND SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
 JIS B 1702-1 (ISO) 5 級
 System of accuracy: JIS B1702-1(ISO) class 5



B1形
TYPE B1

SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| SG1.5S 50B - 1520 | 50 | φ 75 | φ 78 | B1 | 15 | φ20 | φ50 | 15 | 30 | 0.67 |
| SG1.5S 52B - 1520 | 52 | φ 78 | φ 81 | B1 | 15 | φ20 | φ50 | 15 | 30 | 0.72 |
| SG1.5S 55B - 1520 | 55 | φ 82.5 | φ 85.5 | B1 | 15 | φ20 | φ50 | 15 | 30 | 0.78 |
| SG1.5S 56B - 1520 | 56 | φ 84 | φ 87 | B1 | 15 | φ20 | φ50 | 15 | 30 | 0.80 |
| SG1.5S 60B - 1520 | 60 | φ 90 | φ 93 | B1 | 15 | φ20 | φ60 | 15 | 30 | 1.00 |
| SG1.5S 64B - 1520 | 64 | φ 96 | φ 99 | B1 | 15 | φ20 | φ60 | 15 | 30 | 1.10 |
| SG1.5S 70B - 1520 | 70 | φ105 | φ108 | B1 | 15 | φ20 | φ60 | 15 | 30 | 1.27 |
| SG1.5S 72B - 1520 | 72 | φ108 | φ111 | B1 | 15 | φ20 | φ60 | 15 | 30 | 1.33 |
| SG1.5S 75B - 1520 | 75 | φ112.5 | φ115.5 | B1 | 15 | φ20 | φ60 | 15 | 30 | 1.42 |
| SG1.5S 80B - 1520 | 80 | φ120 | φ123 | B1 | 15 | φ20 | φ60 | 15 | 30 | 1.58 |
| SG1.5S 90B - 1525 | 90 | φ135 | φ138 | B1 | 15 | φ25 | φ70 | 15 | 30 | 2.01 |
| SG1.5S 100B - 1525 | 100 | φ150 | φ153 | B1 | 15 | φ25 | φ70 | 15 | 30 | 2.40 |
| SG1.5S 112B - 1525 | 112 | φ168 | φ171 | B1 | 15 | φ25 | φ70 | 15 | 30 | 2.93 |
| SG1.5S 120B - 1525 | 120 | φ180 | φ183 | B1 | 15 | φ25 | φ70 | 15 | 30 | 3.31 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 50 | 15 | 6.24 | 12.44 | 17.96 | 21.99 | 25.91 | 34.07 | 39.20 |
| 52 | 15 | 6.55 | 13.02 | 18.76 | 22.99 | 27.07 | 35.44 | 40.80 |
| 55 | 15 | 7.01 | 13.87 | 19.98 | 24.48 | 28.79 | 37.47 | 43.26 |
| 56 | 15 | 7.17 | 14.15 | 20.39 | 24.97 | 29.36 | 38.14 | 44.07 |
| 60 | 15 | 7.79 | 15.29 | 22.03 | 26.94 | 31.52 | 40.76 | 47.28 |
| 64 | 15 | 8.41 | 16.41 | 23.65 | 28.88 | 33.62 | 43.48 | 50.43 |
| 70 | 15 | 9.35 | 18.07 | 26.06 | 31.71 | 36.68 | 47.56 | 55.02 |
| 72 | 15 | 9.67 | 18.62 | 26.86 | 32.60 | 37.68 | 48.90 | 56.52 |
| 75 | 15 | 10.14 | 19.44 | 28.05 | 33.92 | 39.16 | 50.88 | 58.74 |
| 80 | 15 | 10.93 | 20.80 | 30.01 | 36.08 | 41.57 | 54.12 | 61.89 |
| 90 | 15 | 12.49 | 23.55 | 33.71 | 40.22 | 46.39 | 60.33 | 67.34 |
| 100 | 15 | 14.03 | 26.28 | 37.20 | 44.20 | 51.28 | 65.34 | 72.38 |
| 112 | 15 | 15.78 | 29.50 | 41.21 | 49.15 | 56.93 | 70.67 | - |
| 120 | 15 | 16.94 | 31.61 | 43.79 | 52.40 | 60.57 | 73.96 | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 3.00 | 6.14 | 9.04 | 11.21 | 13.34 | 17.90 | 20.82 | |
| 3.26 | 6.64 | 9.78 | 12.13 | 14.43 | 19.27 | 22.43 | |
| 3.66 | 7.44 | 10.94 | 13.57 | 16.14 | 21.42 | 25.00 | |
| 3.80 | 7.71 | 11.35 | 14.07 | 16.72 | 22.15 | 25.88 | |
| 4.39 | 8.86 | 13.04 | 16.15 | 19.11 | 25.19 | 29.54 | |
| 5.02 | 10.08 | 14.85 | 18.37 | 21.61 | 28.51 | 33.41 | |
| 6.05 | 12.05 | 17.77 | 21.91 | 25.62 | 33.87 | 39.60 | |
| 6.41 | 12.75 | 18.80 | 23.12 | 27.02 | 35.75 | 41.76 | |
| 6.98 | 13.82 | 20.40 | 25.00 | 29.18 | 38.65 | 45.08 | |
| 7.99 | 15.72 | 23.20 | 28.27 | 32.93 | 43.70 | 50.47 | |
| 10.21 | 19.93 | 29.21 | 35.32 | 41.18 | 54.56 | 61.49 | |
| 12.68 | 24.63 | 35.71 | 43.00 | 50.42 | 65.43 | 73.16 | |
| 15.93 | 30.91 | 44.24 | 53.46 | 62.57 | 79.05 | - | |
| 18.29 | 35.47 | 50.34 | 61.03 | 71.27 | 88.54 | - | |

歯研平歯車 GROUND SPUR GEARS

モジュール
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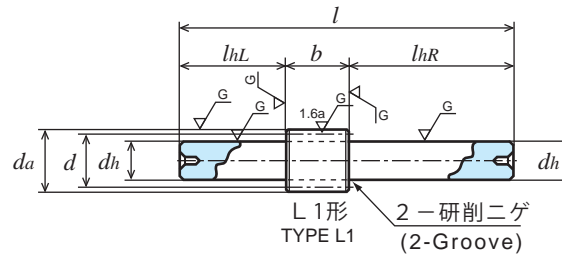
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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



SCM435、440 クロムモリブデン鋼 (JIS G 4053) Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H7)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(kg)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|------------------------------|
| SG2S 14L - 2012 | 14 | φ28 | φ32 | L1 | 20 | - | φ12 (h7) | L25 R60 | 105 | 0.17 |
| SG2S 14B - 2012 | 14 | φ28 | φ32 | B1 | 20 | φ12 | φ22 | 20 | 40 | 0.12 |
| SG2S 15L - 2012 | 15 | φ30 | φ34 | L1 | 20 | - | φ12 (h7) | L25 R60 | 105 | 0.19 |
| SG2S 15B - 2012 | 15 | φ30 | φ34 | B1 | 20 | φ12 | φ22 | 20 | 40 | 0.13 |
| SG2S 16L - 2015 | 16 | φ32 | φ36 | L1 | 20 | - | φ15 (h7) | L25 R60 | 105 | 0.24 |
| SG2S 16B - 2012 | 16 | φ32 | φ36 | B1 | 20 | φ12 | φ25 | 20 | 40 | 0.17 |
| SG2S 17B - 2012 | 17 | φ34 | φ38 | B1 | 20 | φ12 | φ25 | 20 | 40 | 0.18 |
| SG2S 18L - 2015 | 18 | φ36 | φ40 | L1 | 20 | - | φ15 (h7) | L25 R60 | 105 | 0.28 |
| SG2S 18B - 2015 | 18 | φ36 | φ40 | B1 | 20 | φ15 | φ30 | 20 | 40 | 0.21 |
| SG2S 20B - 2015 | 20 | φ40 | φ44 | B1 | 20 | φ15 | φ30 | 20 | 40 | 0.25 |
| SG2S 21B - 2015 | 21 | φ42 | φ46 | B1 | 20 | φ15 | φ30 | 20 | 40 | 0.27 |
| SG2S 22B - 2015 | 22 | φ44 | φ48 | B1 | 20 | φ15 | φ30 | 20 | 40 | 0.29 |
| SG2S 23B - 2015 | 23 | φ46 | φ50 | B1 | 20 | φ15 | φ30 | 20 | 40 | 0.31 |
| SG2S 24B - 2015 | 24 | φ48 | φ52 | B1 | 20 | φ15 | φ40 | 20 | 40 | 0.42 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 14 | 20 | 2.46 | 4.92 | 7.39 | 9.23 | 11.08 | 15.13 | 17.84 |
| 15 | 20 | 2.76 | 5.52 | 8.28 | 10.35 | 12.42 | 16.85 | 19.84 |
| 16 | 20 | 3.06 | 6.12 | 9.19 | 11.48 | 13.77 | 18.58 | 21.86 |
| 17 | 20 | 3.37 | 6.74 | 10.11 | 12.63 | 15.08 | 20.32 | 23.94 |
| 18 | 20 | 3.68 | 7.36 | 11.04 | 13.80 | 16.40 | 22.06 | 26.02 |
| 20 | 20 | 4.32 | 8.64 | 12.96 | 16.15 | 19.08 | 25.63 | 30.25 |
| 21 | 20 | 4.64 | 9.29 | 13.93 | 17.29 | 20.41 | 27.43 | 32.36 |
| 22 | 20 | 4.97 | 9.94 | 14.92 | 18.44 | 21.75 | 29.25 | 34.47 |
| 23 | 20 | 5.30 | 10.61 | 15.91 | 19.59 | 23.09 | 31.06 | 36.59 |
| 24 | 20 | 5.63 | 11.27 | 16.90 | 20.73 | 24.42 | 32.87 | 38.68 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 0.52 | 1.06 | 1.60 | 2.02 | 2.44 | 3.39 | 4.03 |
| 0.60 | 1.22 | 1.85 | 2.33 | 2.82 | 3.89 | 4.62 |
| 0.69 | 1.39 | 2.12 | 2.67 | 3.23 | 4.42 | 5.25 |
| 0.78 | 1.58 | 2.40 | 3.08 | 3.65 | 4.99 | 5.94 |
| 0.88 | 1.78 | 2.71 | 3.41 | 4.09 | 5.59 | 6.66 |
| 1.09 | 2.22 | 3.37 | 4.24 | 5.05 | 6.90 | 8.23 |
| 1.21 | 2.45 | 3.73 | 4.68 | 5.57 | 7.62 | 9.08 |
| 1.33 | 2.70 | 4.11 | 5.14 | 6.11 | 8.37 | 9.97 |
| 1.45 | 2.96 | 4.51 | 5.62 | 6.68 | 9.15 | 10.89 |
| 1.59 | 3.24 | 4.93 | 6.12 | 7.27 | 9.97 | 11.86 |

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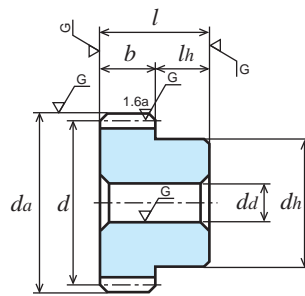
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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



B1形
TYPE B1

SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| SG2S 25B - 2015 | 25 | φ50 | φ54 | B1 | 20 | φ15 | φ40 | 20 | 40 | 0.45 |
| SG2S 26B - 2015 | 26 | φ52 | φ56 | B1 | 20 | φ15 | φ40 | 20 | 40 | 0.47 |
| SG2S 27B - 2015 | 27 | φ54 | φ58 | B1 | 20 | φ15 | φ40 | 20 | 40 | 0.50 |
| SG2S 28B - 2015 | 28 | φ56 | φ60 | B1 | 20 | φ15 | φ40 | 20 | 40 | 0.53 |
| SG2S 30B - 2015 | 30 | φ60 | φ64 | B1 | 20 | φ15 | φ40 | 20 | 40 | 0.58 |
| SG2S 32B - 2020 | 32 | φ64 | φ68 | B1 | 20 | φ20 | φ50 | 20 | 40 | 0.71 |
| SG2S 34B - 2020 | 34 | φ68 | φ72 | B1 | 20 | φ20 | φ50 | 20 | 40 | 0.77 |
| SG2S 35B - 2020 | 35 | φ70 | φ74 | B1 | 20 | φ20 | φ50 | 20 | 40 | 0.81 |
| SG2S 36B - 2020 | 36 | φ72 | φ76 | B1 | 20 | φ20 | φ50 | 20 | 40 | 0.84 |
| SG2S 38B - 2020 | 38 | φ76 | φ80 | B1 | 20 | φ20 | φ60 | 20 | 40 | 1.05 |
| SG2S 40B - 2020 | 40 | φ80 | φ84 | B1 | 20 | φ20 | φ60 | 20 | 40 | 1.13 |
| SG2S 42B - 2020 | 42 | φ84 | φ88 | B1 | 20 | φ20 | φ60 | 20 | 40 | 1.21 |
| SG2S 44B - 2020 | 44 | φ88 | φ92 | B1 | 20 | φ20 | φ60 | 20 | 40 | 1.29 |
| SG2S 45B - 2020 | 45 | φ90 | φ94 | B1 | 20 | φ20 | φ60 | 20 | 40 | 1.34 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 25 | 20 | 5.97 | 11.94 | 17.84 | 21.88 | 25.76 | 34.68 | 40.79 |
| 26 | 20 | 6.31 | 12.61 | 18.79 | 23.03 | 27.09 | 36.49 | 42.84 |
| 27 | 20 | 6.65 | 13.29 | 19.75 | 24.17 | 28.44 | 38.30 | 44.83 |
| 28 | 20 | 6.99 | 13.98 | 20.70 | 25.32 | 29.82 | 40.11 | 46.80 |
| 30 | 20 | 7.67 | 15.35 | 22.59 | 27.59 | 32.55 | 43.69 | 50.68 |
| 32 | 20 | 8.37 | 16.76 | 24.48 | 29.87 | 35.28 | 47.14 | 54.51 |
| 34 | 20 | 9.07 | 18.14 | 26.36 | 32.21 | 38.01 | 50.49 | 58.27 |
| 35 | 20 | 9.42 | 18.84 | 27.30 | 33.38 | 39.37 | 52.14 | 60.13 |
| 36 | 20 | 9.77 | 19.54 | 28.24 | 34.54 | 40.73 | 53.78 | 61.97 |
| 38 | 20 | 10.48 | 20.87 | 30.11 | 36.87 | 43.43 | 57.03 | 65.60 |
| 40 | 20 | 11.20 | 22.20 | 31.97 | 39.19 | 46.12 | 60.23 | 69.43 |
| 42 | 20 | 11.91 | 23.52 | 33.89 | 41.49 | 48.80 | 63.37 | 73.24 |
| 44 | 20 | 12.62 | 24.82 | 35.77 | 43.76 | 51.30 | 66.42 | 76.96 |
| 45 | 20 | 12.99 | 25.48 | 36.72 | 44.90 | 52.55 | 67.94 | 78.82 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 1.73 | 3.52 | 5.36 | 6.64 | 7.89 | 10.82 | 12.86 |
| 1.87 | 3.82 | 5.80 | 7.18 | 8.53 | 11.70 | 13.88 |
| 2.03 | 4.14 | 6.25 | 7.74 | 9.19 | 12.62 | 14.92 |
| 2.18 | 4.66 | 6.73 | 8.32 | 9.90 | 13.57 | 16.00 |
| 2.52 | 5.15 | 7.72 | 9.55 | 11.37 | 15.56 | 18.25 |
| 2.88 | 5.90 | 8.79 | 10.85 | 12.95 | 17.64 | 20.62 |
| 3.27 | 6.69 | 9.92 | 12.27 | 14.63 | 19.81 | 23.11 |
| 3.47 | 7.11 | 10.51 | 13.00 | 15.50 | 20.93 | 24.40 |
| 3.68 | 7.54 | 11.12 | 13.76 | 16.40 | 22.08 | 25.72 |
| 4.12 | 8.41 | 12.38 | 15.35 | 18.27 | 24.47 | 28.45 |
| 4.58 | 9.32 | 13.71 | 17.01 | 20.24 | 26.95 | 31.41 |
| 5.07 | 10.28 | 15.13 | 18.76 | 22.30 | 29.54 | 34.50 |
| 5.58 | 11.29 | 16.62 | 20.59 | 24.40 | 32.22 | 37.73 |
| 5.85 | 11.81 | 17.38 | 21.53 | 25.47 | 33.59 | 39.39 |

齒研平齒車

GROUND SPUR GEARS

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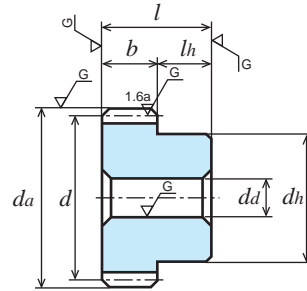
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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| SG2S 48B - 2020 | 48 | φ 96 | φ100 | B1 | 20 | 20 | φ60 | 20 | 40 | 1.47 |
| SG2S 50B - 2020 | 50 | φ100 | φ104 | B1 | 20 | 20 | φ60 | 20 | 40 | 1.57 |
| SG2S 52B - 2020 | 52 | φ104 | φ108 | B1 | 20 | 20 | φ60 | 20 | 40 | 1.67 |
| SG2S 54B - 2020 | 54 | φ108 | φ112 | B1 | 20 | 20 | φ60 | 20 | 40 | 1.78 |
| SG2S 55B - 2020 | 55 | φ110 | φ114 | B1 | 20 | 20 | φ60 | 20 | 40 | 1.83 |
| SG2S 56B - 2020 | 56 | φ112 | φ116 | B1 | 20 | 20 | φ60 | 20 | 40 | 1.88 |
| SG2S 60B - 2025 | 60 | φ120 | φ124 | B1 | 20 | 25 | φ70 | 20 | 40 | 2.21 |
| SG2S 64B - 2025 | 64 | φ128 | φ132 | B1 | 20 | 25 | φ70 | 20 | 40 | 2.45 |
| SG2S 70B - 2025 | 70 | φ140 | φ144 | B1 | 20 | 25 | φ70 | 20 | 40 | 2.85 |
| SG2S 72B - 2025 | 72 | φ144 | φ148 | B1 | 20 | 25 | φ80 | 20 | 40 | 3.17 |
| SG2S 75B - 2025 | 75 | φ150 | φ154 | B1 | 20 | 25 | φ80 | 20 | 40 | 3.39 |
| SG2S 80B - 2025 | 80 | φ160 | φ164 | B1 | 20 | 25 | φ80 | 20 | 40 | 3.77 |
| SG2S 90B - 2025 | 90 | φ180 | φ184 | B1 | 20 | 25 | φ80 | 20 | 40 | 4.60 |
| SG2S 100B - 2030 | 100 | φ200 | φ204 | B1 | 20 | 30 | φ80 | 20 | 40 | 5.46 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|-------|-------|--------|--------|--------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 48 | 20 | 14.07 | 27.44 | 39.56 | 48.31 | 56.23 | 72.72 | 84.34 |
| 50 | 20 | 14.80 | 28.74 | 41.44 | 50.56 | 58.64 | 75.93 | 87.96 |
| 52 | 20 | 15.53 | 30.04 | 43.31 | 52.74 | 61.03 | 79.10 | 91.54 |
| 54 | 20 | 16.26 | 31.33 | 45.17 | 54.83 | 63.38 | 82.24 | 95.07 |
| 55 | 20 | 16.63 | 31.97 | 46.10 | 55.87 | 64.54 | 83.80 | 96.81 |
| 56 | 20 | 16.99 | 32.61 | 47.03 | 56.90 | 65.70 | 85.35 | 98.55 |
| 60 | 20 | 18.46 | 35.16 | 50.71 | 60.97 | 70.25 | 91.46 | 104.57 |
| 64 | 20 | 19.94 | 37.77 | 54.34 | 64.96 | 74.72 | 97.43 | 109.96 |
| 70 | 20 | 22.17 | 41.66 | 59.39 | 70.76 | 81.78 | 105.82 | 117.59 |
| 72 | 20 | 22.90 | 42.94 | 61.04 | 72.65 | 84.09 | 108.14 | 120.01 |
| 75 | 20 | 23.95 | 44.86 | 63.49 | 75.44 | 87.52 | 111.53 | 123.54 |
| 80 | 20 | 25.68 | 48.04 | 67.49 | 80.31 | 93.15 | 116.96 | - |
| 90 | 20 | 29.06 | 54.23 | 75.12 | 89.89 | 103.90 | 126.88 | - |
| 100 | 20 | 32.41 | 60.17 | 82.79 | 99.19 | 113.41 | - | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|--------|--------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 6.69 | 13.44 | 19.80 | 24.49 | 28.82 | 38.01 | 44.55 |
| 7.28 | 14.58 | 21.49 | 26.56 | 31.15 | 41.12 | 48.14 |
| 7.90 | 15.76 | 23.24 | 28.68 | 33.55 | 44.34 | 51.85 |
| 8.55 | 16.99 | 25.07 | 30.83 | 36.03 | 47.67 | 55.67 |
| 8.88 | 17.63 | 26.01 | 31.93 | 37.30 | 49.37 | 57.63 |
| 9.22 | 18.27 | 26.96 | 33.05 | 38.58 | 51.10 | 59.61 |
| 10.65 | 20.95 | 30.93 | 37.69 | 43.91 | 58.26 | 67.29 |
| 12.18 | 23.87 | 35.16 | 42.59 | 49.53 | 65.82 | 75.02 |
| 14.69 | 28.59 | 41.75 | 50.41 | 58.89 | 77.64 | 87.09 |
| 15.58 | 30.26 | 44.06 | 53.14 | 62.17 | 81.44 | 91.23 |
| 16.91 | 32.84 | 47.61 | 57.34 | 67.23 | 87.25 | 97.54 |
| 19.26 | 37.38 | 53.80 | 64.88 | 76.04 | 97.20 | - |
| 24.39 | 47.29 | 67.12 | 81.37 | 95.03 | 118.05 | - |
| 30.11 | 58.13 | 81.94 | 99.45 | 114.85 | - | - |

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BEVEL GEARS

スプロケット
SPROCKETS

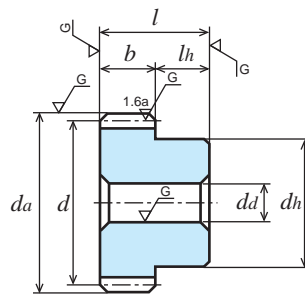
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REFERENCE DATA

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GROUND SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯)
 MODULE 2.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
 JIS B 1702-1 (ISO) 5 級
 System of accuracy: JIS B1702-1(ISO) class 5



B1形
TYPE B1

SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| SG2.5S 14B - 2515 | 14 | φ35 | φ40 | B1 | 25 | φ15 | φ28 | 20 | 45 | 0.2 |
| SG2.5S 15B - 2515 | 15 | φ37.5 | φ42.5 | B1 | 25 | φ15 | φ28 | 20 | 45 | 0.3 |
| SG2.5S 16B - 2515 | 16 | φ40 | φ45 | B1 | 25 | φ15 | φ28 | 20 | 45 | 0.3 |
| SG2.5S 18B - 2520 | 18 | φ45 | φ50 | B1 | 25 | φ20 | φ38 | 20 | 45 | 0.4 |
| SG2.5S 20B - 2520 | 20 | φ50 | φ55 | B1 | 25 | φ20 | φ38 | 20 | 45 | 0.5 |
| SG2.5S 24B - 2520 | 24 | φ60 | φ65 | B1 | 25 | φ20 | φ50 | 20 | 45 | 0.8 |
| SG2.5S 25B - 2520 | 25 | φ62.5 | φ67.5 | B1 | 25 | φ20 | φ50 | 20 | 45 | 0.8 |
| SG2.5S 28B - 2520 | 28 | φ70 | φ75 | B1 | 25 | φ20 | φ60 | 20 | 45 | 1.1 |
| SG2.5S 30B - 2520 | 30 | φ75 | φ80 | B1 | 25 | φ20 | φ60 | 20 | 45 | 1.2 |
| SG2.5S 32B - 2520 | 32 | φ80 | φ85 | B1 | 25 | φ20 | φ60 | 20 | 45 | 1.3 |
| SG2.5S 35B - 2525 | 35 | φ87.5 | φ92.5 | B1 | 25 | φ25 | φ70 | 20 | 45 | 1.6 |
| SG2.5S 36B - 2525 | 36 | φ90 | φ95 | B1 | 25 | φ25 | φ70 | 20 | 45 | 1.7 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|-------|-------|-------|-------|--------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 14 | 25 | 4.81 | 9.62 | 14.42 | 18.03 | 21.48 | 28.91 | 34.08 |
| 15 | 25 | 5.39 | 10.78 | 16.17 | 20.21 | 23.93 | 32.14 | 37.95 |
| 16 | 25 | 5.98 | 11.96 | 17.94 | 22.35 | 26.40 | 35.46 | 41.86 |
| 18 | 25 | 7.19 | 14.38 | 21.57 | 26.60 | 31.38 | 42.19 | 49.72 |
| 20 | 25 | 8.44 | 16.88 | 25.23 | 30.94 | 36.42 | 49.04 | 57.68 |
| 24 | 25 | 11.00 | 22.01 | 32.39 | 39.57 | 46.67 | 62.66 | 72.67 |
| 25 | 25 | 11.66 | 23.32 | 34.18 | 41.73 | 49.27 | 65.97 | 76.34 |
| 28 | 25 | 13.65 | 27.30 | 39.56 | 48.36 | 57.05 | 75.55 | 87.13 |
| 30 | 25 | 14.99 | 29.87 | 43.11 | 52.78 | 62.19 | 81.77 | 94.10 |
| 32 | 25 | 16.34 | 32.40 | 46.67 | 57.20 | 67.33 | 87.92 | 101.35 |
| 35 | 25 | 18.40 | 36.19 | 52.15 | 63.81 | 74.84 | 96.92 | 112.26 |
| 36 | 25 | 19.09 | 37.45 | 53.97 | 66.00 | 77.24 | 99.87 | 115.86 |

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 1.03 | 2.10 | 3.19 | 4.02 | 4.83 | 6.61 | 7.87 |
| 1.19 | 2.42 | 3.68 | 4.65 | 5.55 | 7.58 | 9.04 |
| 1.36 | 2.77 | 4.21 | 5.30 | 6.32 | 8.63 | 10.29 |
| 1.74 | 3.54 | 5.39 | 6.72 | 7.99 | 10.94 | 13.03 |
| 2.16 | 4.41 | 6.69 | 8.30 | 9.86 | 13.52 | 16.07 |
| 3.15 | 6.44 | 9.66 | 11.93 | 14.22 | 19.45 | 22.81 |
| 3.43 | 7.02 | 10.48 | 12.94 | 15.43 | 21.07 | 24.64 |
| 4.34 | 8.89 | 13.14 | 16.26 | 19.37 | 26.16 | 30.51 |
| 5.00 | 10.23 | 15.07 | 18.68 | 22.24 | 29.83 | 34.70 |
| 5.72 | 11.65 | 17.13 | 21.26 | 25.30 | 33.69 | 39.26 |
| 6.89 | 13.95 | 20.53 | 25.44 | 30.17 | 39.85 | 46.65 |
| 7.31 | 14.76 | 21.73 | 26.92 | 31.84 | 41.99 | 49.24 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯研平歯車

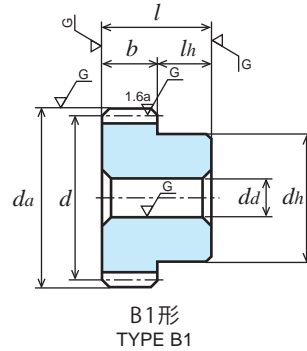
GROUND SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯)
 MODULE 2.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
 JIS B 1702-1 (ISO) 5 級
 System of accuracy: JIS B1702-1(ISO) class 5



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| SG2.5S 40B - 2525 | 40 | φ100 | φ105 | B1 | 25 | φ25 | φ70 | 20 | 45 | 2.0 |
| SG2.5S 45B - 2525 | 45 | φ112.5 | φ117.5 | B1 | 25 | φ25 | φ70 | 20 | 45 | 2.4 |
| SG2.5S 48B - 2525 | 48 | φ120 | φ125 | B1 | 25 | φ25 | φ70 | 20 | 45 | 2.5 |
| SG2.5S 50B - 2530 | 50 | φ125 | φ130 | B1 | 25 | φ30 | φ80 | 20 | 45 | 2.8 |
| SG2.5S 55B - 2530 | 55 | φ137.5 | φ142.5 | B1 | 25 | φ30 | φ80 | 20 | 45 | 3.4 |
| SG2.5S 56B - 2530 | 56 | φ140 | φ145 | B1 | 25 | φ30 | φ80 | 20 | 45 | 3.5 |
| SG2.5S 60B - 2530 | 60 | φ150 | φ155 | B1 | 25 | φ30 | φ80 | 20 | 45 | 4.0 |
| SG2.5S 64B - 2530 | 64 | φ160 | φ165 | B1 | 25 | φ30 | φ80 | 20 | 45 | 4.5 |
| SG2.5S 70B - 2530 | 70 | φ175 | φ180 | B1 | 25 | φ30 | φ90 | 20 | 45 | 5.4 |
| SG2.5S 72B - 2530 | 72 | φ180 | φ185 | B1 | 25 | φ30 | φ90 | 20 | 45 | 5.7 |
| SG2.5S 75B - 2530 | 75 | φ187.5 | φ192.5 | B1 | 25 | φ30 | φ90 | 20 | 45 | 6.1 |
| SG2.5S 80B - 2530 | 80 | φ200 | φ205 | B1 | 25 | φ30 | φ90 | 20 | 45 | 6.9 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|--------|--------|--------|--------|--------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 40 | 25 | 21.87 | 42.47 | 61.23 | 74.71 | 86.65 | 112.19 | 129.97 |
| 45 | 25 | 25.36 | 48.64 | 70.16 | 84.85 | 97.96 | 127.28 | 146.94 |
| 48 | 25 | 27.48 | 52.33 | 75.48 | 90.76 | 104.57 | 136.13 | 155.65 |
| 50 | 25 | 28.90 | 54.85 | 79.00 | 94.63 | 108.89 | 141.94 | 160.97 |
| 55 | 25 | 32.47 | 61.12 | 87.29 | 104.08 | 120.17 | 156.12 | 173.61 |
| 56 | 25 | 33.19 | 62.36 | 88.91 | 105.93 | 122.43 | 158.43 | 176.03 |
| 60 | 25 | 35.94 | 67.32 | 95.27 | 113.22 | 131.34 | 167.37 | 185.40 |
| 64 | 25 | 38.61 | 72.24 | 101.49 | 120.77 | 140.07 | 175.88 | - |
| 70 | 25 | 42.59 | 79.53 | 110.56 | 132.11 | 152.83 | 187.90 | - |
| 72 | 25 | 43.91 | 81.94 | 113.52 | 135.82 | 157.00 | 191.72 | - |
| 75 | 25 | 45.87 | 85.53 | 117.88 | 141.33 | 163.16 | 197.29 | - |
| 80 | 25 | 49.13 | 91.20 | 125.49 | 150.35 | 171.91 | - | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|--------|--------|--------|--------|--------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 9.10 | 18.22 | 26.86 | 33.20 | 38.93 | 51.40 | 60.18 |
| 11.63 | 23.04 | 34.00 | 41.67 | 48.64 | 64.42 | 75.14 |
| 13.31 | 26.19 | 38.67 | 47.12 | 54.88 | 72.83 | 84.11 |
| 14.49 | 28.44 | 41.94 | 50.91 | 59.22 | 78.68 | 90.11 |
| 17.69 | 34.47 | 50.42 | 60.92 | 71.11 | 94.11 | 105.66 |
| 18.36 | 35.74 | 52.18 | 63.02 | 73.62 | 97.04 | 108.86 |
| 21.14 | 41.06 | 59.51 | 71.67 | 84.04 | 109.06 | 121.93 |
| 24.07 | 46.72 | 67.25 | 81.09 | 95.05 | 121.50 | - |
| 28.82 | 55.88 | 79.59 | 96.37 | 112.64 | 140.91 | - |
| 30.49 | 59.11 | 83.90 | 101.71 | 118.78 | 147.57 | - |
| 33.09 | 64.11 | 90.53 | 109.96 | 128.25 | 157.71 | - |
| 37.64 | 72.66 | 102.43 | 124.31 | 143.57 | - | - |

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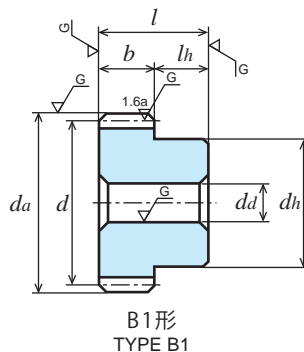
歯研平歯車 GROUND SPUR GEARS

モジュール
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3

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



B1形
TYPE B1

SCM435、440 クロムモリブデン鋼 (JIS G 4053) Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| SG3S 14B - 3015 | 14 | φ 42 | φ 48 | B1 | 30 | φ15 | φ34 | 20 | 50 | 0.4 |
| SG3S 15B - 3015 | 15 | φ 45 | φ 51 | B1 | 30 | φ15 | φ36 | 20 | 50 | 0.5 |
| SG3S 16B - 3015 | 16 | φ 48 | φ 54 | B1 | 30 | φ15 | φ36 | 20 | 50 | 0.5 |
| SG3S 18B - 3020 | 18 | φ 54 | φ 60 | B1 | 30 | φ20 | φ45 | 20 | 50 | 0.7 |
| SG3S 20B - 3020 | 20 | φ 60 | φ 66 | B1 | 30 | φ20 | φ45 | 20 | 50 | 0.8 |
| SG3S 24B - 3020 | 24 | φ 72 | φ 78 | B1 | 30 | φ20 | φ50 | 20 | 50 | 1.1 |
| SG3S 25B - 3020 | 25 | φ 75 | φ 81 | B1 | 30 | φ20 | φ50 | 20 | 50 | 1.2 |
| SG3S 28B - 3025 | 28 | φ 84 | φ 90 | B1 | 30 | φ25 | φ60 | 20 | 50 | 1.6 |
| SG3S 30B - 3025 | 30 | φ 90 | φ 96 | B1 | 30 | φ25 | φ60 | 20 | 50 | 1.7 |
| SG3S 32B - 3025 | 32 | φ 96 | φ102 | B1 | 30 | φ25 | φ60 | 20 | 50 | 1.9 |
| SG3S 35B - 3030 | 35 | φ105 | φ111 | B1 | 30 | φ30 | φ70 | 20 | 50 | 2.3 |
| SG3S 36B - 3030 | 36 | φ108 | φ114 | B1 | 30 | φ30 | φ70 | 20 | 50 | 2.5 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|-------|--------|--------|--------|--------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 14 | 30 | 8.31 | 16.62 | 24.93 | 30.93 | 36.51 | 49.07 | 57.88 |
| 15 | 30 | 9.31 | 18.62 | 27.93 | 34.46 | 40.64 | 54.65 | 64.40 |
| 16 | 30 | 10.33 | 20.67 | 30.99 | 38.02 | 44.79 | 60.28 | 70.95 |
| 18 | 30 | 12.42 | 24.84 | 36.90 | 45.18 | 53.16 | 71.59 | 83.78 |
| 20 | 30 | 14.59 | 29.17 | 42.93 | 52.45 | 61.87 | 83.06 | 96.33 |
| 24 | 30 | 19.01 | 38.01 | 54.95 | 67.21 | 79.24 | 104.65 | 120.57 |
| 25 | 30 | 20.15 | 40.15 | 57.96 | 70.95 | 83.59 | 109.93 | 126.49 |
| 28 | 30 | 23.59 | 46.57 | 67.09 | 82.15 | 96.61 | 125.47 | 145.00 |
| 30 | 30 | 25.90 | 50.82 | 73.23 | 89.55 | 104.80 | 135.50 | 157.19 |
| 32 | 30 | 28.24 | 55.08 | 79.39 | 96.95 | 112.84 | 145.94 | 169.26 |
| 35 | 30 | 31.79 | 61.43 | 88.58 | 107.77 | 124.68 | 161.66 | 187.02 |
| 36 | 30 | 32.98 | 63.54 | 91.64 | 111.22 | 128.56 | 166.83 | 192.84 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 1.81 | 3.68 | 5.60 | 7.02 | 8.36 | 11.43 | 13.62 |
| 2.08 | 4.25 | 6.47 | 8.06 | 9.59 | 13.13 | 15.64 |
| 2.38 | 4.86 | 7.40 | 9.17 | 10.91 | 14.95 | 17.78 |
| 3.04 | 6.21 | 9.38 | 11.61 | 13.79 | 18.92 | 22.39 |
| 3.78 | 7.73 | 11.59 | 14.32 | 17.06 | 23.34 | 27.37 |
| 5.52 | 11.31 | 16.68 | 20.65 | 24.60 | 33.13 | 38.59 |
| 6.01 | 12.28 | 18.09 | 22.41 | 26.69 | 35.79 | 41.64 |
| 7.60 | 15.42 | 22.69 | 28.14 | 33.45 | 44.30 | 51.76 |
| 8.77 | 17.71 | 26.08 | 32.30 | 38.21 | 50.39 | 59.08 |
| 10.03 | 20.15 | 29.69 | 36.74 | 43.23 | 57.01 | 66.83 |
| 12.09 | 24.10 | 35.54 | 43.81 | 51.24 | 67.75 | 79.19 |
| 12.82 | 25.49 | 37.60 | 46.25 | 54.04 | 71.51 | 83.51 |

齒研平齒車

GROUND SPUR GEARS

モジュール
MODULE

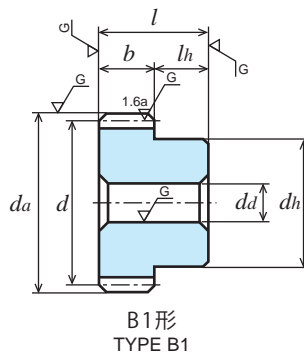
3

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC49 ~ 55
JIS B 1702-1 (ISO) 5 級
System of accuracy: JIS B1702-1(ISO) class 5



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



SCM435、440 クロムモリブデン鋼 (JIS G 4053)

Material : Chromium Molybdenum Steel (ISO 34CrMo4, 42CrMo4)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| SG3S 40B - 3030 | 40 | φ120 | φ126 | B1 | 30 | φ30 | φ 70 | 20 | 50 | 3.0 |
| SG3S 45B - 3030 | 45 | φ135 | φ141 | B1 | 30 | φ30 | φ 80 | 20 | 50 | 3.9 |
| SG3S 48B - 3030 | 48 | φ144 | φ150 | B1 | 30 | φ30 | φ 80 | 20 | 50 | 4.3 |
| SG3S 50B - 3030 | 50 | φ150 | φ156 | B1 | 30 | φ30 | φ 80 | 20 | 50 | 4.6 |
| SG3S 55B - 3035 | 55 | φ165 | φ171 | B1 | 30 | φ35 | φ 90 | 20 | 50 | 5.6 |
| SG3S 56B - 3035 | 56 | φ168 | φ174 | B1 | 30 | φ35 | φ 90 | 20 | 50 | 5.8 |
| SG3S 60B - 3035 | 60 | φ180 | φ186 | B1 | 30 | φ35 | φ 90 | 20 | 50 | 6.6 |
| SG3S 64B - 3040 | 64 | φ192 | φ198 | B1 | 30 | φ40 | φ 90 | 20 | 50 | 7.3 |
| SG3S 70B - 3040 | 70 | φ210 | φ216 | B1 | 30 | φ40 | φ100 | 20 | 50 | 8.8 |
| SG3S 72B - 3040 | 72 | φ216 | φ222 | B1 | 30 | φ40 | φ100 | 20 | 50 | 9.3 |
| SG3S 75B - 3040 | 75 | φ225 | φ231 | B1 | 30 | φ40 | φ100 | 20 | 50 | 10.0 |
| SG3S 80B - 3040 | 80 | φ240 | φ246 | B1 | 30 | φ40 | φ100 | 20 | 50 | 11.3 |

Gear tooth surface completed with induction hardening, Hardness HRC49 to 55.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|--------|--------|--------|--------|--------|--------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 40 | 30 | 37.79 | 71.94 | 103.77 | 124.77 | 143.76 | 187.16 | 214.00 |
| 45 | 30 | 43.83 | 82.62 | 118.23 | 141.06 | 162.71 | 211.59 | 236.20 |
| 48 | 30 | 47.47 | 89.00 | 126.51 | 150.58 | 174.29 | 224.14 | 248.74 |
| 50 | 30 | 49.77 | 93.24 | 131.94 | 156.80 | 181.90 | 231.80 | 256.76 |
| 55 | 30 | 55.48 | 103.74 | 145.22 | 173.05 | 200.54 | 250.00 | - |
| 56 | 30 | 56.62 | 105.82 | 147.83 | 176.30 | 204.19 | 253.49 | - |
| 60 | 30 | 61.14 | 114.10 | 158.07 | 189.13 | 218.62 | 266.97 | - |
| 64 | 30 | 65.63 | 122.26 | 168.12 | 201.71 | 232.50 | - | - |
| 70 | 30 | 72.29 | 133.62 | 184.00 | 220.08 | 249.18 | - | - |
| 72 | 30 | 74.50 | 137.34 | 189.20 | 226.08 | 254.51 | - | - |
| 75 | 30 | 77.78 | 142.85 | 196.93 | 234.96 | 262.28 | - | - |
| 80 | 30 | 83.22 | 151.85 | 209.58 | 247.54 | 274.71 | - | - |

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|--------|--------|--------|--------|--------|--------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 15.97 | 31.43 | 46.40 | 56.54 | 65.86 | 87.40 | 100.93 |
| 20.43 | 39.86 | 58.41 | 70.63 | 82.36 | 109.12 | 122.99 |
| 23.37 | 45.39 | 66.08 | 79.71 | 93.26 | 122.16 | 136.84 |
| 25.37 | 49.27 | 71.42 | 86.01 | 100.85 | 130.87 | 146.32 |
| 30.73 | 59.63 | 85.52 | 103.27 | 120.93 | 153.45 | - |
| 31.86 | 61.82 | 88.47 | 106.92 | 125.14 | 158.10 | - |
| 36.59 | 70.93 | 100.68 | 122.05 | 142.54 | 177.08 | - |
| 41.63 | 80.62 | 113.58 | 138.05 | 160.74 | - | - |
| 49.78 | 95.73 | 135.04 | 163.59 | 187.06 | - | - |
| 52.66 | 101.01 | 142.56 | 172.51 | 196.11 | - | - |
| 57.11 | 109.17 | 154.16 | 186.25 | 209.93 | - | - |
| 64.93 | 123.36 | 174.37 | 208.50 | 233.57 | - | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

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歯研平歯車の特徴 (SG シリーズ)

Feature of SG Ground Spur Gears.

- 1) サイズはモジュール m0.5 より m3.0 までの 7 サイズで豊富に品揃えしております。
- 2) 材質は SCM435、440 を用い、歯部高周波焼き入れ (HRC49 ~ 55) を行なっております。穴、ハブ部の追加加工が可能です。
- 3) 精度等級は JIS B 1702-1(ISO) 5 級になっております。
- 4) 穴・外周・側面・ハブ側面の研削仕上げを行なっております。追加加工時の基準面になります。
- 5) 両軸タイプ (ピニオン) も揃えております。

- 1) Size : Module 0.5 to 3.0 with wide range are available in seven sizes.
- 2) Material : Chromium Molybdenum Steel, complete with high frequency Induction Hardened. (HRC49 to 55).
- 3) System of accuracy: JIS B 1702-1(ISO) class 5.
- 4) Bore diameter, Tip diameter and other surfaces are ground so that chucking base can be performed when additional machining is required.
- 5) We have Ground Spur Gear with Solid shaft on both ends for Pinion, size ranging from M0.5 to 2.0.

歯研平歯車の追加加工時のご注意 (SG シリーズ)

Precaution for additional process of SG Ground Spur Gears.

KG 歯研平歯車は、なるべく穴を追加加工しないでご利用下さい。追加加工をしますと、歯車の精度が下がる事があります。但しご利用の際、追加加工が必要となりましたら次項にご注意下さい。

We provide high precision and high quality performance of KG Ground Spur Gears to customer. KG Ground Spur Gears do not require additional machining by our customer. This will therefore prevent deterioration of KG Ground Spur Gears, which has been vigorously checked by KG before delivery to customer.

However, due to your 'special' requirement that need additional machining to KG-Ground Spur Gear, please note the following information.

歯研平歯車の穴の追加加工のご注意 (SG シリーズ)

Precaution for additional machining to bore diameter of SG Ground Spur Gears.

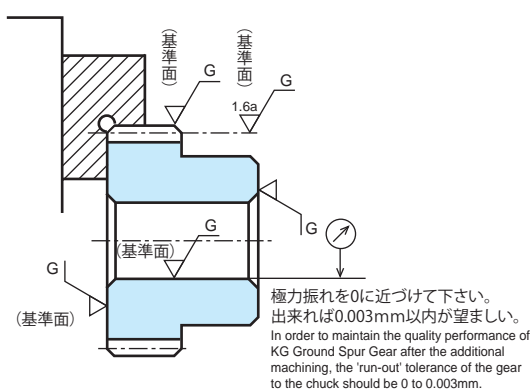
- 1) 必ず生づめスクロールチャックを用いて チャッキングした商品の穴面から芯出しをして下さい。
- 2) 図のようにチャッキングすれば 外周と側面が研削面となっておりますので 容易に芯が出せます。
- 3) 外径の小さい (小歯数) 歯車は、穴面も焼き入れの影響で硬化しており、切削性が悪くなりますのでご注意下さい。
- 4) 追加加工による最大加工径は ハブ径の 60-70% を目安として下さい。

Additional machining for bore diameter is not advisable for our KG Ground Spur Gears.

Additional machining might be affected the precision class, as for the gear increased pitch deviation by additional key way process, may cause 1 or 2 class decline.

- 1) We recommend the use of three-jaw chuck (scroll chuck) that is not surface hardened for centering of the gear.
- 2) The drawing shown on the right is highly recommended to follow, in order to obtain the centering easier because the gear has been ground.
- 3) Due to induction hardening, the bore diameter of small size gears (Pinion) may not be easily machined.
- 4) The maximum bore dimension should not exceed 60-70% of the hub diameter if additional machining is required.

Machining will be easier if you follow the instruction (refer to the above picture).



歯研平歯車のその他の部分の追加工の時のご注意 (SG シリーズ) Precaution for additional process for other parts of SG Ground Spur Gear.

- 1) チャッキング方法は穴の追加工と同じですが、ハブをチャッキングする場合も、必ず穴面からの芯出しを行なって下さい。
- 2) 両軸付き (L) 歯車の歯部に近い軸部は、熱処理による影響で硬化していますのでご注意ください。
- 3) 小モジュールで歯数の少ないものは、2) と同じく穴面まで硬化している事があります。
- 4) 歯部に近い部分は、熱処理の影響で硬化しておりますのでご注意ください。

- 1) Method of chucking is the same as in the boring process. Please take note of the centering location when chucking to the gear hub.
- 2) Due to the heat treatment, both sides of the solid shaft areas of the 'Type L' are low in machinability.
- 3) Heat treatment on specific surface of small module size gear for Pinion will affect the hardening of the whole gear module.
- 4) Take note that surface near to the gear tooth area may be low machinability due to the heat treatment processed.

特殊仕様の歯研歯車も受注致しております Customize make Ground Gears.

| | |
|--------------|--|
| 歯車の種類 | 平歯車、はすば歯車 |
| モジュールサイズ | m : 0.3 0.4 0.5 0.6 0.75 0.8 1.0 1.25 1.5 1.75 2.0 2.25 2.5 2.75 3.0 4.0 5.0 |
| DP (インチ) サイズ | ご相談により受け賜ります。 |
| 歯数 | 10 枚より 500 枚まで |
| 外径 | φ8mm より φ350mm まで |
| 歯幅 | 最大 200mm まで |
| 最大ネジレ角 | 左右 45° |
| 保証精度等級 | 新 JIS 4 級 (旧 JIS 0 級) より受け賜ります。 |

Our gear products: Spur, Helical and other gears.
 Our sizes: Module from 0.3, 0.4, 0.5, 0.6, 0.75, 0.8, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 4.0 and 5.0.
 Our capability of D.P (inch) size: Please provide your drawing to us. Price, delivery and lead-time are negotiable. Do not hesitate to contact us for discussion.

Number of teeth and maximum tip diameter.
 No. of teeth: range from 10z to 500z
 Tip diameter: $d_a=8.0\text{mm}$ up to 350.00mm
 Face width: Maximum 200.0mm
 Helix: Maximum 45 degree (Right /Left helix)
 We are able to fabricate gears with standard that are above JIS B 1702 class 0 equivalent ISO 4.

Memo

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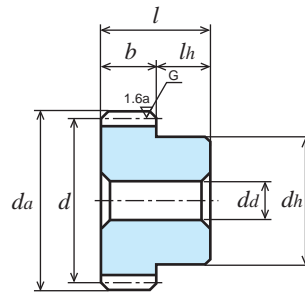
GROUND SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ Hrc47 ~ 53
 JIS B 1702-1 (ISO) 7級
 System of accuracy : JIS B 1702-1(ISO) class 7



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|------------------------------|
| ● SGE50S 30B - 0504 | 30 | φ15 | φ16 | B1 | 5 | φ4 | φ12 | 8 | 13 | 12.7 |
| ● SGE50S 40B - 0504 | 40 | φ20 | φ21 | B1 | 5 | φ4 | φ15 | 8 | 13 | 22.1 |
| ● SGE50S 50B - 0504 | 50 | φ25 | φ26 | B1 | 5 | φ4 | φ18 | 8 | 13 | 33.9 |
| ● SGE50S 60B - 0505 | 60 | φ30 | φ31 | B1 | 5 | φ5 | φ22 | 8 | 13 | 49.5 |
| ● SGE50S 70B - 0505 | 70 | φ35 | φ36 | B1 | 5 | φ5 | φ25 | 8 | 13 | 66.5 |
| ● SGE50S 80B - 0506 | 80 | φ40 | φ41 | B1 | 5 | φ6 | φ28 | 8 | 13 | 85.0 |
| ● SGE50S 90B - 0506 | 90 | φ45 | φ46 | B1 | 5 | φ6 | φ32 | 8 | 13 | 109.9 |
| ● SGE50S 100B - 0506 | 100 | φ50 | φ51 | B1 | 5 | φ6 | φ35 | 8 | 13 | 134.4 |
| ● SGE50S 120B - 0506 | 120 | φ60 | φ61 | B1 | 5 | φ6 | φ42 | 8 | 13 | 194.9 |

● の商品は新商品です。
 Products with ● marks are new item.

Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|--------|----------|----------|----------|----------|----------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 30 | 5 | 80.54 | 161.08 | 241.63 | 296.60 | 347.96 | 459.16 | 531.69 |
| 40 | 5 | 117.09 | 234.19 | 342.60 | 415.43 | 484.22 | 630.05 | 727.71 |
| 50 | 5 | 154.49 | 307.53 | 438.50 | 528.52 | 612.15 | 795.67 | 929.77 |
| 60 | 5 | 192.53 | 375.41 | 530.54 | 635.73 | 732.48 | 965.31 | 1,123.08 |
| 70 | 5 | 230.93 | 441.27 | 618.60 | 737.06 | 855.34 | 1,128.41 | 1,315.49 |
| 80 | 5 | 269.57 | 505.05 | 702.44 | 837.49 | 979.47 | 1,288.25 | 1,505.79 |
| 90 | 5 | 308.09 | 566.09 | 781.45 | 941.83 | 1,098.54 | 1,448.09 | 1,687.94 |
| 100 | 5 | 345.37 | 625.52 | 862.40 | 1,044.07 | 1,214.70 | 1,604.66 | 1,865.27 |
| 120 | 5 | 414.57 | 738.59 | 1,029.96 | 1,240.25 | 1,447.40 | 1,904.73 | 2,221.44 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|--------|----------|----------|----------|----------|----------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 23.40 | 48.25 | 73.71 | 91.38 | 108.03 | 144.51 | 168.88 | |
| 42.74 | 88.14 | 131.25 | 160.74 | 188.91 | 249.31 | 290.12 | |
| 68.24 | 140.01 | 203.27 | 247.30 | 288.79 | 380.74 | 448.75 | |
| 100.00 | 200.97 | 289.16 | 349.83 | 406.41 | 543.35 | 637.24 | |
| 138.12 | 272.07 | 388.19 | 467.15 | 546.46 | 731.33 | 859.50 | |
| 182.72 | 352.81 | 499.54 | 601.50 | 709.14 | 945.96 | 1,114.64 | |
| 233.83 | 442.88 | 622.34 | 757.42 | 890.63 | 1,190.99 | 1,399.33 | |
| 290.20 | 541.88 | 760.46 | 929.62 | 1,090.21 | 1,461.16 | 1,712.07 | |
| 416.54 | 765.05 | 1,085.93 | 1,320.47 | 1,553.44 | 2,073.87 | 2,437.97 | |

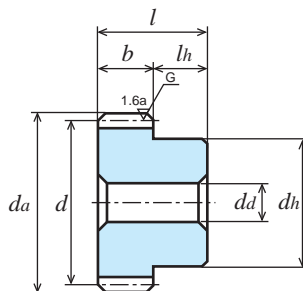
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GROUND SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC47 ~ 53
 JIS B 1702-1 (ISO) 7級
 System of accuracy : JIS B 1702-1(ISO) class 7



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>di</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|------------------------------|
| ● SGE80S 25B - 0805 | 25 | φ20 | φ21.6 | B1 | 8 | φ 5 | φ16 | 10 | 18 | 32.5 |
| ● SGE80S 30B - 0805 | 30 | φ24 | φ25.6 | B1 | 8 | φ 5 | φ20 | 10 | 18 | 50.1 |
| ● SGE80S 40B - 0806 | 40 | φ32 | φ33.6 | B1 | 8 | φ 6 | φ25 | 10 | 18 | 84.7 |
| ● SGE80S 50B - 0806 | 50 | φ40 | φ41.6 | B1 | 8 | φ 6 | φ28 | 10 | 18 | 122.9 |
| ● SGE80S 60B - 0806 | 60 | φ48 | φ49.6 | B1 | 8 | φ 6 | φ34 | 10 | 18 | 180.5 |
| ● SGE80S 70B - 0808 | 70 | φ56 | φ57.6 | B1 | 8 | φ 8 | φ40 | 10 | 18 | 245.7 |
| ● SGE80S 80B - 0808 | 80 | φ64 | φ65.6 | B1 | 8 | φ 8 | φ45 | 10 | 18 | 319.2 |
| ● SGE80S 90B - 0808 | 90 | φ72 | φ73.6 | B1 | 8 | φ 8 | φ50 | 10 | 18 | 402.1 |
| ● SGE80S 100B - 0810 | 100 | φ80 | φ81.6 | B1 | 8 | φ10 | φ60 | 10 | 18 | 525.8 |
| ● SGE80S 120B - 0810 | 120 | φ96 | φ97.6 | B1 | 8 | φ10 | φ70 | 10 | 18 | 744.7 |

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 Products with ● marks are new item.

Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|----------|----------|----------|----------|----------|----------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 25 | 8 | 257.23 | 514.46 | 752.38 | 912.43 | 1,063.43 | 1,383.75 | 1,598.07 |
| 30 | 8 | 329.81 | 659.29 | 941.65 | 1,136.20 | 1,317.84 | 1,707.70 | 1,997.37 |
| 40 | 8 | 479.71 | 927.82 | 1,307.05 | 1,562.49 | 1,797.72 | 2,380.47 | 2,765.49 |
| 50 | 8 | 632.84 | 1,185.57 | 1,648.92 | 1,966.00 | 2,299.31 | 3,024.09 | 3,534.52 |
| 60 | 8 | 788.13 | 1,432.30 | 1,970.04 | 2,387.61 | 2,780.45 | 3,670.23 | 4,270.98 |
| 70 | 8 | 929.75 | 1,667.30 | 2,314.57 | 2,792.93 | 3,250.73 | 4,290.73 | 4,995.68 |
| 80 | 8 | 1,067.88 | 1,890.71 | 2,647.87 | 3,183.03 | 3,723.73 | 4,896.66 | 5,706.20 |
| 90 | 8 | 1,200.89 | 2,101.81 | 2,966.46 | 3,579.91 | 4,176.82 | 5,493.79 | 6,382.94 |
| 100 | 8 | 1,331.42 | 2,334.79 | 3,277.69 | 3,969.25 | 4,619.06 | 6,077.09 | 7,106.74 |
| 120 | 8 | 1,581.73 | 2,784.19 | 3,915.35 | 4,716.56 | 5,495.21 | 7,256.77 | 8,708.13 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|----------|----------|----------|----------|----------|----------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 68.40 | 141.06 | 210.02 | 257.25 | 302.18 | 398.84 | 464.43 | |
| 100.25 | 206.60 | 300.37 | 365.97 | 427.76 | 562.45 | 663.17 | |
| 183.16 | 365.19 | 523.66 | 632.11 | 733.20 | 984.91 | 1,153.54 | |
| 292.33 | 564.56 | 799.31 | 962.34 | 1,134.54 | 1,513.68 | 1,783.55 | |
| 428.08 | 801.96 | 1,122.84 | 1,374.15 | 1,613.15 | 2,160.32 | 2,533.88 | |
| 581.53 | 1,074.99 | 1,519.00 | 1,851.10 | 2,171.74 | 2,907.99 | 3,413.28 | |
| 756.77 | 1,381.16 | 1,969.08 | 2,390.32 | 2,818.63 | 3,760.20 | 4,417.24 | |
| 953.11 | 1,719.57 | 2,470.54 | 3,010.83 | 3,540.97 | 4,725.01 | 5,533.69 | |
| 1,169.89 | 2,114.84 | 3,022.20 | 3,695.86 | 4,335.34 | 5,786.57 | 6,821.14 | |
| 1,661.95 | 3,015.64 | 4,316.82 | 5,251.26 | 6,167.25 | 8,262.29 | 9,994.37 | |

齒研平齒車

GROUND SPUR GEARS

モジュール
MODULE

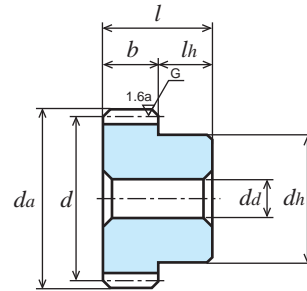
1

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC47 ~ 53
JIS B 1702-1 (ISO) 7級
System of accuracy : JIS B 1702-1(ISO) class 7



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| ● SGE1S 20B - 1005 | 20 | φ 20 | φ 22 | B1 | 10 | φ 5 | φ 16 | 10 | 20 | 37.0 |
| ● SGE1S 25B - 1005 | 25 | φ 25 | φ 27 | B1 | 10 | φ 5 | φ 20 | 10 | 20 | 59.7 |
| ● SGE1S 30B - 1006 | 30 | φ 30 | φ 32 | B1 | 10 | φ 6 | φ 25 | 10 | 20 | 89.1 |
| ● SGE1S 40B - 1006 | 40 | φ 40 | φ 42 | B1 | 10 | φ 6 | φ 30 | 10 | 20 | 149.1 |
| ● SGE1S 50B - 1008 | 50 | φ 50 | φ 52 | B1 | 10 | φ 8 | φ 35 | 10 | 20 | 221.0 |
| ● SGE1S 60B - 1008 | 60 | φ 60 | φ 62 | B1 | 10 | φ 8 | φ 42 | 10 | 20 | 321.9 |
| ● SGE1S 70B - 1010 | 70 | φ 70 | φ 72 | B1 | 10 | φ 10 | φ 55 | 10 | 20 | 442.9 |
| ● SGE1S 80B - 1010 | 80 | φ 80 | φ 82 | B1 | 10 | φ 10 | φ 60 | 10 | 20 | 603.1 |
| ● SGE1S 90B - 1010 | 90 | φ 90 | φ 92 | B1 | 10 | φ 10 | φ 65 | 10 | 20 | 746.3 |
| ● SGE1S 100B - 1010 | 100 | φ 100 | φ 102 | B1 | 10 | φ 10 | φ 70 | 10 | 20 | 904.9 |
| ● SGE1S 120B - 1010 | 120 | φ 120 | φ 122 | B1 | 10 | φ 10 | φ 90 | 10 | 20 | 1373.2 |

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Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---|------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 20 | 10 | 0.37 | 0.73 | 1.07 | 1.30 | 1.51 | 1.96 | 2.27 |
| 25 | 10 | 0.50 | 1.00 | 1.43 | 1.72 | 1.99 | 2.59 | 3.02 |
| 30 | 10 | 0.64 | 1.26 | 1.78 | 2.13 | 2.45 | 3.23 | 3.76 |
| 40 | 10 | 0.94 | 1.76 | 2.44 | 2.91 | 3.40 | 4.48 | 5.23 |
| 50 | 10 | 1.23 | 2.23 | 3.07 | 3.72 | 4.33 | 5.72 | 6.64 |
| 60 | 10 | 1.50 | 2.68 | 3.73 | 4.49 | 5.24 | 6.90 | 8.05 |
| 70 | 10 | 1.77 | 3.10 | 4.36 | 5.26 | 6.14 | 8.08 | 9.39 |
| 80 | 10 | 2.02 | 3.54 | 4.97 | 6.02 | 7.01 | 9.22 | 10.78 |
| 90 | 10 | 2.26 | 3.98 | 5.59 | 6.75 | 7.85 | 10.31 | 12.32 |
| 100 | 10 | 2.50 | 4.41 | 6.20 | 7.46 | 8.70 | 11.57 | 13.88 |
| 120 | 10 | 2.95 | 5.23 | 7.37 | 8.89 | 10.32 | 14.17 | 17.01 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 0.09 | 0.18 | 0.26 | 0.32 | 0.38 | 0.50 | 0.58 |
| 0.14 | 0.28 | 0.41 | 0.49 | 0.58 | 0.76 | 0.90 |
| 0.20 | 0.40 | 0.58 | 0.70 | 0.81 | 1.09 | 1.27 |
| 0.37 | 0.71 | 1.00 | 1.20 | 1.42 | 1.89 | 2.23 |
| 0.58 | 1.08 | 1.52 | 1.86 | 2.18 | 2.92 | 3.42 |
| 0.83 | 1.53 | 2.17 | 2.64 | 3.11 | 4.15 | 4.88 |
| 1.13 | 2.04 | 2.93 | 3.56 | 4.19 | 5.59 | 6.56 |
| 1.46 | 2.64 | 3.78 | 4.62 | 5.42 | 7.23 | 8.53 |
| 1.84 | 3.33 | 4.76 | 5.80 | 6.80 | 9.05 | 10.91 |
| 2.25 | 4.08 | 5.84 | 7.10 | 8.34 | 11.25 | 13.61 |
| 3.17 | 5.79 | 8.30 | 10.10 | 11.83 | 16.48 | 19.94 |

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SPROCKETS

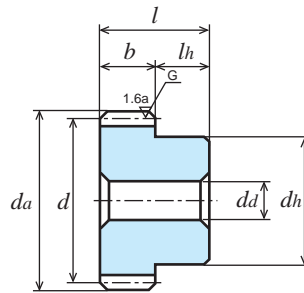
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モジュール **1.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC47 ~ 53
 JIS B 1702-1 (ISO) 7級
 System of accuracy : JIS B 1702-1(ISO) class 7



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>di</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| ● SGE1.5S 20B - 1506 | 20 | φ 30 | φ 33 | B1 | 15 | φ 6 | φ 25 | 15 | 30 | 0.1 |
| ● SGE1.5S 25B - 1508 | 25 | φ 37.5 | φ 40.5 | B1 | 15 | φ 8 | φ 30 | 15 | 30 | 0.2 |
| ● SGE1.5S 30B - 1508 | 30 | φ 45 | φ 48 | B1 | 15 | φ 8 | φ 38 | 15 | 30 | 0.3 |
| ● SGE1.5S 40B - 1508 | 40 | φ 60 | φ 63 | B1 | 15 | φ 8 | φ 50 | 15 | 30 | 0.6 |
| ● SGE1.5S 50B - 1510 | 50 | φ 75 | φ 78 | B1 | 15 | φ 10 | φ 60 | 15 | 30 | 0.8 |
| ● SGE1.5S 60B - 1510 | 60 | φ 90 | φ 93 | B1 | 15 | φ 10 | φ 65 | 15 | 30 | 1.1 |
| ● SGE1.5S 70B - 1510 | 70 | φ 105 | φ 108 | B1 | 15 | φ 10 | φ 75 | 15 | 30 | 1.5 |
| ● SGE1.5S 80B - 1510 | 80 | φ 120 | φ 123 | B1 | 15 | φ 10 | φ 85 | 15 | 30 | 2.0 |
| ● SGE1.5S 90B - 1512 | 90 | φ 135 | φ 138 | B1 | 15 | φ 12 | φ 95 | 15 | 30 | 2.5 |
| ● SGE1.5S 100B - 1515 | 100 | φ 150 | φ 153 | B1 | 15 | φ 15 | φ 105 | 15 | 30 | 3.1 |

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Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|-------|-------|-------|-------|-------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 20 | 15 | 1.23 | 2.40 | 3.40 | 4.07 | 4.69 | 6.18 | 7.19 |
| 25 | 15 | 1.70 | 3.21 | 4.48 | 5.32 | 6.22 | 8.18 | 9.56 |
| 30 | 15 | 2.17 | 3.99 | 5.51 | 6.65 | 7.75 | 10.22 | 11.91 |
| 40 | 15 | 3.08 | 5.49 | 7.66 | 9.22 | 10.76 | 14.16 | 16.52 |
| 50 | 15 | 3.95 | 6.91 | 9.73 | 11.76 | 13.71 | 18.04 | 20.93 |
| 60 | 15 | 4.78 | 8.39 | 11.80 | 14.24 | 16.56 | 21.74 | 25.99 |
| 70 | 15 | 5.57 | 9.82 | 13.82 | 16.63 | 19.38 | 25.98 | 31.17 |
| 80 | 15 | 6.32 | 11.19 | 15.77 | 19.01 | 22.09 | 30.33 | 36.39 |
| 90 | 15 | 7.03 | 12.59 | 17.67 | 21.29 | 24.95 | 34.66 | 41.59 |
| 100 | 15 | 7.76 | 13.95 | 19.58 | 23.51 | 28.11 | 39.04 | 46.85 |

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 0.30 | 0.60 | 0.87 | 1.05 | 1.22 | 1.63 | 1.91 |
| 0.48 | 0.93 | 1.33 | 1.59 | 1.88 | 2.50 | 2.95 |
| 0.70 | 1.33 | 1.87 | 2.27 | 2.67 | 3.57 | 4.20 |
| 1.25 | 2.30 | 3.26 | 3.96 | 4.66 | 6.22 | 7.62 |
| 1.94 | 3.49 | 5.01 | 6.11 | 7.18 | 9.58 | 11.21 |
| 2.75 | 4.99 | 7.14 | 8.70 | 10.20 | 13.58 | 16.37 |
| 3.70 | 6.72 | 9.63 | 11.70 | 13.75 | 18.69 | 22.61 |
| 4.76 | 8.68 | 12.45 | 15.16 | 17.75 | 24.73 | 29.91 |
| 5.93 | 10.93 | 15.62 | 19.01 | 22.46 | 31.65 | 38.28 |
| 7.24 | 13.42 | 19.16 | 23.24 | 28.01 | 39.46 | 47.73 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

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GROUND SPUR GEARS

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MODULE

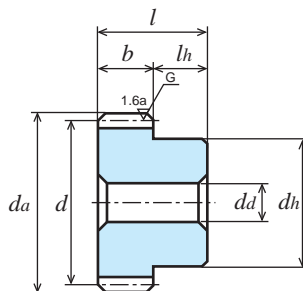
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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC47 ~ 53
JIS B 1702-1 (ISO) 7級
System of accuracy : JIS B 1702-1(ISO) class 7



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------------|
| ● SGE2S 20B - 2008 | 20 | φ 40 | φ 44 | B1 | 20 | φ 8 | φ 34 | 20 | 40 | 0.3 |
| ● SGE2S 25B - 2008 | 25 | φ 50 | φ 54 | B1 | 20 | φ 8 | φ 40 | 20 | 40 | 0.5 |
| ● SGE2S 30B - 2010 | 30 | φ 60 | φ 64 | B1 | 20 | φ 10 | φ 50 | 20 | 40 | 0.7 |
| ● SGE2S 40B - 2010 | 40 | φ 80 | φ 84 | B1 | 20 | φ 10 | φ 60 | 20 | 40 | 1.2 |
| ● SGE2S 50B - 2012 | 50 | φ 100 | φ 104 | B1 | 20 | φ 12 | φ 70 | 20 | 40 | 1.8 |
| ● SGE2S 60B - 2012 | 60 | φ 120 | φ 124 | B1 | 20 | φ 12 | φ 85 | 20 | 40 | 2.6 |
| ● SGE2S 70B - 2015 | 70 | φ 140 | φ 144 | B1 | 20 | φ 15 | φ 100 | 20 | 40 | 3.6 |
| ● SGE2S 80B - 2015 | 80 | φ 160 | φ 164 | B1 | 20 | φ 15 | φ 115 | 20 | 40 | 4.7 |
| ● SGE2S 90B - 2015 | 90 | φ 180 | φ 184 | B1 | 20 | φ 15 | φ 130 | 20 | 40 | 6.0 |
| ● SGE2S 100B - 2015 | 100 | φ 200 | φ 204 | B1 | 20 | φ 15 | φ 140 | 20 | 40 | 7.3 |

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Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---|-------|-------|-------|-------|-------|--------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 20 | 20 | 2.92 | 5.47 | 7.61 | 9.07 | 10.61 | 13.96 | 16.31 |
| 25 | 20 | 4.00 | 7.25 | 9.99 | 12.09 | 14.07 | 18.59 | 21.61 |
| 30 | 20 | 5.02 | 8.95 | 12.48 | 15.03 | 17.54 | 23.09 | 26.92 |
| 40 | 20 | 7.02 | 12.31 | 17.28 | 20.93 | 24.36 | 32.05 | 37.48 |
| 50 | 20 | 8.91 | 15.70 | 22.09 | 26.58 | 30.99 | 41.20 | 49.44 |
| 60 | 20 | 10.70 | 18.94 | 26.69 | 32.18 | 37.39 | 51.34 | 61.60 |
| 70 | 20 | 12.39 | 22.24 | 31.22 | 37.57 | 44.34 | 61.58 | 73.89 |
| 80 | 20 | 14.17 | 25.43 | 35.66 | 43.13 | 51.76 | 71.89 | 86.27 |
| 90 | 20 | 15.92 | 28.48 | 39.89 | 49.29 | 59.15 | 82.16 | 98.59 |
| 100 | 20 | 17.63 | 31.51 | 44.42 | 55.52 | 66.63 | 92.54 | 111.04 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|--------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 0.73 | 1.41 | 2.00 | 2.41 | 2.84 | 3.78 | 4.46 |
| 1.16 | 2.17 | 3.04 | 3.72 | 4.36 | 5.84 | 6.85 |
| 1.67 | 3.06 | 4.34 | 5.28 | 6.21 | 8.30 | 9.75 |
| 2.92 | 5.29 | 7.56 | 9.24 | 10.84 | 14.47 | 17.05 |
| 4.49 | 8.16 | 11.68 | 14.19 | 16.68 | 22.50 | 27.22 |
| 6.34 | 11.57 | 16.60 | 20.21 | 23.67 | 32.97 | 39.88 |
| 8.45 | 15.65 | 22.36 | 27.17 | 32.32 | 45.53 | 55.08 |
| 10.96 | 20.27 | 28.94 | 35.34 | 42.75 | 60.23 | 72.86 |
| 13.79 | 25.42 | 36.25 | 45.23 | 54.71 | 77.09 | 93.25 |
| 16.91 | 31.14 | 44.68 | 56.40 | 68.23 | 96.13 | 116.29 |

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スプロケット
SPROCKETS

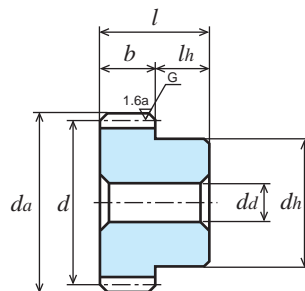
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REFERENCE DATA

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GROUND SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯)
 MODULE 2.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC47 ~ 53
 JIS B 1702-1 (ISO) 7級
 System of accuracy : JIS B 1702-1(ISO) class 7



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>di</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| ● SGE2.5S 20B - 2510 | 20 | φ 50 | φ 55 | B1 | 25 | φ10 | φ 42 | 20 | 45 | 0.6 |
| ● SGE2.5S 25B - 2510 | 25 | φ 62.5 | φ 67.5 | B1 | 25 | φ10 | φ 52 | 20 | 45 | 0.9 |
| ● SGE2.5S 30B - 2512 | 30 | φ 75 | φ 80 | B1 | 25 | φ12 | φ 65 | 20 | 45 | 1.3 |
| ● SGE2.5S 40B - 2512 | 40 | φ100 | φ105 | B1 | 25 | φ12 | φ 70 | 20 | 45 | 2.1 |
| ● SGE2.5S 50B - 2515 | 50 | φ125 | φ130 | B1 | 25 | φ15 | φ 90 | 20 | 45 | 3.3 |
| ● SGE2.5S 60B - 2515 | 60 | φ150 | φ155 | B1 | 25 | φ15 | φ105 | 20 | 45 | 4.8 |
| ● SGE2.5S 70B - 2520 | 70 | φ175 | φ180 | B1 | 25 | φ20 | φ125 | 20 | 45 | 6.5 |
| ● SGE2.5S 80B - 2520 | 80 | φ200 | φ205 | B1 | 25 | φ20 | φ140 | 20 | 45 | 8.5 |

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Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|-------|-------|--------|--------|--------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 20 | 25 | 5.68 | 10.28 | 14.18 | 17.16 | 19.97 | 26.38 | 30.67 |
| 25 | 25 | 7.61 | 13.51 | 18.89 | 22.72 | 26.56 | 34.93 | 40.73 |
| 30 | 25 | 9.52 | 16.68 | 23.49 | 28.39 | 33.09 | 43.52 | 50.51 |
| 40 | 25 | 13.20 | 23.25 | 32.71 | 39.35 | 45.89 | 61.00 | 73.20 |
| 50 | 25 | 16.62 | 29.53 | 41.53 | 50.10 | 58.15 | 80.47 | 96.56 |
| 60 | 25 | 19.94 | 35.84 | 50.29 | 60.38 | 72.19 | 100.27 | 120.32 |
| 70 | 25 | 23.40 | 41.90 | 58.71 | 72.16 | 86.59 | 120.27 | 144.32 |
| 80 | 25 | 26.76 | 47.82 | 67.40 | 84.25 | 101.10 | 140.41 | 168.49 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|--------|--------|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 1.45 | 2.71 | 3.80 | 4.65 | 5.45 | 7.31 | 8.56 |
| 2.26 | 4.13 | 5.88 | 7.14 | 8.41 | 11.22 | 13.19 |
| 3.23 | 5.82 | 8.35 | 10.19 | 11.97 | 15.97 | 18.69 |
| 5.61 | 10.20 | 14.60 | 17.74 | 20.86 | 28.13 | 34.02 |
| 8.56 | 15.67 | 22.43 | 27.33 | 31.97 | 44.89 | 54.30 |
| 12.07 | 22.36 | 31.94 | 38.73 | 46.68 | 65.77 | 79.56 |
| 16.31 | 30.11 | 42.94 | 53.30 | 64.47 | 90.84 | 109.88 |
| 21.13 | 38.93 | 55.85 | 70.50 | 85.28 | 120.17 | 145.36 |

歯研平歯車

GROUND SPUR GEARS

モジュール
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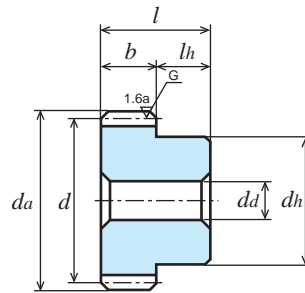
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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯部高周波焼き入れ HRC47 ~ 53
JIS B 1702-1 (ISO) 7級
System of accuracy : JIS B 1702-1(ISO) class 7



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| ● SGE3S 20B - 3012 | 20 | φ 60 | φ 66 | B1 | 30 | φ12 | φ 52 | 20 | 50 | 0.9 |
| ● SGE3S 25B - 3012 | 25 | φ 75 | φ 81 | B1 | 30 | φ12 | φ 60 | 20 | 50 | 1.4 |
| ● SGE3S 30B - 3012 | 30 | φ 90 | φ 96 | B1 | 30 | φ12 | φ 75 | 20 | 50 | 2.1 |
| ● SGE3S 40B - 3015 | 40 | φ120 | φ126 | B1 | 30 | φ15 | φ 85 | 20 | 50 | 3.5 |
| ● SGE3S 50B - 3015 | 50 | φ150 | φ156 | B1 | 30 | φ15 | φ105 | 20 | 50 | 5.4 |
| ● SGE3S 60B - 3015 | 60 | φ180 | φ186 | B1 | 30 | φ15 | φ130 | 20 | 50 | 8.0 |
| ● SGE3S 70B - 3020 | 70 | φ210 | φ216 | B1 | 30 | φ20 | φ150 | 20 | 50 | 10.8 |
| ● SGE3S 80B - 3020 | 80 | φ240 | φ246 | B1 | 30 | φ20 | φ170 | 20 | 50 | 14.1 |

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Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|---|-------|--------|--------|--------|--------|--------|
| | | 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 |
| 20 | 30 | 9.61 | 17.12 | 23.88 | 28.75 | 33.56 | 44.16 | 51.50 |
| 25 | 30 | 12.83 | 22.47 | 31.65 | 38.25 | 44.59 | 58.65 | 68.07 |
| 30 | 30 | 15.98 | 28.09 | 39.47 | 47.64 | 55.43 | 72.74 | 86.96 |
| 40 | 30 | 21.97 | 38.89 | 54.81 | 66.08 | 76.77 | 105.40 | 126.48 |
| 50 | 30 | 27.65 | 49.70 | 69.74 | 83.74 | 100.12 | 139.05 | 166.86 |
| 60 | 30 | 33.58 | 60.06 | 84.13 | 103.96 | 124.75 | 173.26 | 207.92 |
| 70 | 30 | 39.28 | 70.25 | 99.75 | 124.69 | 149.63 | 207.82 | 249.39 |
| 80 | 30 | 44.76 | 80.24 | 116.46 | 145.58 | 174.69 | 242.63 | 291.15 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|-------|-------|--------|--------|--------|--------|--|
| 400 | 800 | 1,200 | 1,500 | 1,800 | 2,500 | 3,000 | |
| 2.50 | 4.59 | 6.52 | 7.92 | 9.32 | 12.44 | 14.63 | |
| 3.87 | 6.99 | 10.02 | 12.23 | 14.36 | 19.17 | 22.43 | |
| 5.51 | 9.98 | 14.28 | 17.40 | 20.40 | 27.16 | 32.74 | |
| 9.51 | 17.36 | 24.90 | 30.31 | 35.50 | 49.45 | 59.82 | |
| 14.48 | 26.84 | 38.33 | 46.48 | 56.01 | 78.92 | 95.47 | |
| 20.68 | 38.13 | 54.37 | 67.85 | 82.07 | 115.64 | 139.88 | |
| 27.86 | 51.36 | 74.24 | 93.71 | 113.35 | 159.72 | 193.20 | |
| 35.97 | 66.47 | 98.20 | 123.96 | 149.95 | 211.28 | 255.57 | |

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平歯車

Spur Gears

商品記号の読み方 Reference of Catalogue Numbers

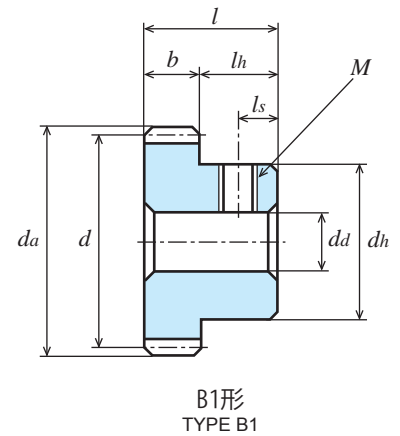
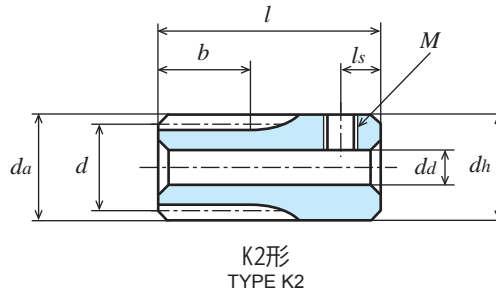
S1S25A - 0806F
= 0806
S1S25B - 0806F
+ 0806
* 0806

| 歯車の種類 Kind of Gear | モジュール Module | 材質 Material | 歯数 Number of Teeth | 形状 Type | 穴仕上 Bores Processed | 歯幅 Face Width | 穴径 Bore Diameter | 追加工用商品 Gear for the item of additional machining |
|-------------------------|---|--|-----------------------|---|--|---|--------------------------------------|---|
| S : スパーギヤ Spur gears | m : 0.3, 0.5 0.75, 0.8 1.0, 1.25 1.5, 2.0 2.5, 3.0 4.0, 5.0 | S : S45C Carbon Steel B : 黄銅 Brass D : ポリアセタール Poly Acetal (Machined) SU : ステンレス SUS304 Stainless Steel DM : 射出成形品 Poly Acetal (Injection molded) DB : ポリアセタール (黄銅ブッシュ入り) Acetal (with Brass Bushing) | 歯数 z: 8 ~ 120 | A : ハブ無し Hub less. B : 片ハブ付き With Hub on one side. BF : 片ハブ付き、 追加工用商品 Gera for the item of additional machining. L : 両軸付き With Solid shaft on both side. K : 棒状のもの Bar of gear. | 【-】: キーみぞ、 ネジ穴無し 旋削仕上げ Gear without key way / without threaded hole , except types of K1 and L1. 【+】: ネジ穴付 旋削仕上げ Gear with threaded hole / with set screw. / without set screw. (Please refer the details) 【*】: ネジ穴付 旋削仕上げ Gear with two threaded holes / with two set screws. 【=】: キーみぞ付 旋削仕上げ Gear with key way / with key. 【#】: キーみぞ、 ネジ穴付 旋削仕上げ Gear with key way and threaded hole / with key and screw. | 単位: ミリメートル Dimension : millimeter “広幅”と“並幅” があります。 並幅: 軽荷重用 広幅: 重荷重用 があります。 Types of Face Width: We have Wide-face width for Heavy load, and Standard-face width for Light load. | 単位: ミリメートル Dimension : millimeter | "Fタイプ"、"N タイプ"と呼ん でください。追 加工して使う商 品です。 F type and N type gears are meant for additional machining. H : 歯部高周波 焼入 HRC47 ~ 53 Complete with high frequency induction hardening (HRC47 ~ 53). |

平歯車 SPUR GEARS

モジュール **0.3** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9級
System of accuracy: JIS B 1702-1(ISO) class 9



C3604B 快削黄銅棒 Material: Brass (ISO CuZn39Pb3)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|-----|----------------------|
| | | | | | | | | | | M | ls | |
| S30B 14K + 0402 | 14 | φ 4.2 | φ 4.8 | K2 | 4 | φ2 | φ 5 | 8 | 12 | M1.6 | 2.5 | 1.5 |
| S30B 15K + 0402 | 15 | φ 4.5 | φ 5.1 | K2 | 4 | φ2 | φ 5.5 | 8 | 12 | M1.6 | 2.5 | 1.8 |
| S30B 16K + 0402 | 16 | φ 4.8 | φ 5.4 | K2 | 4 | φ2 | φ 5.5 | 8 | 12 | M1.6 | 2.5 | 1.9 |
| S30B 18K + 0402 | 18 | φ 5.4 | φ 6 | K2 | 4 | φ2 | φ 6 | 8 | 12 | M2 | 2.5 | 2.3 |
| S30B 20B + 0302 | 20 | φ 6 | φ 6.6 | B1 | 3.2 | φ2 | φ 5 | 4.8 | 8 | M1.6 | 2.5 | 1.3 |
| S30B 24B + 0302 | 24 | φ 7.2 | φ 7.8 | B1 | 3.2 | φ2 | φ 6 | 4.8 | 8 | M2 | 2.5 | 2.0 |
| S30B 25B + 0302 | 25 | φ 7.5 | φ 8.1 | B1 | 3.2 | φ2 | φ 6 | 4.8 | 8 | M2 | 2.5 | 2.1 |
| S30B 28B + 0302 | 28 | φ 8.4 | φ 9 | B1 | 3.2 | φ2 | φ 7 | 4.8 | 8 | M2 | 2.5 | 2.8 |
| S30B 30B + 0302 | 30 | φ 9 | φ 9.6 | B1 | 3.2 | φ2 | φ 8 | 4.8 | 8 | M2 | 2.5 | 3.5 |
| S30B 32B + 0202 | 32 | φ 9.6 | φ 10.2 | B1 | 2 | φ2 | φ 8 | 6 | 8 | M2 | 3 | 3.5 |
| S30B 35B + 0202 | 35 | φ 10.5 | φ 11.1 | B1 | 2 | φ2 | φ 8 | 6 | 8 | M2 | 3 | 3.8 |
| S30B 36B + 0203 | 36 | φ 10.8 | φ 11.4 | B1 | 2 | φ3 | φ 9 | 6 | 8 | M3 | 3 | 4.2 |
| S30B 40B + 0203 | 40 | φ 12 | φ 12.6 | B1 | 2 | φ3 | φ 10 | 6 | 8 | M3 | 3 | 5.3 |
| S30B 45B + 0203 | 45 | φ 13.5 | φ 14.1 | B1 | 2 | φ3 | φ 10 | 6 | 8 | M3 | 3 | 5.8 |
| S30B 48B + 0203 | 48 | φ 14.4 | φ 15 | B1 | 2 | φ3 | φ 10 | 6 | 8 | M3 | 3 | 6.1 |

セットスクリューは付いておりません。

[+]: Gear with threaded hole / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|------|------|------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S30B 14K + 0402 | 0.03 | 0.32 | 0.64 | 1.27 | 2.55 | 3.82 | 4.78 |
| S30B 15K + 0402 | 0.04 | 0.36 | 0.71 | 1.43 | 2.86 | 4.29 | 5.36 |
| S30B 16K + 0402 | 0.04 | 0.40 | 0.79 | 1.59 | 3.17 | 4.76 | 5.95 |
| S30B 18K + 0402 | 0.05 | 0.48 | 0.95 | 1.91 | 3.81 | 5.72 | 7.15 |
| S30B 20B + 0302 | 0.04 | 0.45 | 0.90 | 1.79 | 3.58 | 5.37 | 6.71 |
| S30B 24B + 0302 | 0.06 | 0.58 | 1.17 | 2.33 | 4.67 | 7.00 | 8.75 |
| S30B 25B + 0302 | 0.06 | 0.62 | 1.24 | 2.47 | 4.95 | 7.42 | 9.27 |
| S30B 28B + 0302 | 0.07 | 0.72 | 1.45 | 2.89 | 5.79 | 8.68 | 10.86 |
| S30B 30B + 0302 | 0.08 | 0.79 | 1.59 | 3.18 | 6.36 | 9.54 | 11.92 |
| S30B 32B + 0202 | 0.05 | 0.54 | 1.08 | 2.17 | 4.33 | 6.50 | 8.12 |
| S30B 35B + 0202 | 0.06 | 0.61 | 1.22 | 2.44 | 4.88 | 7.32 | 9.15 |
| S30B 36B + 0203 | 0.06 | 0.63 | 1.27 | 2.53 | 5.06 | 7.59 | 9.49 |
| S30B 40B + 0203 | 0.07 | 0.72 | 1.45 | 2.90 | 5.80 | 8.70 | 10.87 |
| S30B 45B + 0203 | 0.08 | 0.84 | 1.68 | 3.36 | 6.72 | 10.09 | 12.49 |
| S30B 48B + 0203 | 0.09 | 0.91 | 1.82 | 3.64 | 7.29 | 10.93 | 13.40 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

RoHS 対応

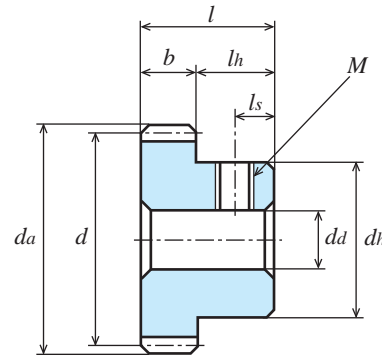
2006年11月生産開始分より欧州 RoHS 指令に対応できる商品を提供しています。

We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

JIS B 1702-1 (ISO) 9 級
System of accuracy : JIS B 1702-1(ISO) class 9



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

C3604B 快削黄銅棒

Material : Brass (ISO CuZn39Pb3)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | M | ls | |
| S30B 50B + 0203 | 50 | φ15 | φ15.6 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 6.4 |
| S30B 56B + 0203 | 56 | φ16.8 | φ17.4 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 7.1 |
| S30B 60B + 0203 | 60 | φ18 | φ18.6 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 7.7 |
| S30B 64B + 0203 | 64 | φ19.2 | φ19.8 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 8.3 |
| S30B 66B + 0203 | 66 | φ19.8 | φ20.4 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 8.6 |
| S30B 70B + 0203 | 70 | φ21 | φ21.6 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 9.3 |
| S30B 72B + 0203 | 72 | φ21.6 | φ22.2 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 9.6 |
| S30B 75B + 0203 | 75 | φ22.5 | φ23.1 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 10.1 |
| S30B 80B + 0203 | 80 | φ24 | φ24.6 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 11.1 |
| S30B 90B + 0203 | 90 | φ27 | φ27.6 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 13.1 |
| S30B 96B + 0203 | 96 | φ28.8 | φ29.4 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 14.4 |
| S30B 100B + 0203 | 100 | φ30 | φ30.6 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 15.4 |
| S30B 108B + 0203 | 108 | φ32.4 | φ33 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 17.4 |
| S30B 120B + 0203 | 120 | φ36 | φ36.6 | B1 | 2 | φ3 | φ10 | 6 | 8 | M3 | 3 | 20.7 |

セットスクリューは付いておりません。

[+]: Gear with threaded hole / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|------|-------|-------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S30B 50B + 0203 | 0.10 | 0.96 | 1.92 | 3.83 | 7.66 | 11.49 | 13.99 |
| S30B 56B + 0203 | 0.11 | 1.10 | 2.20 | 4.40 | 8.80 | 13.09 | 15.74 |
| S30B 60B + 0203 | 0.12 | 1.20 | 2.39 | 4.78 | 9.56 | 14.07 | 16.88 |
| S30B 64B + 0203 | 0.13 | 1.29 | 2.58 | 5.16 | 10.33 | 15.02 | 17.99 |
| S30B 66B + 0203 | 0.13 | 1.34 | 2.68 | 5.36 | 10.71 | 15.50 | 18.54 |
| S30B 70B + 0203 | 0.14 | 1.43 | 2.87 | 5.74 | 11.48 | 16.43 | 19.61 |
| S30B 72B + 0203 | 0.15 | 1.48 | 2.97 | 5.93 | 11.87 | 16.89 | 20.14 |
| S30B 75B + 0203 | 0.16 | 1.56 | 3.11 | 6.22 | 12.44 | 17.58 | 20.92 |
| S30B 80B + 0203 | 0.17 | 1.68 | 3.35 | 6.71 | 13.40 | 18.69 | 22.20 |
| S30B 90B + 0203 | 0.19 | 1.92 | 3.83 | 7.67 | 15.04 | 20.83 | 24.62 |
| S30B 96B + 0203 | 0.21 | 2.06 | 4.13 | 8.25 | 16.01 | 22.07 | 26.02 |
| S30B 100B + 0203 | 0.22 | 2.16 | 4.32 | 8.64 | 16.64 | 22.89 | 26.93 |
| S30B 108B + 0203 | 0.24 | 2.36 | 4.71 | 9.42 | 17.88 | 24.46 | 28.68 |
| S30B 112B + 0203 | 0.25 | 2.45 | 4.91 | 9.81 | 18.49 | 25.23 | 29.54 |
| S30B 120B + 0203 | 0.26 | 2.65 | 5.30 | 10.60 | 19.69 | 26.73 | 31.19 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

RoHS 対応

2006年11月生産開始分より欧州 RoHS 指令に対応できる商品を提供しています。

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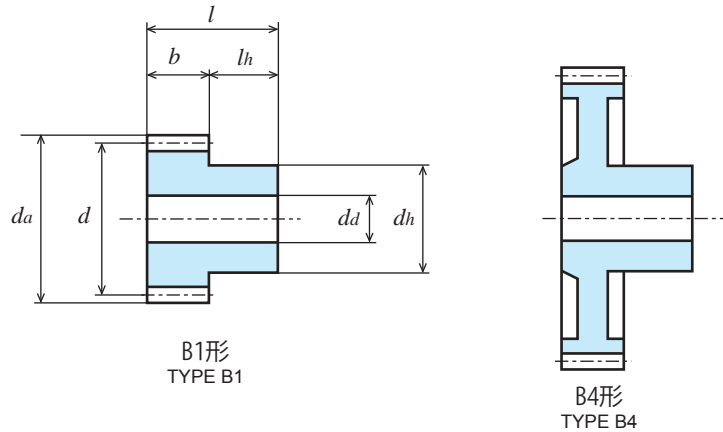
平歯車 SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 11 級
System of accuracy : JIS B 1702-1(ISO) class 11



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



ポリアセタール (黒色)
Material : Poly Acetal (Black)

射出成形品 穴径 (da) の追加加工はなるべくしないで下さい。気泡 (す) がでることがあります。
Injection Molded gears Additional machining to bore (da) is not advisable because 'voids' may be occur.

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|---------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| S50DM 20B - 0403 | 20 | φ10 | φ11 | B1 | 4 | φ3 | φ8 | 4 | 8 | 0.9 |
| S50DM 24B - 0303 | 24 | φ12 | φ13 | B1 | 3 | φ3 | φ10 | 5 | 8 | 1.0 |
| S50DM 30B - 0303 | 30 | φ15 | φ16 | B1 | 3 | φ3 | φ10 | 5 | 8 | 1.2 |
| S50DM 40B - 0303 | 40 | φ20 | φ21 | B4 | 3 | φ3 | φ10 | 5 | 8 | 1.5 |
| S50DM 50B - 0303 | 50 | φ25 | φ26 | B4 | 3 | φ3 | φ10 | 5 | 8 | 2.0 |
| S50DM 60B - 0303 | 60 | φ30 | φ31 | B4 | 3 | φ3 | φ10 | 5 | 8 | 2.7 |
| S50DM 80B - 0303 | 80 | φ40 | φ41 | B4 | 3 | φ3 | φ10 | 5 | 8 | 4.4 |
| S50DM 100B - 0303 | 100 | φ50 | φ51 | B4 | 3 | φ3 | φ10 | 5 | 8 | 6.6 |

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|-------|-------|-------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50DM 20B - 0403 | 0.18 | 1.84 | 3.67 | 7.34 | 14.67 | 21.97 | 27.44 |
| S50DM 24B - 0303 | 0.17 | 1.65 | 3.31 | 6.61 | 13.19 | 19.76 | 24.67 |
| S50DM 30B - 0303 | 0.21 | 2.07 | 4.13 | 8.25 | 16.48 | 24.67 | 30.80 |
| S50DM 40B - 0303 | 0.28 | 2.75 | 5.51 | 11.00 | 21.94 | 32.84 | 40.97 |
| S50DM 50B - 0303 | 0.34 | 3.44 | 6.88 | 13.74 | 27.40 | 40.97 | 51.10 |
| S50DM 60B - 0303 | 0.41 | 4.13 | 8.25 | 16.48 | 32.84 | 49.08 | 61.18 |
| S50DM 80B - 0303 | 0.55 | 5.51 | 11.00 | 21.94 | 43.68 | 65.19 | 80.75 |
| S50DM 100B - 0303 | 0.69 | 6.88 | 13.74 | 27.40 | 54.47 | 80.75 | 99.78 |

The above numerical values are Lewis formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

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かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

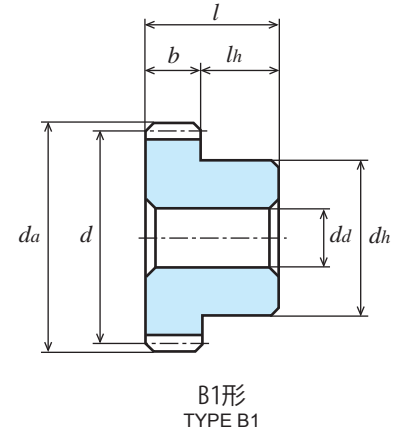
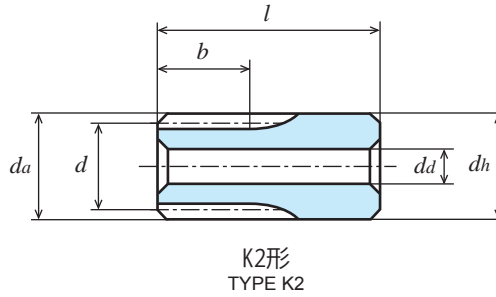
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平歯車

SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
 System of accuracy : JIS B 1702-1(ISO) class 9-10



ポリアセタール (白色)
 Material : Poly Acetal (White)

機械加工品
 Machined Gears

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|-------------------------------|-----------|-------------------------|-----------------------------|------------------------------|--------------------------------|-----------------------------|------------------------|
| S50D 14K - 0803 | 14 | $\phi 7$ | $\phi 8$ | K2 | 8 | $\phi 3$ | $\phi 9$ | 10 | 18 | 1.15 |
| S50D 15K - 0803 | 15 | $\phi 7.5$ | $\phi 8.5$ | K2 | 8 | $\phi 3$ | $\phi 9$ | 10 | 18 | 1.22 |
| S50D 16K - 0803 | 16 | $\phi 8$ | $\phi 9$ | K2 | 8 | $\phi 3$ | $\phi 9$ | 10 | 18 | 1.29 |
| S50D 18K - 0803 | 18 | $\phi 9$ | $\phi 10$ | K2 | 8 | $\phi 3$ | $\phi 10$ | 10 | 18 | 1.65 |
| S50D 20B - 0303 | 20 | $\phi 10$ | $\phi 11$ | B1 | 3 | $\phi 3$ | $\phi 8$ | 5 | 8 | 0.61 |
| S50D 24B - 0303 | 24 | $\phi 12$ | $\phi 13$ | B1 | 3 | $\phi 3$ | $\phi 8$ | 5 | 8 | 0.75 |
| S50D 25B - 0303 | 25 | $\phi 12.5$ | $\phi 13.5$ | B1 | 3 | $\phi 3$ | $\phi 8$ | 5 | 8 | 0.79 |
| S50D 28B - 0303 | 28 | $\phi 14$ | $\phi 15$ | B1 | 3 | $\phi 3$ | $\phi 8$ | 5 | 8 | 0.93 |
| S50D 30B - 0303 | 30 | $\phi 15$ | $\phi 16$ | B1 | 3 | $\phi 3$ | $\phi 8$ | 5 | 8 | 0.97 |
| S50D 32B - 0303 | 32 | $\phi 16$ | $\phi 17$ | B1 | 3 | $\phi 3$ | $\phi 8$ | 5 | 8 | 1.13 |
| S50D 36B - 0303 | 36 | $\phi 18$ | $\phi 19$ | B1 | 3 | $\phi 3$ | $\phi 8$ | 5 | 8 | 1.35 |
| S50D 40B - 0303 | 40 | $\phi 20$ | $\phi 21$ | B1 | 3 | $\phi 3$ | $\phi 10$ | 5 | 8 | 1.81 |

波形スプリングピン付き、呼び径は $\phi 1$ です。(ステンレス)
 Gear with Corrugated spring (SUS) as dimension of $\phi 1.0$

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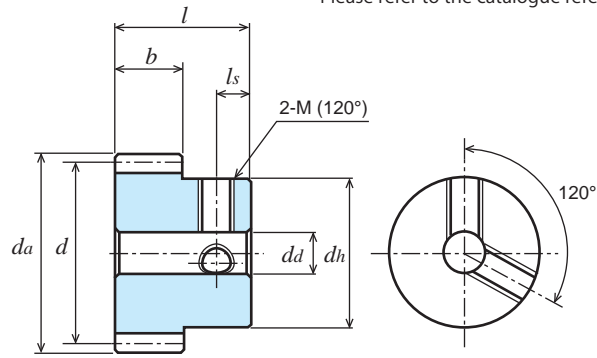
平歯車 SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

ポリアセタール (白色)
Material : Poly Acetal (White)

機械加工品
Machined Gears

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|---------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S50D 14K * 0803 | 14 | φ 7 | φ 8 | K2 | 8 | φ3 | φ 9 | 10 | 18 | 2-M3 | 3 | 1.10 |
| S50D 15K * 0803 | 15 | φ 7.5 | φ 8.5 | K2 | 8 | φ3 | φ 9 | 10 | 18 | 2-M3 | 3 | 1.17 |
| S50D 16K * 0803 | 16 | φ 8 | φ 9 | K2 | 8 | φ3 | φ 9 | 10 | 18 | 2-M3 | 3 | 1.24 |
| S50D 18K * 0803 | 18 | φ 9 | φ10 | K2 | 8 | φ3 | φ10 | 10 | 18 | 2-M3 | 3 | 1.59 |
| S50D 20B * 0303 | 20 | φ10 | φ11 | B1 | 3 | φ3 | φ 8 | 5 | 8 | 2-M3 | 3 | 0.57 |
| S50D 24B * 0303 | 24 | φ12 | φ13 | B1 | 3 | φ3 | φ10 | 5 | 8 | 2-M3 | 3 | 0.90 |
| S50D 25B * 0303 | 25 | φ12.5 | φ13.5 | B1 | 3 | φ3 | φ10 | 5 | 8 | 2-M3 | 3 | 0.94 |
| S50D 28B * 0303 | 28 | φ14 | φ15 | B1 | 3 | φ3 | φ12 | 5 | 8 | 2-M3 | 3 | 1.30 |
| S50D 30B * 0303 | 30 | φ15 | φ16 | B1 | 3 | φ3 | φ12 | 5 | 8 | 2-M3 | 3 | 1.39 |
| S50D 32B * 0303 | 32 | φ16 | φ17 | B1 | 3 | φ3 | φ14 | 5 | 8 | 2-M3 | 3 | 1.77 |
| S50D 36B * 0303 | 36 | φ18 | φ19 | B1 | 3 | φ3 | φ15 | 5 | 8 | 2-M3 | 3 | 2.15 |
| S50D 40B * 0303 | 40 | φ20 | φ21 | B1 | 3 | φ3 | φ15 | 5 | 8 | 2-M3 | 3 | 2.40 |

【*】(アスタ)にはセットスクリーが2個付いております。
[*] : Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|------|-------|-------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50D 14K * 0803 | 0.22 | 2.24 | 4.48 | 8.95 | 17.89 | 26.82 | 33.50 |
| S50D 15K * 0803 | 0.24 | 2.40 | 4.80 | 9.59 | 19.17 | 28.73 | 35.88 |
| S50D 16K * 0803 | 0.26 | 2.56 | 5.12 | 10.23 | 20.44 | 30.64 | 38.27 |
| S50D 18K * 0803 | 0.29 | 2.88 | 5.76 | 11.51 | 22.99 | 34.45 | 43.03 |
| S50D 20B * 0303 | 0.12 | 1.20 | 2.40 | 4.79 | 9.58 | 14.35 | 17.92 |
| S50D 24B * 0303 | 0.17 | 1.74 | 3.48 | 6.96 | 13.90 | 20.82 | 25.99 |
| S50D 25B * 0303 | 0.18 | 1.81 | 3.63 | 7.25 | 14.47 | 21.68 | 27.07 |
| S50D 28B * 0303 | 0.20 | 2.03 | 4.06 | 8.12 | 16.21 | 24.27 | 30.30 |
| S50D 30B * 0303 | 0.22 | 2.18 | 4.35 | 8.70 | 17.36 | 25.99 | 32.45 |
| S50D 32B * 0303 | 0.23 | 2.32 | 4.64 | 9.27 | 18.51 | 27.71 | 34.59 |
| S50D 36B * 0303 | 0.26 | 2.61 | 5.22 | 10.43 | 20.82 | 31.16 | 38.88 |
| S50D 40B * 0303 | 0.29 | 2.90 | 5.80 | 11.59 | 23.12 | 34.59 | 43.16 |

The above numerical values are Lewis formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

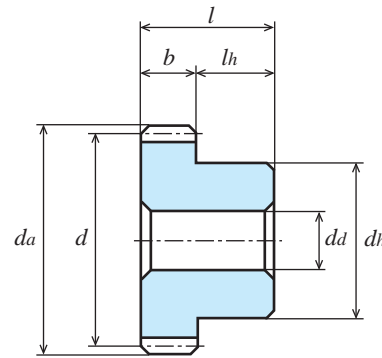
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平歯車

SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
 System of accuracy : JIS B 1702-1(ISO) class 9-10



B1形
TYPE B1

ポリアセタール (白色)
Material : Poly Acetal (White)

機械加工品
Machined Gears

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter d_d | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|--------------------------------|-----------|-------------------------|------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| S50D 45B - 0303 | 45 | φ22.5 | φ23.5 | B1 | 3 | φ3 | φ10 | 5 | 8 | 2.17 |
| S50D 50B - 0303 | 50 | φ25 | φ26 | B1 | 3 | φ3 | φ10 | 5 | 8 | 2.56 |
| S50D 56B - 0303 | 56 | φ28 | φ29 | B1 | 3 | φ3 | φ10 | 5 | 8 | 3.09 |
| S50D 60B - 0303 | 60 | φ30 | φ31 | B1 | 3 | φ3 | φ10 | 5 | 8 | 3.40 |
| S50D 64B - 0303 | 64 | φ32 | φ33 | B1 | 3 | φ3 | φ10 | 5 | 8 | 3.90 |
| S50D 70B - 0304 | 70 | φ35 | φ36 | B1 | 3 | φ4 | φ12 | 5 | 8 | 4.70 |
| S50D 72B - 0304 | 72 | φ36 | φ37 | B1 | 3 | φ4 | φ12 | 5 | 8 | 4.99 |
| S50D 80B - 0304 | 80 | φ40 | φ41 | B1 | 3 | φ4 | φ12 | 5 | 8 | 6.01 |
| S50D 90B - 0305 | 90 | φ45 | φ46 | B1 | 3 | φ5 | φ14 | 5 | 8 | 7.64 |
| S50D 100B - 0305 | 100 | φ50 | φ51 | B1 | 3 | φ5 | φ14 | 5 | 8 | 9.22 |
| S50D 120B - 0305 | 120 | φ60 | φ61 | B1 | 3 | φ5 | φ14 | 5 | 8 | 12.90 |

波形スプリングピン付き、呼び径はφ1です。(ステンレス)
 Gear with Corrugated spring (SUS) as dimension of φ1.0

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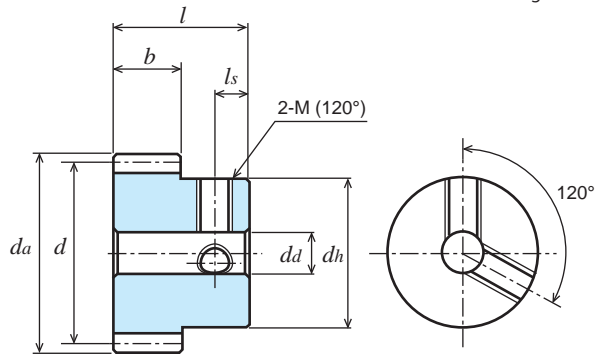
SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
 System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

ポリアセタール (白色)
 Material : Poly Acetal (White)

機械加工品
 Machined Gears

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|---------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S50D 45B * 0303 | 45 | φ22.5 | φ23.5 | B1 | 3 | φ3 | φ15 | 5 | 8 | 2-M3 | 3 | 2.75 |
| S50D 50B * 0303 | 50 | φ25 | φ26 | B1 | 3 | φ3 | φ15 | 5 | 8 | 2-M3 | 3 | 3.15 |
| S50D 56B * 0303 | 56 | φ28 | φ29 | B1 | 3 | φ3 | φ15 | 5 | 8 | 2-M3 | 3 | 3.67 |
| S50D 60B * 0303 | 60 | φ30 | φ31 | B1 | 3 | φ3 | φ15 | 5 | 8 | 2-M3 | 3 | 4.06 |
| S50D 64B * 0303 | 64 | φ32 | φ33 | B1 | 3 | φ3 | φ15 | 5 | 8 | 2-M3 | 3 | 4.47 |
| S50D 70B * 0304 | 70 | φ35 | φ36 | B1 | 3 | φ4 | φ16 | 5 | 8 | 2-M3 | 3 | 5.25 |
| S50D 72B * 0304 | 72 | φ36 | φ37 | B1 | 3 | φ4 | φ16 | 5 | 8 | 2-M3 | 3 | 5.48 |
| S50D 80B * 0304 | 80 | φ40 | φ41 | B1 | 3 | φ4 | φ16 | 5 | 8 | 2-M3 | 3 | 6.49 |
| S50D 90B * 0305 | 90 | φ45 | φ46 | B1 | 3 | φ5 | φ18 | 5 | 8 | 2-M3 | 3 | 8.20 |
| S50D 100B * 0305 | 100 | φ50 | φ51 | B1 | 3 | φ5 | φ18 | 5 | 8 | 2-M3 | 3 | 9.77 |
| S50D 120B * 0305 | 120 | φ60 | φ61 | B1 | 3 | φ5 | φ18 | 5 | 8 | 2-M3 | 3 | 13.43 |

【*】(アスタ)にはセットスクリーが2個付いております。

[*] : Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|-------|-------|-------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50D 45B * 0303 | 0.33 | 3.26 | 6.52 | 13.03 | 25.99 | 38.88 | 48.50 |
| S50D 50B * 0303 | 0.36 | 3.63 | 7.25 | 14.47 | 28.86 | 43.16 | 53.83 |
| S50D 56B * 0303 | 0.41 | 4.06 | 8.12 | 16.21 | 32.30 | 48.29 | 60.21 |
| S50D 60B * 0303 | 0.44 | 4.35 | 8.70 | 17.36 | 34.59 | 51.70 | 64.45 |
| S50D 64B * 0303 | 0.46 | 4.64 | 9.27 | 18.51 | 36.88 | 55.11 | 68.68 |
| S50D 70B * 0304 | 0.51 | 5.08 | 10.14 | 20.24 | 40.31 | 60.21 | 74.86 |
| S50D 72B * 0304 | 0.52 | 5.22 | 10.43 | 20.82 | 41.45 | 61.91 | 76.91 |
| S50D 80B * 0304 | 0.58 | 5.80 | 11.59 | 23.12 | 46.01 | 68.68 | 85.07 |
| S50D 90B * 0305 | 0.65 | 6.52 | 13.03 | 25.99 | 51.70 | 76.91 | 95.15 |
| S50D 100B * 0305 | 0.73 | 7.25 | 14.47 | 28.86 | 57.38 | 85.07 | 105.11 |
| S50D 120B * 0305 | 0.87 | 8.70 | 17.36 | 34.59 | 68.68 | 101.14 | 124.67 |

The above numerical values are Lewis formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

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かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

技術仕様
REFERENCE DATA

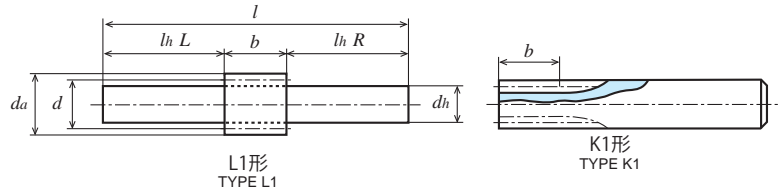
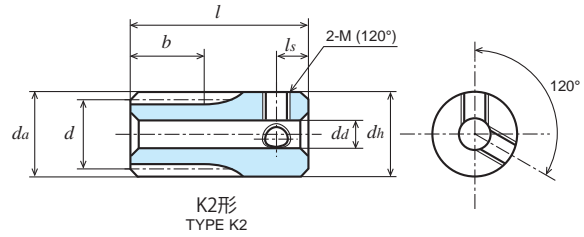
平歯車 SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9級
System of accuracy : JIS B 1702-1(ISO) class 9



New **ねじを2箇所 (120°配) にしました。**
New item with two threaded holes (120°)



SUS304 ステンレス鋼棒 (JIS G 4303) Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S50SU 10K - 1006 | 10 | φ 5 | φ 6 | K1 | 10 | - | φ 6 | 45 | 55 | - | - | 11.7 |
| S50SU 12K - 1007 | 12 | φ 6 | φ 7 | K1 | 10 | - | φ 7 | 45 | 55 | - | - | 16.0 |
| S50SU 14K - 1008 | 14 | φ 7 | φ 8 | K1 | 10 | - | φ 8 | 45 | 55 | - | - | 21.0 |
| S50SU 15K - 1008 | 15 | φ 7.5 | φ 8.5 | K1 | 10 | - | φ 8.5 | 45 | 55 | - | - | 23.8 |
| S50SU 16K * 0804 | 16 | φ 8 | φ 9 | K2 | 8 | φ4 | φ 9 | 10 | 18 | 2-M3 | 3 | 6.2 |
| S50SU 16L - 0805 | 16 | φ 8 | φ 9 | L1 | 8 | - | φ 5 (h9) | L22 R50 | 80 | - | - | 14.4 |
| S50SU 18K * 0804 | 18 | φ 9 | φ 10 | K2 | 8 | φ4 | φ 10 | 10 | 18 | 2-M3 | 3 | 8.2 |
| S50SU 18L - 0806 | 18 | φ 9 | φ 10 | L1 | 8 | - | φ 6 (h9) | L22 R50 | 80 | - | - | 20.2 |
| S50SU 20K * 0804 | 20 | φ 10 | φ 11 | K2 | 8 | φ4 | φ 11 | 10 | 18 | 2-M3 | 3 | 10.4 |
| S50SU 20L - 0806 | 20 | φ 10 | φ 11 | L1 | 8 | - | φ 6 (h9) | L22 R50 | 80 | - | - | 21.1 |
| S50SU 24K * 0805 | 24 | φ 12 | φ 13 | K2 | 8 | φ5 | φ 13 | 10 | 18 | 2-M3 | 3 | 14.5 |
| S50SU 25K * 0805 | 25 | φ 12.5 | φ 13.5 | K2 | 8 | φ5 | φ 13.5 | 10 | 18 | 2-M3 | 3 | 15.9 |
| S50SU 28K * 0805 | 28 | φ 14 | φ 15 | K2 | 8 | φ5 | φ 15 | 10 | 18 | 2-M3 | 3 | 20.5 |
| S50SU 30K * 0806 | 30 | φ 15 | φ 16 | K2 | 8 | φ6 | φ 16 | 10 | 18 | 2-M3 | 3 | 22.7 |

SUS304の商品にはセットスクリューは付いておりません。[*]: Gear with two threaded holes / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50SU 10K - 1006 | 0.30 | 3.03 | 6.06 | 12.12 | 24.24 | 36.37 | 45.46 |
| S50SU 12K - 1007 | 0.42 | 4.24 | 8.49 | 16.98 | 33.96 | 50.93 | 63.67 |
| S50SU 14K - 1008 | 0.55 | 5.53 | 11.07 | 22.13 | 44.26 | 66.39 | 82.99 |
| S50SU 15K - 1008 | 0.62 | 6.20 | 12.40 | 24.80 | 49.60 | 74.41 | 93.01 |
| S50SU 16K * 0804 | 0.55 | 5.50 | 11.01 | 22.02 | 44.04 | 66.06 | 82.57 |
| S50SU 16L - 0805 | 0.55 | 5.50 | 11.01 | 22.02 | 44.04 | 66.06 | 82.57 |
| S50SU 18K * 0804 | 0.66 | 6.62 | 13.24 | 26.47 | 52.94 | 79.41 | 99.26 |
| S50SU 18L - 0806 | 0.66 | 6.62 | 13.24 | 26.47 | 52.94 | 79.41 | 99.26 |
| S50SU 20K * 0804 | 0.78 | 7.77 | 15.54 | 31.08 | 62.16 | 93.24 | 116.55 |
| S50SU 20L - 0806 | 0.78 | 7.77 | 15.54 | 31.08 | 62.16 | 93.24 | 116.55 |
| S50SU 24K * 0805 | 1.01 | 10.13 | 20.26 | 40.52 | 81.04 | 121.55 | 151.94 |
| S50SU 25K * 0805 | 1.07 | 10.73 | 21.46 | 42.93 | 85.86 | 128.79 | 160.96 |
| S50SU 28K * 0805 | 1.26 | 12.56 | 25.13 | 50.26 | 100.52 | 150.77 | 185.69 |
| S50SU 30K * 0806 | 1.38 | 13.80 | 27.59 | 55.18 | 110.37 | 165.55 | 201.56 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

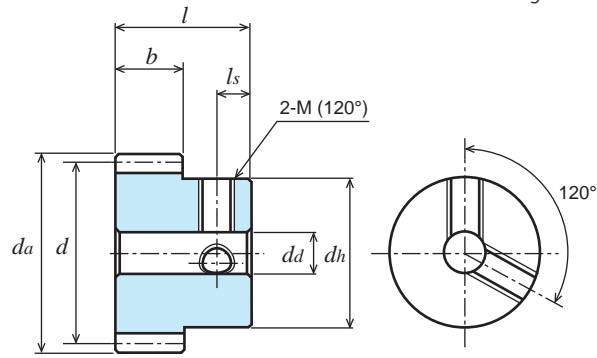
平歯車 SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9級
System of accuracy : JIS B 1702-1(ISO) class 9



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303) Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S50SU 32B * 0506 | 32 | φ16 | φ17 | B1 | 5 | φ 6 | φ12 | 8 | 13 | 2-M3 | 4 | 12.0 |
| S50SU 36B * 0506 | 36 | φ18 | φ19 | B1 | 5 | φ 6 | φ12 | 8 | 13 | 2-M3 | 4 | 14.1 |
| S50SU 40B * 0506 | 40 | φ20 | φ21 | B1 | 5 | φ 6 | φ15 | 8 | 13 | 2-M4 | 4 | 20.0 |
| S50SU 45B * 0506 | 45 | φ22.5 | φ23.5 | B1 | 5 | φ 6 | φ15 | 8 | 13 | 2-M4 | 4 | 23.3 |
| S50SU 48B * 0506 | 48 | φ24 | φ25 | B1 | 5 | φ 6 | φ15 | 8 | 13 | 2-M4 | 4 | 25.5 |
| S50SU 50B * 0506 | 50 | φ25 | φ26 | B1 | 5 | φ 6 | φ15 | 8 | 13 | 2-M4 | 4 | 27.0 |
| S50SU 54B * 0506 | 54 | φ27 | φ28 | B1 | 5 | φ 6 | φ15 | 8 | 13 | 2-M4 | 4 | 30.3 |
| S50SU 56B * 0506 | 56 | φ28 | φ29 | B1 | 5 | φ 6 | φ15 | 8 | 13 | 2-M4 | 4 | 32.0 |
| S50SU 60B * 0508 | 60 | φ30 | φ31 | B1 | 5 | φ 8 | φ18 | 8 | 13 | 2-M4 | 4 | 38.2 |
| S50SU 64B * 0508 | 64 | φ32 | φ33 | B1 | 5 | φ 8 | φ18 | 8 | 13 | 2-M4 | 4 | 42.0 |
| S50SU 70B * 0508 | 70 | φ35 | φ36 | B1 | 5 | φ 8 | φ18 | 8 | 13 | 2-M4 | 4 | 48.3 |
| S50SU 72B * 0508 | 72 | φ36 | φ37 | B1 | 5 | φ 8 | φ18 | 8 | 13 | 2-M4 | 4 | 50.5 |
| S50SU 75B * 0508 | 75 | φ37.5 | φ38.5 | B1 | 5 | φ 8 | φ18 | 8 | 13 | 2-M4 | 4 | 53.9 |
| S50SU 80B * 0510 | 80 | φ40 | φ41 | B1 | 5 | φ10 | φ22 | 8 | 13 | 2-M5 | 4 | 64.3 |
| S50SU 90B * 0510 | 90 | φ45 | φ46 | B1 | 5 | φ10 | φ22 | 8 | 13 | 2-M5 | 4 | 77.5 |
| S50SU 100B * 0510 | 100 | φ50 | φ51 | B1 | 5 | φ10 | φ25 | 8 | 13 | 2-M5 | 4 | 98.9 |
| S50SU 120B * 0510 | 120 | φ60 | φ61 | B1 | 5 | φ10 | φ25 | 8 | 13 | 2-M5 | 4 | 133.2 |

SUS304 の商品にはセットスクリューは付いておりません。[*]: Gear with two threaded holes / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50SU 32B * 0506 | 0.94 | 9.40 | 18.81 | 37.61 | 75.22 | 112.74 | 135.81 |
| S50SU 36B * 0506 | 1.10 | 10.98 | 21.96 | 43.93 | 87.85 | 129.24 | 155.10 |
| S50SU 40B * 0506 | 1.26 | 12.58 | 25.16 | 50.32 | 100.65 | 145.37 | 173.83 |
| S50SU 45B * 0506 | 1.46 | 14.59 | 29.18 | 58.37 | 116.74 | 164.87 | 196.29 |
| S50SU 48B * 0506 | 1.58 | 15.81 | 31.63 | 63.25 | 126.40 | 176.32 | 209.39 |
| S50SU 50B * 0506 | 1.66 | 16.63 | 33.26 | 66.52 | 132.10 | 183.82 | 217.95 |
| S50SU 54B * 0506 | 1.83 | 18.27 | 36.54 | 73.08 | 143.35 | 198.52 | 234.63 |
| S50SU 56B * 0506 | 1.91 | 19.10 | 38.19 | 76.38 | 148.90 | 205.71 | 242.76 |
| S50SU 60B * 0508 | 2.07 | 20.75 | 41.50 | 83.00 | 159.84 | 219.81 | 258.63 |
| S50SU 64B * 0508 | 2.24 | 22.41 | 44.82 | 89.64 | 170.57 | 233.52 | 273.96 |
| S50SU 70B * 0508 | 2.49 | 24.91 | 49.82 | 99.65 | 186.27 | 253.37 | 296.02 |
| S50SU 72B * 0508 | 2.57 | 25.75 | 51.50 | 102.99 | 191.40 | 259.80 | 303.14 |
| S50SU 75B * 0508 | 2.70 | 27.01 | 54.01 | 108.02 | 199.00 | 269.28 | 313.58 |
| S50SU 80B * 0510 | 2.91 | 29.11 | 58.21 | 116.42 | 211.43 | 284.66 | 334.02 |
| S50SU 90B * 0510 | 3.33 | 33.28 | 66.56 | 133.13 | 235.05 | 313.46 | 376.29 |
| S50SU 100B * 0510 | 3.75 | 37.50 | 75.01 | 148.96 | 257.73 | 344.32 | 417.84 |
| S50SU 120B * 0510 | 4.60 | 45.99 | 91.98 | 177.13 | 299.84 | 412.29 | 497.84 |

The above numerical values are equivalent to JGMA formulas as reference only.

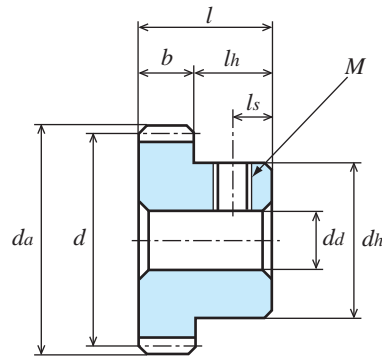
動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

平歯車 SPUR GEARS

モジュール 0.5 圧力角 20° (並歯)
MODULE 0.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



B1形
TYPE B1

C3604B 快削黄銅棒 Material : Brass (ISO CuZn39Pb3)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|-----|----------------------|
| | | | | | | | | | | M | ls | |
| S50B 10K - 1006 | 10 | φ 5 | φ 6 | K1 | 10 | - | φ 6 | 45 | 55 | - | - | 12.5 |
| S50B 12K - 1007 | 12 | φ 6 | φ 7 | K1 | 10 | - | φ 7 | 45 | 55 | - | - | 17.1 |
| S50B 14K - 1008 | 14 | φ 7 | φ 8 | K1 | 10 | - | φ 8 | 45 | 55 | - | - | 22.5 |
| S50B 15K + 0803 | 15 | φ 7.5 | φ 8.5 | K2 | 8 | φ 3 | φ 9 | 10 | 18 | M3 | 3 | 7.2 |
| S50B 16K + 0803 | 16 | φ 8 | φ 9 | K2 | 8 | φ 3 | φ 9 | 10 | 18 | M3 | 3 | 7.6 |
| S50B 18K + 0803 | 18 | φ 9 | φ 10 | K2 | 8 | φ 3 | φ 10 | 10 | 18 | M3 | 3 | 9.7 |
| S50B 20K + 0803 | 20 | φ 10 | φ 11 | K2 | 8 | φ 3 | φ 11 | 10 | 18 | M3 | 3 | 12.2 |
| S50B 20B + 0303 | 20 | φ 10 | φ 11 | B1 | 3 | φ 3 | φ 8.2 | 5 | 8 | M3 | 2.5 | 3.8 |
| S50B 24B + 0303 | 24 | φ 12 | φ 13 | B1 | 3 | φ 3 | φ 10 | 5 | 8 | M3 | 2.5 | 5.6 |
| S50B 25B + 0303 | 25 | φ 12.5 | φ 13.5 | B1 | 3 | φ 3 | φ 10 | 5 | 8 | M3 | 2.5 | 5.8 |
| S50B 26B + 0303 | 26 | φ 13 | φ 14 | B1 | 3 | φ 3 | φ 10 | 5 | 8 | M3 | 2.5 | 6.1 |
| S50B 28B + 0303 | 28 | φ 14 | φ 15 | B1 | 3 | φ 3 | φ 10 | 5 | 8 | M3 | 2.5 | 6.6 |
| S50B 30B + 0303 | 30 | φ 15 | φ 16 | B1 | 3 | φ 3 | φ 10 | 5 | 8 | M3 | 2.5 | 7.2 |
| S50B 32B + 0303 | 32 | φ 16 | φ 17 | B1 | 3 | φ 3 | φ 10 | 5 | 8 | M3 | 2.5 | 7.8 |
| S50B 35B + 0303 | 35 | φ 17.5 | φ 18.5 | B1 | 3 | φ 3 | φ 10 | 5 | 8 | M3 | 2.5 | 8.8 |
| S50B 36B + 0303 | 36 | φ 18 | φ 19 | B1 | 3 | φ 3 | φ 10 | 5 | 8 | M3 | 2.5 | 9.2 |

セットスクリューは付いておりません。
[+] : Gear with threaded hole / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|------|-------|-------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50B 10K - 1006 | 0.12 | 1.21 | 2.42 | 4.85 | 9.70 | 14.55 | 18.18 |
| S50B 12K - 1007 | 0.17 | 1.70 | 3.40 | 6.79 | 13.58 | 20.37 | 25.47 |
| S50B 14K - 1008 | 0.22 | 2.21 | 4.43 | 8.85 | 17.71 | 26.56 | 33.20 |
| S50B 15K + 0803 | 0.20 | 1.98 | 3.97 | 7.94 | 15.87 | 23.81 | 29.76 |
| S50B 16K + 0803 | 0.22 | 2.20 | 4.40 | 8.81 | 17.62 | 26.42 | 33.03 |
| S50B 18K + 0803 | 0.26 | 2.65 | 5.29 | 10.59 | 21.18 | 31.76 | 39.71 |
| S50B 20K + 0803 | 0.31 | 3.11 | 6.22 | 12.43 | 24.86 | 37.30 | 46.62 |
| S50B 20B + 0303 | 0.12 | 1.17 | 2.33 | 4.66 | 9.32 | 13.99 | 17.48 |
| S50B 24B + 0303 | 0.15 | 1.52 | 3.04 | 6.08 | 12.16 | 18.23 | 22.79 |
| S50B 25B + 0303 | 0.16 | 1.61 | 3.22 | 6.44 | 12.88 | 19.32 | 24.15 |
| S50B 26B + 0303 | 0.17 | 1.70 | 3.40 | 6.80 | 13.61 | 20.41 | 25.43 |
| S50B 28B + 0303 | 0.19 | 1.88 | 3.77 | 7.54 | 15.08 | 22.62 | 27.85 |
| S50B 30B + 0303 | 0.21 | 2.07 | 4.14 | 8.28 | 16.56 | 24.83 | 30.23 |
| S50B 32B + 0303 | 0.23 | 2.26 | 4.51 | 9.03 | 18.05 | 27.06 | 32.60 |
| S50B 35B + 0303 | 0.25 | 2.54 | 5.08 | 10.16 | 20.32 | 30.04 | 36.08 |
| S50B 36B + 0303 | 0.26 | 2.64 | 5.27 | 10.54 | 21.08 | 31.02 | 37.22 |

The above numerical values are equivalent to JGMA formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

RoHS 対応

2006年11月生産開始分より欧州 RoHS 指令に対応できる商品を提供しています。
We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

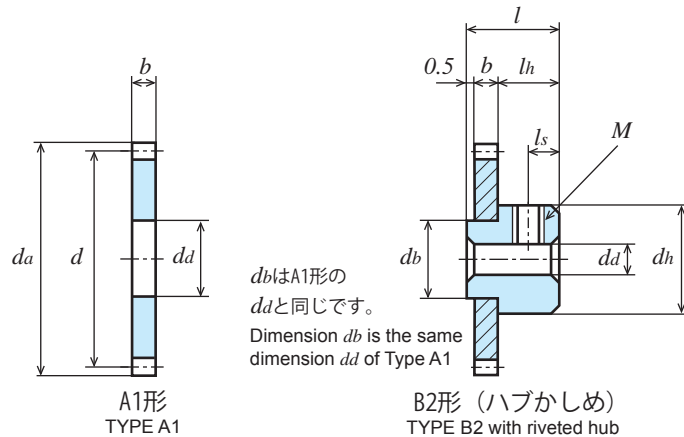
平歯車 SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず “フルネームで商品記号” を明記してください。
Please refer to the catalogue reference while ordering.



C3713P 快削黄銅板、C3604B 快削黄銅棒 Material : Brass (ISO CuZn38Pb2, CuZn39Pb3)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H8) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|------------------------------|
| | | | | | | | | | | <i>M</i> | <i>ls</i> | |
| S50B 40A - 0208 | 40 | φ20 | φ21 | A1 | 2 | φ8 | - | - | 2 | - | - | 4.5 |
| S50B 40B + 0203 | 40 | φ20 | φ21 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 8.1 |
| S50B 42A - 0208 | 42 | φ21 | φ22 | A1 | 2 | φ8 | - | - | 2 | - | - | 5.0 |
| S50B 42B + 0203 | 42 | φ21 | φ22 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 8.6 |
| S50B 45A - 0208 | 45 | φ22.5 | φ23.5 | A1 | 2 | φ8 | - | - | 2 | - | - | 5.9 |
| S50B 45B + 0203 | 45 | φ22.5 | φ23.5 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 9.5 |
| S50B 48A - 0208 | 48 | φ24 | φ25 | A1 | 2 | φ8 | - | - | 2 | - | - | 6.8 |
| S50B 48B + 0203 | 48 | φ24 | φ25 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 10.4 |
| S50B 50A - 0208 | 50 | φ25 | φ26 | A1 | 2 | φ8 | - | - | 2 | - | - | 7.5 |
| S50B 50B + 0203 | 50 | φ25 | φ26 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 11.1 |
| S50B 55A - 0208 | 55 | φ27.5 | φ28.5 | A1 | 2 | φ8 | - | - | 2 | - | - | 9.2 |
| S50B 55B + 0203 | 55 | φ27.5 | φ28.5 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 12.8 |
| S50B 56A - 0208 | 56 | φ28 | φ29 | A1 | 2 | φ8 | - | - | 2 | - | - | 9.6 |
| S50B 56B + 0203 | 56 | φ28 | φ29 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 13.2 |
| S50B 58A - 0208 | 58 | φ29 | φ30 | A1 | 2 | φ8 | - | - | 2 | - | - | 10.4 |
| S50B 58B + 0203 | 58 | φ29 | φ30 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 14.0 |
| S50B 60A - 0208 | 60 | φ30 | φ31 | A1 | 2 | φ8 | - | - | 2 | - | - | 11.2 |
| S50B 60B + 0203 | 60 | φ30 | φ31 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 14.8 |

A1形の穴径はプレスの抜き出しですので (H8) の公差仕上がりになっておりません。

Bore tolerance of H8 but does not apply to type A1 gears due to the press item.

セットスクリューは付いておりません。

[+]: Gear with threaded hole / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|------|-------|-------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50B 40A - 0208 | 0.20 | 2.01 | 4.03 | 8.05 | 16.10 | 23.26 | 27.81 |
| S50B 42A - 0208 | 0.21 | 2.14 | 4.28 | 8.57 | 17.13 | 24.53 | 29.28 |
| S50B 45A - 0208 | 0.23 | 2.33 | 4.67 | 9.34 | 18.68 | 26.38 | 31.41 |
| S50B 48A - 0208 | 0.25 | 2.53 | 5.06 | 10.12 | 20.22 | 28.21 | 33.50 |
| S50B 50A - 0208 | 0.27 | 2.66 | 5.32 | 10.64 | 21.14 | 29.41 | 34.87 |
| S50B 55A - 0208 | 0.30 | 2.99 | 5.98 | 11.96 | 23.38 | 32.34 | 38.19 |
| S50B 56A - 0208 | 0.31 | 3.06 | 6.11 | 12.22 | 23.82 | 32.91 | 38.84 |
| S50B 58A - 0208 | 0.32 | 3.19 | 6.37 | 12.75 | 24.70 | 34.05 | 40.12 |
| S50B 60A - 0208 | 0.33 | 3.32 | 6.64 | 13.28 | 25.57 | 35.17 | 41.38 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

RoHS 対応

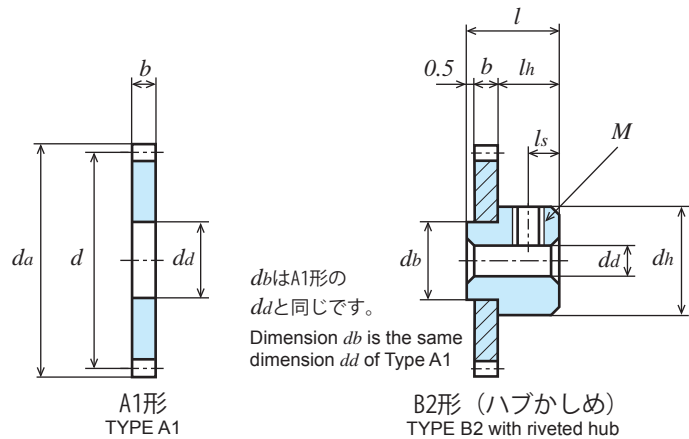
2006年11月生産開始日より欧州 RoHS 指令に対応できる商品を提供しています。

We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

平歯車 SPUR GEARS

モジュール 0.5 圧力角 20° (並歯)
MODULE 0.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



C3713P 快削黄銅板、C3604B 快削黄銅棒 Material : Brass (ISO CuZn38Pb2, CuZn39Pb3)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H8) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|------------------------------|
| | | | | | | | | | | <i>M</i> | <i>ls</i> | |
| S50B 62A - 0208 | 62 | φ31 | φ32 | A1 | 2 | φ8 | - | - | 2 | - | - | 12.0 |
| S50B 62B + 0203 | 62 | φ31 | φ32 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 15.6 |
| S50B 64A - 0208 | 64 | φ32 | φ33 | A1 | 2 | φ8 | - | - | 2 | - | - | 12.8 |
| S50B 64B + 0203 | 64 | φ32 | φ33 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 16.4 |
| S50B 65A - 0208 | 65 | φ32.5 | φ33.5 | A1 | 2 | φ8 | - | - | 2 | - | - | 12.3 |
| S50B 65B + 0203 | 65 | φ32.5 | φ33.5 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 16.8 |
| S50B 68A - 0208 | 68 | φ34 | φ35 | A1 | 2 | φ8 | - | - | 2 | - | - | 14.6 |
| S50B 68B + 0203 | 68 | φ34 | φ35 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 18.2 |
| S50B 70A - 0208 | 70 | φ35 | φ36 | A1 | 2 | φ8 | - | - | 2 | - | - | 15.5 |
| S50B 70B + 0203 | 70 | φ35 | φ36 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 19.1 |
| S50B 72A - 0208 | 72 | φ36 | φ37 | A1 | 2 | φ8 | - | - | 2 | - | - | 16.5 |
| S50B 72B + 0203 | 72 | φ36 | φ37 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 20.0 |
| S50B 75A - 0208 | 75 | φ37.5 | φ38.5 | A1 | 2 | φ8 | - | - | 2 | - | - | 17.9 |
| S50B 75B + 0203 | 75 | φ37.5 | φ38.5 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 21.5 |
| S50B 80A - 0208 | 80 | φ40 | φ41 | A1 | 2 | φ8 | - | - | 2 | - | - | 20.5 |
| S50B 80B + 0203 | 80 | φ40 | φ41 | B2 | 2 | φ3 | φ10 | 5 | 7.5 | M3 | 2.5 | 24.1 |

A1形の穴径はプレスの抜き放しですので (H8) の公差仕上げになっておりません。Bore tolerance of H8 but does not apply to type A1 gears due to the press item. セットスクリューは付いておりません。[+]: Gear with threaded hole / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|------|-------|-------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50B 62A - 0208 | 0.35 | 3.45 | 6.91 | 13.81 | 26.44 | 36.27 | 42.62 |
| S50B 64A - 0208 | 0.36 | 3.59 | 7.17 | 14.34 | 27.29 | 37.36 | 43.83 |
| S50B 65A - 0208 | 0.37 | 3.65 | 7.30 | 14.61 | 27.72 | 37.90 | 44.43 |
| S50B 66A - 0208 | 0.37 | 3.72 | 7.44 | 14.88 | 28.14 | 38.44 | 45.03 |
| S50B 68A - 0208 | 0.39 | 3.85 | 7.70 | 15.41 | 28.97 | 39.50 | 46.21 |
| S50B 70A - 0208 | 0.40 | 3.99 | 7.97 | 15.94 | 29.80 | 40.54 | 47.36 |
| S50B 72A - 0208 | 0.41 | 4.12 | 8.24 | 16.48 | 30.62 | 41.57 | 48.50 |
| S50B 75A - 0208 | 0.43 | 4.32 | 8.64 | 17.28 | 31.84 | 43.09 | 50.17 |
| S50B 80A - 0208 | 0.47 | 4.66 | 9.31 | 18.63 | 33.83 | 45.55 | 53.44 |

The above numerical values are equivalent to JGMA formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

RoHS 対応

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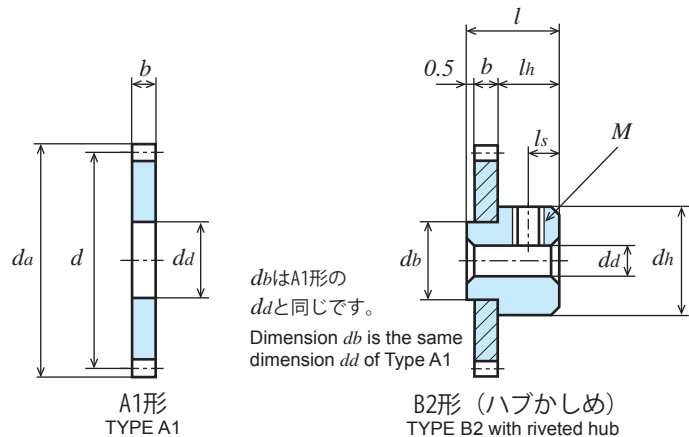
平歯車 SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず “フルネームで商品記号” を明記してください。
Please refer to the catalogue reference while ordering.



C3713P 快削黄銅板、C3604B 快削黄銅棒 Material : Brass (ISO CuZn38Pb2, CuZn39Pb3)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H8) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|------------------------------|
| | | | | | | | | | | <i>M</i> | <i>ls</i> | |
| S50B 84A - 0208 | 84 | φ42 | φ43 | A1 | 2 | φ 8 | - | - | 2 | - | - | 22.7 |
| S50B 84B + 0203 | 84 | φ42 | φ43 | B2 | 2 | φ 3 | φ10 | 5 | 7.5 | M3 | 2.5 | 26.3 |
| S50B 85A - 0208 | 85 | φ42.5 | φ43.5 | A1 | 2 | φ 8 | - | - | 2 | - | - | 23.3 |
| S50B 85B + 0203 | 85 | φ42.5 | φ43.5 | B2 | 2 | φ 3 | φ10 | 5 | 7.5 | M3 | 2.5 | 26.9 |
| S50B 90A - 0208 | 90 | φ45 | φ46 | A1 | 2 | φ 8 | - | - | 2 | - | - | 26.2 |
| S50B 90B + 0203 | 90 | φ45 | φ46 | B2 | 2 | φ 3 | φ10 | 5 | 7.5 | M3 | 2.5 | 29.8 |
| S50B 95A - 0208 | 95 | φ47.5 | φ48.5 | A1 | 2 | φ 8 | - | - | 2 | - | - | 29.3 |
| S50B 95B + 0203 | 95 | φ47.5 | φ48.5 | B2 | 2 | φ 3 | φ10 | 5 | 7.5 | M3 | 2.5 | 32.9 |
| S50B 100A - 0212 | 100 | φ50 | φ51 | A1 | 2 | φ12 | - | - | 2 | - | - | 32.5 |
| S50B 100B + 0203 | 100 | φ50 | φ51 | B2 | 2 | φ 3 | φ15 | 7 | 9.5 | M3 | 3.5 | 36.1 |
| S50B 105A - 0212 | 105 | φ52.5 | φ53.5 | A1 | 2 | φ12 | - | - | 2 | - | - | 36.0 |
| S50B 105B + 0203 | 105 | φ52.5 | φ53.5 | B2 | 2 | φ 3 | φ15 | 7 | 9.5 | M3 | 3.5 | 39.5 |
| S50B 110A - 0212 | 110 | φ55 | φ56 | A1 | 2 | φ12 | - | - | 2 | - | - | 39.5 |
| S50B 110B + 0203 | 110 | φ55 | φ56 | B2 | 2 | φ 3 | φ15 | 7 | 9.5 | M3 | 3.5 | 43.1 |

A1形の穴径はプレスの抜き放しですので (H8) の公差仕上げになっておりません。

Bore tolerance of H8 but does not apply to type A1 gears due to the press item.

セットスクリューは付いておりません。

[+]: Gear with threaded hole / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|-------|-------|-------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50B 84A - 0208 | 0.49 | 4.92 | 9.84 | 19.68 | 35.34 | 47.40 | 56.14 |
| S50B 85A - 0208 | 0.50 | 4.99 | 9.98 | 19.95 | 35.72 | 47.87 | 56.82 |
| S50B 90A - 0208 | 0.53 | 5.33 | 10.65 | 21.30 | 37.61 | 50.15 | 60.21 |
| S50B 95A - 0208 | 0.57 | 5.66 | 11.33 | 22.65 | 39.44 | 52.36 | 63.55 |
| S50B 100A - 0212 | 0.60 | 6.00 | 12.00 | 23.83 | 41.24 | 55.09 | 66.86 |
| S50B 105A - 0212 | 0.63 | 6.34 | 12.68 | 24.98 | 42.98 | 57.85 | 70.12 |
| S50B 110A - 0212 | 0.67 | 6.68 | 13.36 | 26.12 | 44.69 | 60.59 | 73.34 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

RoHS 対応

2006年11月生産開始日より欧州 RoHS 指令に対応できる商品を提供しています。

We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

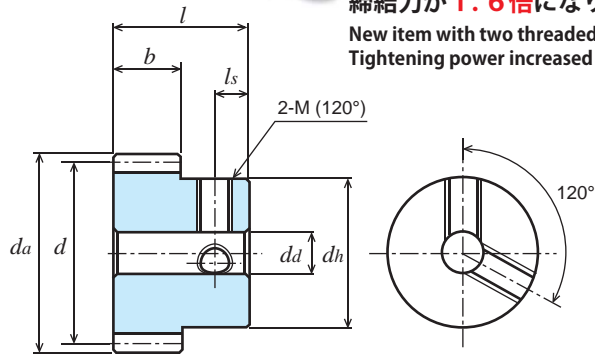
平歯車 SPUR GEARS

MODULE 0.5 圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8~9 級
System of accuracy : JIS B 1702-1(ISO) class 8-9



New **ねじを2箇所 (120°配) にしました。**
締結力が1.6倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S50S 10K - 1006 | 10 | φ 5 | φ 6 | K1 | 10 | - | φ 6 | 45 | 55 | - | - | 11.5 |
| S50S 12K - 1007 | 12 | φ 6 | φ 7 | K1 | 10 | - | φ 7 | 45 | 55 | - | - | 15.8 |
| S50S 14K - 1008 | 14 | φ 7 | φ 8 | K1 | 10 | - | φ 8 | 45 | 55 | - | - | 20.8 |
| S50S 15K * 0803 | 15 | φ 7.5 | φ 8.5 | K2 | 8 | φ3 | φ 8.5 | 10 | 18 | 2-M3 | 3 | 6.0 |
| S50S 16K * 0803 | 16 | φ 8 | φ 9 | K2 | 8 | φ3 | φ 9 | 10 | 18 | 2-M3 | 3 | 6.9 |
| S50S 18K * 0804 | 18 | φ 9 | φ10 | K2 | 8 | φ4 | φ10 | 10 | 18 | 2-M3 | 3 | 8.1 |
| S50S 20K * 0804 | 20 | φ10 | φ11 | K2 | 8 | φ4 | φ11 | 10 | 18 | 2-M3 | 3 | 10.3 |
| S50S 21K * 0804 | 21 | φ10.5 | φ11.5 | K2 | 8 | φ4 | φ11.5 | 10 | 18 | 2-M3 | 3 | 11.5 |
| S50S 22K * 0804 | 22 | φ11 | φ12 | K2 | 8 | φ4 | φ12 | 10 | 18 | 2-M3 | 3 | 12.7 |
| S50S 24K * 0804 | 24 | φ12 | φ13 | K2 | 8 | φ4 | φ13 | 10 | 18 | 2-M3 | 3 | 15.4 |
| S50S 25B * 0804 | 25 | φ12.5 | φ13.5 | B1 | 8 | φ4 | φ10 | 8 | 16 | 2-M3 | 4 | 10.8 |
| S50S 26B * 0804 | 26 | φ13 | φ14 | B1 | 8 | φ4 | φ10 | 8 | 16 | 2-M3 | 4 | 11.4 |
| S50S 27B * 0804 | 27 | φ13.5 | φ14.5 | B1 | 8 | φ4 | φ10 | 8 | 16 | 2-M3 | 4 | 12.1 |
| S50S 28B * 0804 | 28 | φ14 | φ15 | B1 | 8 | φ4 | φ10 | 8 | 16 | 2-M3 | 4 | 12.8 |
| S50S 30B * 0805 | 30 | φ15 | φ16 | B1 | 8 | φ5 | φ12 | 8 | 16 | 2-M3 | 4 | 15.4 |

【*】(アスタ)にはセットスクリーが2個付いております。
[*]: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50S 10K - 1006 | 0.62 | 6.19 | 12.38 | 24.77 | 49.53 | 74.30 | 92.87 |
| S50S 12K - 1007 | 0.85 | 8.49 | 16.98 | 33.96 | 67.91 | 101.87 | 127.33 |
| S50S 14K - 1008 | 1.11 | 11.07 | 22.13 | 44.26 | 88.53 | 132.79 | 165.99 |
| S50S 15K * 0803 | 0.99 | 9.92 | 19.84 | 39.68 | 79.37 | 119.05 | 148.81 |
| S50S 16K * 0803 | 1.10 | 11.01 | 22.02 | 44.04 | 88.08 | 132.12 | 165.15 |
| S50S 18K * 0804 | 1.32 | 13.24 | 26.47 | 52.94 | 105.88 | 158.82 | 198.53 |
| S50S 20K * 0804 | 1.55 | 15.54 | 31.08 | 62.16 | 124.32 | 186.48 | 233.10 |
| S50S 21K * 0804 | 1.67 | 16.70 | 33.40 | 66.81 | 133.62 | 200.43 | 250.53 |
| S50S 22K * 0804 | 1.79 | 17.88 | 35.76 | 71.52 | 143.04 | 214.57 | 268.21 |
| S50S 24K * 0804 | 2.03 | 20.26 | 40.52 | 81.04 | 162.07 | 243.11 | 303.88 |
| S50S 25B * 0804 | 2.15 | 21.46 | 42.93 | 85.86 | 172.72 | 257.57 | 321.97 |
| S50S 26B * 0804 | 2.27 | 22.68 | 45.36 | 90.71 | 181.43 | 272.14 | 339.11 |
| S50S 27B * 0804 | 2.39 | 23.90 | 47.80 | 95.60 | 191.20 | 286.80 | 355.29 |
| S50S 28B * 0804 | 2.51 | 25.13 | 50.26 | 100.52 | 201.03 | 301.55 | 371.39 |
| S50S 30B * 0805 | 2.76 | 27.59 | 55.18 | 110.37 | 220.74 | 331.11 | 403.12 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

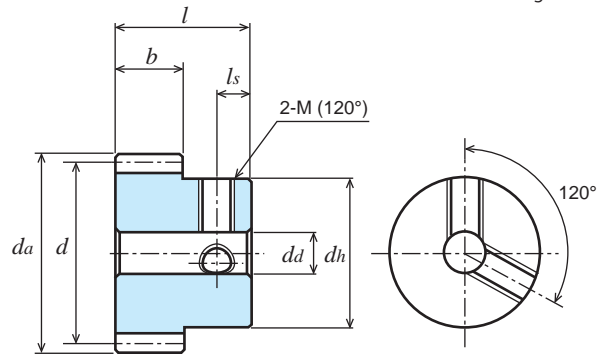
平歯車 SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| ● S50S 30BF - 0504 | 30 | φ15 | φ16 | B1 | 5 | φ4(H8) | φ12 | 8 | 13 | - | - | 12.7 |
| ● S50S 30B - 0504H | 30 | φ15 | φ16 | B1 | 5 | φ4(H※) | φ12 | 8 | 13 | - | - | 12.7 |
| S50S 30B * 0805 | 30 | φ15 | φ16 | B1 | 8 | φ5 | φ12 | 8 | 16 | 2-M3 | 4 | 15.4 |
| S50S 32B * 0505 | 32 | φ16 | φ17 | B1 | 5 | φ5 | φ12 | 8 | 13 | 2-M3 | 4 | 12.7 |
| S50S 35B * 0505 | 35 | φ17.5 | φ18.5 | B1 | 5 | φ5 | φ12 | 8 | 13 | 2-M3 | 4 | 14.2 |
| S50S 36B * 0505 | 36 | φ18 | φ19 | B1 | 5 | φ5 | φ12 | 8 | 13 | 2-M3 | 4 | 14.8 |
| ● S50S 40BF - 0504 | 40 | φ20 | φ21 | B1 | 5 | φ4(H8) | φ15 | 8 | 13 | - | - | 22.1 |
| ● S50S 40B - 0504H | 40 | φ20 | φ21 | B1 | 5 | φ4(H※) | φ15 | 8 | 13 | - | - | 22.1 |
| S50S 40B * 0505 | 40 | φ20 | φ21 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 21.0 |
| S50S 42B * 0505 | 42 | φ21 | φ22 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 22.3 |
| S50S 44B * 0505 | 44 | φ22 | φ23 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 23.6 |
| S50S 45B * 0505 | 45 | φ22.5 | φ23.5 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 24.3 |

●の商品は新商品です。
Products with ● marks are new item.

【*】(アスタ)にはセットスクリューが2個付いております。
[*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.
追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50S30BF - 0504 | 1.73 | 17.28 | 34.56 | 69.11 | 138.22 | 207.34 | 252.89 |
| S50S30B - 0504H | 1.83 | 18.30 | 36.59 | 73.18 | 146.37 | 219.55 | 267.95 |
| S50S 30B * 0805 | 2.76 | 27.59 | 55.18 | 110.37 | 220.74 | 331.11 | 403.12 |
| S50S 32B * 0505 | 1.88 | 18.81 | 37.61 | 75.22 | 150.44 | 225.49 | 271.63 |
| S50S 35B * 0505 | 2.12 | 21.17 | 42.34 | 84.68 | 169.36 | 250.30 | 300.66 |
| S50S 36B * 0505 | 2.20 | 21.96 | 43.93 | 87.85 | 175.71 | 258.48 | 310.20 |
| S50S40BF - 0504 | 2.51 | 25.13 | 50.26 | 100.53 | 201.05 | 290.27 | 347.13 |
| S50S40B - 0504H | 2.66 | 26.62 | 53.24 | 106.48 | 212.96 | 308.58 | 370.49 |
| S50S 40B * 0505 | 2.52 | 25.16 | 50.32 | 100.65 | 201.29 | 290.74 | 347.65 |
| S50S 42B * 0505 | 2.68 | 26.77 | 53.55 | 107.09 | 214.19 | 306.59 | 365.96 |
| S50S 44B * 0505 | 2.84 | 28.37 | 56.75 | 113.49 | 226.99 | 322.02 | 383.71 |
| S50S 45B * 0505 | 2.92 | 29.18 | 58.37 | 116.74 | 233.47 | 329.75 | 392.59 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|-------|-------|-------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50S30BF - 0504 | 0.08 | 0.84 | 1.68 | 3.77 | 7.54 | 11.31 | 12.57 |
| S50S30B - 0504H | 0.40 | 4.39 | 9.07 | 18.66 | 38.52 | 58.75 | 72.53 |
| S50S 30B * 0805 | - | - | - | - | - | - | - |
| S50S 32B * 0505 | - | - | - | - | - | - | - |
| S50S 35B * 0505 | - | - | - | - | - | - | - |
| S50S 36B * 0505 | - | - | - | - | - | - | - |
| S50S40BF - 0504 | 0.16 | 1.57 | 3.14 | 6.70 | 13.40 | 18.85 | 23.56 |
| S50S40B - 0504H | 0.73 | 8.03 | 16.55 | 34.14 | 70.37 | 103.74 | 125.76 |
| S50S 40B * 0505 | - | - | - | - | - | - | - |
| S50S 42B * 0505 | - | - | - | - | - | - | - |
| S50S 44B * 0505 | - | - | - | - | - | - | - |
| S50S 45B * 0505 | - | - | - | - | - | - | - |

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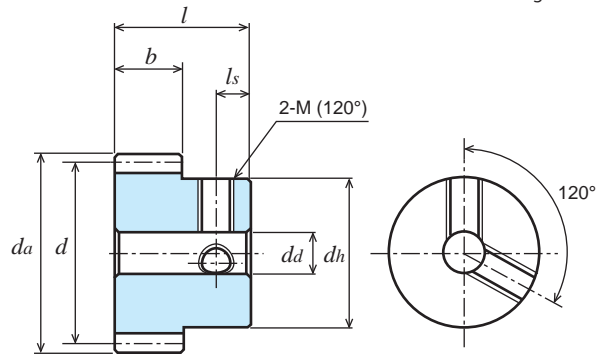
平歯車 SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S50S 48B * 0505 | 48 | φ24 | φ25 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 26.4 |
| ● S50S 50BF - 0504 | 50 | φ25 | φ26 | B1 | 5 | φ4(H8) | φ18 | 8 | 13 | - | - | 33.9 |
| ● S50S 50B - 0504H | 50 | φ25 | φ26 | B1 | 5 | φ4(H※) | φ18 | 8 | 13 | - | - | 33.9 |
| S50S 50B * 0505 | 50 | φ25 | φ26 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 27.9 |
| S50S 52B * 0505 | 52 | φ26 | φ27 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 29.5 |
| S50S 54B * 0505 | 54 | φ27 | φ28 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 31.1 |
| S50S 55B * 0505 | 55 | φ27.5 | φ28.5 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 32.0 |
| S50S 56B * 0505 | 56 | φ28 | φ29 | B1 | 5 | φ5 | φ15 | 8 | 13 | 2-M3 | 4 | 32.8 |
| ● S50S 60BF - 0505 | 60 | φ30 | φ31 | B1 | 5 | φ5 | φ22 | 8 | 13 | - | - | 49.5 |
| ● S50S 60B - 0505H | 60 | φ30 | φ31 | B1 | 5 | φ5(H※) | φ22 | 8 | 13 | - | - | 49.5 |
| S50S 60B * 0506 | 60 | φ30 | φ31 | B1 | 5 | φ6 | φ18 | 8 | 13 | 2-M4 | 4 | 39.9 |
| S50S 64B * 0506 | 64 | φ32 | φ33 | B1 | 5 | φ6 | φ18 | 8 | 13 | 2-M4 | 4 | 43.7 |

●の商品は新商品です。
Products with ● marks are new item.

【*】(アスタ)にはセットスクリューが2個付いております。
[*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.
追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50S 48B * 0505 | 3.16 | 31.63 | 63.25 | 126.50 | 252.80 | 352.63 | 418.79 |
| S50S 50BF - 0504 | 3.31 | 33.09 | 66.18 | 132.36 | 263.04 | 365.67 | 433.52 |
| S50S 50B - 0504H | 3.51 | 35.11 | 70.23 | 140.46 | 279.14 | 390.97 | 465.49 |
| S50S 50B * 0505 | 3.33 | 33.26 | 66.52 | 133.04 | 264.20 | 367.63 | 435.89 |
| S50S 52B * 0505 | 3.49 | 34.90 | 69.80 | 139.60 | 275.51 | 382.44 | 452.72 |
| S50S 54B * 0505 | 3.65 | 36.54 | 73.08 | 146.17 | 286.71 | 397.03 | 469.26 |
| S50S 55B * 0505 | 3.74 | 37.37 | 74.73 | 149.46 | 292.27 | 404.26 | 477.43 |
| S50S 56B * 0505 | 3.82 | 38.19 | 76.38 | 152.76 | 297.80 | 411.43 | 485.53 |
| S50S 60BF - 0505 | 4.13 | 41.26 | 82.52 | 165.03 | 318.33 | 437.29 | 515.20 |
| S50S 60B - 0505H | 4.37 | 43.75 | 87.50 | 175.00 | 338.17 | 468.53 | 553.85 |
| S50S 60B * 0506 | 4.15 | 41.50 | 83.00 | 165.99 | 319.68 | 439.63 | 517.25 |
| S50S 64B * 0506 | 4.48 | 44.82 | 89.64 | 179.28 | 341.14 | 467.04 | 547.92 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50S 48B * 0505 | - | - | - | - | - | - | - |
| S50S 50BF - 0504 | 0.26 | 2.62 | 5.24 | 10.47 | 20.94 | 30.16 | 36.13 |
| S50S 50B - 0504H | 1.16 | 12.82 | 26.42 | 54.45 | 111.54 | 159.11 | 191.35 |
| S50S 50B * 0505 | - | - | - | - | - | - | - |
| S50S 52B * 0505 | - | - | - | - | - | - | - |
| S50S 54B * 0505 | - | - | - | - | - | - | - |
| S50S 55B * 0505 | - | - | - | - | - | - | - |
| S50S 56B * 0505 | - | - | - | - | - | - | - |
| S50S 60BF - 0505 | 0.38 | 3.77 | 7.54 | 15.50 | 30.16 | 41.47 | 50.26 |
| S50S 60B - 0505H | 1.70 | 18.78 | 38.70 | 79.82 | 158.99 | 224.13 | 267.65 |
| S50S 60B * 0506 | - | - | - | - | - | - | - |
| S50S 64B * 0506 | - | - | - | - | - | - | - |

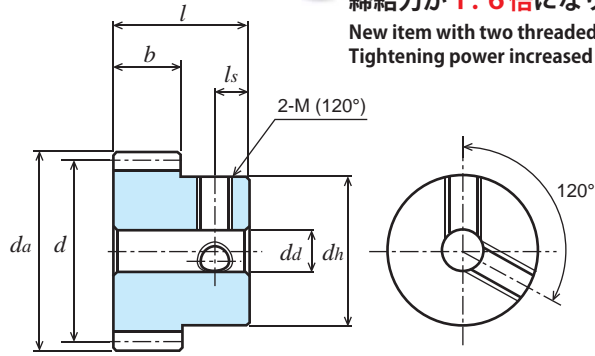
平歯車 SPUR GEARS

モジュール **0.5** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が1.6倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| ● S50S 70BF - 0505 | 70 | φ35 | φ36 | B1 | 5 | φ5 | φ25 | 8 | 13 | - | - | 66.5 |
| ● S50S 70B - 0505H | 70 | φ35 | φ36 | B1 | 5 | φ5(H※) | φ25 | 8 | 13 | - | - | 66.5 |
| ● S50S 70B * 0506 | 70 | φ35 | φ36 | B1 | 5 | φ6 | φ18 | 8 | 13 | 2-M4 | 4 | 49.9 |
| ● S50S 72B * 0506 | 72 | φ36 | φ37 | B1 | 5 | φ6 | φ18 | 8 | 13 | 2-M4 | 4 | 52.1 |
| ● S50S 75B * 0506 | 75 | φ37.5 | φ38.5 | B1 | 5 | φ6 | φ18 | 8 | 13 | 2-M4 | 4 | 55.5 |
| ● S50S 80BF - 0506 | 80 | φ40 | φ41 | B1 | 5 | φ6 | φ28 | 8 | 13 | - | - | 85.0 |
| ● S50S 80B - 0506H | 80 | φ40 | φ41 | B1 | 5 | φ6(H※) | φ28 | 8 | 13 | - | - | 85.0 |
| ● S50S 80B * 0508 | 80 | φ40 | φ41 | B1 | 5 | φ8 | φ22 | 8 | 13 | 2-M4 | 4 | 67.0 |
| ● S50S 90BF - 0506 | 90 | φ45 | φ46 | B1 | 5 | φ6 | φ32 | 8 | 13 | - | - | 109.9 |
| ● S50S 90B - 0506H | 90 | φ45 | φ46 | B1 | 5 | φ6(H※) | φ32 | 8 | 13 | - | - | 109.9 |
| ● S50S 90B * 0508 | 90 | φ45 | φ46 | B1 | 5 | φ8 | φ22 | 8 | 13 | 2-M4 | 4 | 80.1 |
| ● S50S 96B * 0508 | 96 | φ48 | φ49 | B1 | 5 | φ8 | φ22 | 8 | 13 | 2-M4 | 4 | 88.7 |

●の商品は新商品です。
Products with ● marks are new item.

【*】(アスタ)にはセットスクリーが2個付いております。
[*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.
※

歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.
追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50S70BF - 0505 | 4.94 | 49.53 | 99.06 | 198.12 | 370.27 | 503.89 | 587.45 |
| S50S70B - 0505H | 5.25 | 52.48 | 104.97 | 209.94 | 394.79 | 541.28 | 635.58 |
| S50S 70B * 0506 | 4.98 | 49.82 | 99.65 | 199.30 | 372.55 | 506.74 | 592.05 |
| S50S 72B * 0506 | 5.15 | 51.50 | 102.99 | 205.99 | 382.81 | 519.61 | 606.27 |
| S50S 75B * 0506 | 5.40 | 54.01 | 108.02 | 216.04 | 398.01 | 538.57 | 627.16 |
| S50S80BF - 0506 | 5.78 | 57.80 | 115.61 | 231.21 | 419.70 | 565.46 | 662.85 |
| S50S80B - 0506H | 6.13 | 61.27 | 122.54 | 245.08 | 448.83 | 609.43 | 718.51 |
| S50S 80B * 0508 | 5.82 | 58.21 | 116.42 | 232.85 | 422.85 | 569.31 | 668.04 |
| S50S90BF - 0506 | 6.61 | 66.08 | 132.15 | 264.30 | 466.61 | 622.01 | 746.10 |
| S50S90B - 0506H | 7.00 | 70.02 | 140.03 | 280.07 | 499.82 | 672.64 | 809.74 |
| S50S 90B * 0508 | 6.66 | 66.56 | 133.13 | 266.25 | 470.10 | 626.91 | 752.57 |
| S50S 96B * 0508 | 7.16 | 71.63 | 143.26 | 286.28 | 497.59 | 660.77 | 802.70 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50S70BF - 0505 | 0.52 | 5.24 | 10.47 | 21.36 | 40.21 | 56.55 | 65.97 |
| S50S70B - 0505H | 2.34 | 25.93 | 53.46 | 110.22 | 213.68 | 298.20 | 353.60 |
| S50S 70B * 0506 | - | - | - | - | - | - | - |
| S50S 72B * 0506 | - | - | - | - | - | - | - |
| S50S 75B * 0506 | - | - | - | - | - | - | - |
| S50S80BF - 0506 | 0.69 | 7.02 | 14.03 | 28.48 | 52.78 | 71.63 | 86.39 |
| S50S80B - 0506H | 3.10 | 34.30 | 70.71 | 145.80 | 275.28 | 380.47 | 452.97 |
| S50S 80B * 0508 | - | - | - | - | - | - | - |
| S50S90BF - 0506 | 0.89 | 8.90 | 18.01 | 36.44 | 65.34 | 89.22 | 109.95 |
| S50S90B - 0506H | 3.97 | 43.90 | 90.51 | 186.62 | 343.32 | 470.22 | 571.65 |
| S50S 90B * 0508 | - | - | - | - | - | - | - |
| S50S 96B * 0508 | - | - | - | - | - | - | - |

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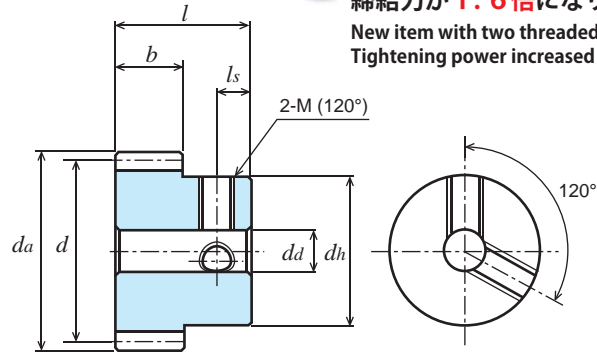
平歯車 SPUR GEARS

モジュール 0.5 圧力角 20° (並歯)
MODULE 0.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が**1.6倍**になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| ● S50S 100BF - 0506 | 100 | φ50 | φ51 | B1 | 5 | φ6 | φ35 | 8 | 13 | - | - | 134.4 |
| ● S50S 100B - 0506H | 100 | φ50 | φ51 | B1 | 5 | φ6(H※) | φ35 | 8 | 13 | - | - | 134.4 |
| S50S 100B * 0508 | 100 | φ50 | φ51 | B1 | 5 | φ8 | φ25 | 8 | 13 | 2-M4 | 4 | 101.4 |
| S50S 110B * 0508 | 110 | φ55 | φ56 | B1 | 5 | φ8 | φ25 | 8 | 13 | 2-M4 | 4 | 117.6 |
| ● S50S 120BF - 0506 | 120 | φ60 | φ61 | B1 | 5 | φ6 | φ42 | 8 | 13 | - | - | 194.9 |
| ● S50S 120B - 0506H | 120 | φ60 | φ61 | B1 | 5 | φ6(H※) | φ42 | 8 | 13 | - | - | 194.9 |
| S50S 120B * 0508 | 120 | φ60 | φ61 | B1 | 5 | φ8 | φ25 | 8 | 13 | 2-M4 | 4 | 135.4 |

● の商品は新商品です。
Products with ● marks are new item.

【*】(アスタ)にはセットスクリーが2個付いております。
[*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.
追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|--------|---------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50S 100BF - 0506 | 7.43 | 74.35 | 148.70 | 295.30 | 511.01 | 683.58 | 829.35 |
| S50S 100B - 0506H | 7.89 | 78.86 | 157.73 | 313.44 | 548.96 | 739.84 | 899.76 |
| S50S 100B * 0508 | 7.50 | 75.01 | 150.02 | 297.93 | 515.45 | 688.64 | 835.69 |
| S50S 110B * 0508 | 8.35 | 83.48 | 166.96 | 326.48 | 558.60 | 757.32 | 916.71 |
| S50S 120BF - 0506 | 9.11 | 91.10 | 182.20 | 351.01 | 593.95 | 816.78 | 986.42 |
| S50S 120B - 0506H | 9.66 | 96.64 | 193.27 | 373.48 | 640.88 | 886.77 | 1073.32 |
| S50S 120B * 0508 | 9.20 | 91.98 | 183.95 | 354.27 | 599.68 | 824.59 | 995.68 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|--------|---------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S50S 100BF - 0506 | 1.11 | 11.20 | 22.41 | 45.24 | 79.58 | 110.58 | 136.65 |
| S50S 100B - 0506H | 4.95 | 54.75 | 112.87 | 231.21 | 417.47 | 572.64 | 703.28 |
| S50S 100B * 0508 | - | - | - | - | - | - | - |
| S50S 110B * 0508 | - | - | - | - | - | - | - |
| S50S 120BF - 0506 | 1.63 | 16.44 | 33.09 | 64.50 | 112.25 | 159.59 | 197.91 |
| S50S 120B - 0506H | 7.25 | 80.21 | 165.37 | 329.41 | 582.65 | 820.78 | 1003.21 |
| S50S 120B * 0508 | - | - | - | - | - | - | - |

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かみ歯
BEVEL GEARS

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SPROCKETS

技術資料
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ステンレス平歯車

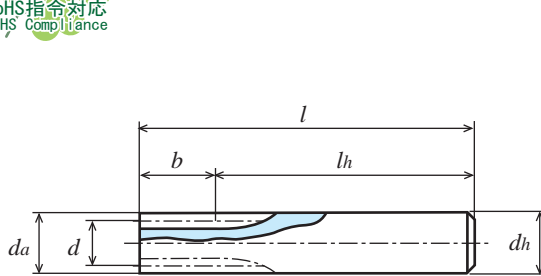
SPUR GEARS

モジュール **0.75** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

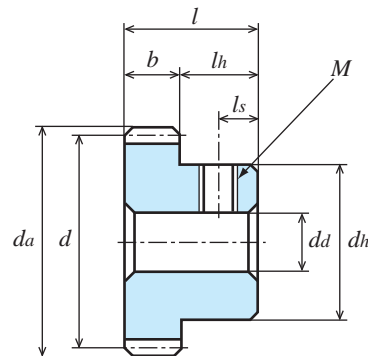
JIS B 1702-1 (ISO) 9 級
 System of accuracy : JIS B 1702-1(ISO) class 9



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



K1形
TYPE K1



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|-----|----------------------|
| | | | | | | | | | | M | ls | |
| S75SU 10K - 0809 | 10 | φ 7.5 | φ 9 | K1 | 8 | - | φ 9 | 47 | 55 | - | - | 26.5 |
| S75SU 14K + 0805 | 14 | φ 10.5 | φ 12 | K2 | 8 | φ5 | φ12 | 12 | 20 | M3 | 3 | 13.0 |
| S75SU 15K + 0805 | 15 | φ 11.25 | φ 12.75 | K2 | 8 | φ5 | φ12.75 | 12 | 20 | M3 | 3 | 15.2 |
| S75SU 16B + 0805 | 16 | φ 12 | φ 13.5 | B1 | 8 | φ5 | φ10 | 7 | 15 | M3 | 3.5 | 9.1 |
| S75SU 18B + 0805 | 18 | φ 13.5 | φ 15 | B1 | 8 | φ5 | φ11 | 7 | 15 | M3 | 3.5 | 11.9 |
| S75SU 20B + 0806 | 20 | φ 15 | φ 16.5 | B1 | 8 | φ6 | φ12 | 7 | 15 | M4 | 3.5 | 13.9 |
| S75SU 21B + 0806 | 21 | φ 15.75 | φ 17.25 | B1 | 8 | φ6 | φ12 | 7 | 15 | M4 | 3.5 | 15.1 |
| S75SU 22B + 0806 | 22 | φ 16.5 | φ 18 | B1 | 8 | φ6 | φ12 | 7 | 15 | M4 | 3.5 | 16.3 |
| S75SU 24B + 0806 | 24 | φ 18 | φ 19.5 | B1 | 8 | φ6 | φ14 | 7 | 15 | M4 | 3.5 | 21.0 |
| S75SU 25B + 0806 | 25 | φ 18.75 | φ 20.25 | B1 | 8 | φ6 | φ14 | 7 | 15 | M4 | 3.5 | 22.4 |
| S75SU 26B + 0806 | 26 | φ 19.5 | φ 21 | B1 | 8 | φ6 | φ14 | 7 | 15 | M4 | 3.5 | 23.8 |
| S75SU 28B + 0806 | 28 | φ 21 | φ 22.5 | B1 | 8 | φ6 | φ14 | 7 | 15 | M4 | 3.5 | 26.9 |
| S75SU 30B + 0806 | 30 | φ 22.5 | φ 24 | B1 | 8 | φ6 | φ14 | 7 | 15 | M4 | 3.5 | 31.3 |

SUS304 の商品にはセットスクリューは付いておりません。
 [+] : Gear with threaded hole / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S75SU 10K - 0809 | 0.55 | 5.46 | 10.91 | 21.82 | 43.64 | 65.46 | 81.83 |
| S75SU 12K - 0811 | 0.76 | 7.64 | 15.28 | 30.56 | 61.12 | 91.68 | 114.60 |
| S75SU 14K + 0805 | 1.00 | 9.96 | 19.92 | 39.84 | 79.67 | 119.51 | 149.39 |
| S75SU 15K + 0805 | 1.12 | 11.16 | 22.32 | 44.64 | 89.29 | 133.93 | 167.41 |
| S75SU 16B + 0805 | 1.24 | 12.39 | 24.77 | 49.54 | 99.09 | 148.63 | 185.79 |
| S75SU 18B + 0805 | 1.49 | 14.89 | 29.78 | 59.56 | 119.12 | 178.67 | 221.34 |
| S75SU 20B + 0806 | 1.75 | 17.48 | 34.97 | 69.93 | 139.86 | 209.79 | 255.42 |
| S75SU 21B + 0806 | 1.88 | 18.79 | 37.58 | 75.16 | 150.32 | 225.48 | 272.18 |
| S75SU 22B + 0806 | 2.01 | 20.12 | 40.23 | 80.46 | 160.93 | 240.07 | 288.91 |
| S75SU 24B + 0806 | 2.28 | 22.79 | 45.58 | 91.17 | 182.33 | 268.23 | 321.89 |
| S75SU 25B + 0806 | 2.41 | 24.15 | 48.30 | 96.59 | 193.18 | 282.23 | 338.23 |
| S75SU 26B + 0806 | 2.55 | 25.51 | 51.03 | 102.05 | 204.11 | 296.15 | 354.44 |
| S75SU 28B + 0806 | 2.83 | 28.27 | 56.54 | 113.08 | 226.16 | 323.73 | 386.41 |
| S75SU 30B + 0806 | 3.10 | 31.04 | 62.08 | 124.17 | 248.33 | 350.73 | 417.57 |

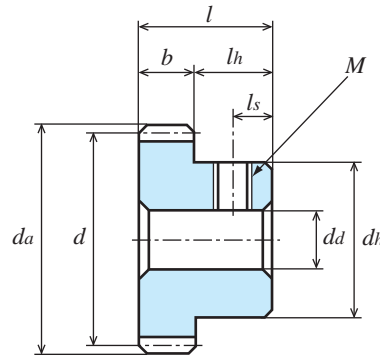
The above numerical values are equivalent to JGMA formulas as reference only.
 動力の換算式は P26 をご参照ください。
 Please refer to the conversion formulas of power on page P26.

ステンレス平歯車

SPUR GEARS

モジュール **0.75** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9級
 System of accuracy : JIS B 1702-1(ISO) class 9



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | M | ls | |
| S75SU 32B + 0606 | 32 | φ24 | φ25.5 | B1 | 6 | φ6 | φ15 | 9 | 15 | M4 | 4 | 30.4 |
| S75SU 36B + 0606 | 36 | φ27 | φ28.5 | B1 | 6 | φ6 | φ18 | 9 | 15 | M4 | 4 | 41.6 |
| S75SU 40B + 0606 | 40 | φ30 | φ31.5 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 52.2 |
| S75SU 44B + 0606 | 44 | φ33 | φ34.5 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 59.2 |
| S75SU 45B + 0606 | 45 | φ33.75 | φ35.25 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 61.1 |
| S75SU 48B + 0606 | 48 | φ36 | φ37.5 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 67.0 |
| S75SU 56B + 0606 | 56 | φ42 | φ43.5 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 84.5 |
| S75SU 60B + 0606 | 60 | φ45 | φ46.5 | B1 | 6 | φ6 | φ22 | 9 | 15 | M4 | 4 | 98.9 |
| S75SU 72B + 0606 | 72 | φ54 | φ55.5 | B1 | 6 | φ6 | φ25 | 9 | 15 | M4 | 4 | 139.9 |
| S75SU 80B + 0608 | 80 | φ60 | φ61.5 | B1 | 6 | φ8 | φ25 | 9 | 15 | M4 | 4 | 163.0 |
| S75SU 100B + 0608 | 100 | φ75 | φ76.5 | B1 | 6 | φ8 | φ30 | 9 | 15 | M4 | 4 | 253.9 |
| S75SU 120B + 0608 | 120 | φ90 | φ91.5 | B1 | 6 | φ8 | φ30 | 9 | 15 | M4 | 4 | 346.3 |

SUS304 の商品にはセットスクリーは付いておりません。
 [+] : Gear with threaded hole / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

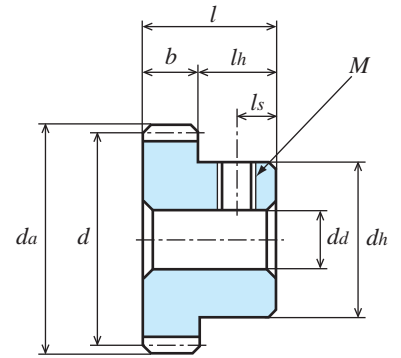
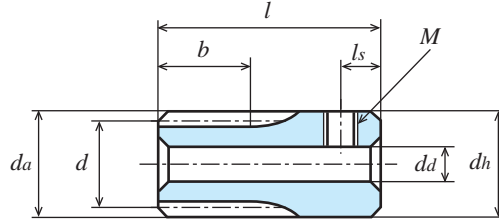
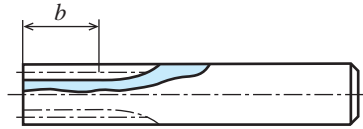
| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|--------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S75SU 32B + 0606 | 2.54 | 25.39 | 50.78 | 101.55 | 202.94 | 283.08 | 336.19 |
| S75SU 36B + 0606 | 2.97 | 29.65 | 59.30 | 118.60 | 232.63 | 322.15 | 380.76 |
| S75SU 38B + 0606 | 3.18 | 31.80 | 63.61 | 127.21 | 247.24 | 341.17 | 402.31 |
| S75SU 40B + 0606 | 3.40 | 33.97 | 67.94 | 135.87 | 261.67 | 359.85 | 423.39 |
| S75SU 44B + 0606 | 3.83 | 38.30 | 76.61 | 153.22 | 289.81 | 395.90 | 463.82 |
| S75SU 45B + 0606 | 3.94 | 39.40 | 78.80 | 157.59 | 296.77 | 404.75 | 473.69 |
| S75SU 48B + 0606 | 4.27 | 42.69 | 85.39 | 170.78 | 317.37 | 430.79 | 502.63 |
| S75SU 56B + 0606 | 5.16 | 51.56 | 103.12 | 206.23 | 370.29 | 496.61 | 588.14 |
| S75SU 60B + 0606 | 5.60 | 56.02 | 112.05 | 224.09 | 395.66 | 527.64 | 633.40 |
| S75SU 72B + 0606 | 6.95 | 69.52 | 139.04 | 272.73 | 467.65 | 632.18 | 765.62 |
| S75SU 80B + 0608 | 7.86 | 78.59 | 157.17 | 302.69 | 512.38 | 704.54 | 850.72 |
| S75SU 100B + 0608 | 10.13 | 101.26 | 202.52 | 373.10 | 619.77 | 876.96 | 1,062.41 |
| S75SU 120B + 0608 | 12.42 | 124.17 | 248.33 | 438.47 | 742.13 | 1,047.95 | 1,267.90 |

The above numerical values are equivalent to JGMA formulas as reference only.
 動力の換算式は P26 をご参照ください。
 Please refer to the conversion formulas of power on page P26.

平歯車 SPUR GEARS

モジュール **0.75** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9 級
System of accuracy : JIS B 1702-1(ISO) class 9



K1形
TYPE K1

B1形
TYPE B1

C3604B 快削黄銅棒 Material : Brass (ISO CuZn39Pb3)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H8)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|-----------------------------|
| | | | | | | | | | | <i>M</i> | <i>ls</i> | |
| S75B 10K - 0809 | 10 | φ 7.5 | φ 9 | K1 | 8 | - | φ 9 | 47 | 55 | - | - | 28.4 |
| S75B 12K - 0811 | 12 | φ 9 | φ 10.5 | K1 | 8 | - | φ 11 | 47 | 55 | - | - | 42.3 |
| S75B 14K + 0805 | 14 | φ 10.5 | φ 12 | K2 | 8 | φ 5 | φ 12 | 12 | 20 | M3 | 3 | 13.9 |
| S75B 15K + 0805 | 15 | φ 11.25 | φ 12.75 | K2 | 8 | φ 5 | φ 12.75 | 12 | 20 | M3 | 3 | 16.3 |
| S75B 16K + 0805 | 16 | φ 12 | φ 13.5 | K2 | 8 | φ 5 | φ 13.5 | 12 | 20 | M3 | 3 | 18.8 |
| S75B 16B + 0305 | 16 | φ 12 | φ 13.5 | B1 | 3 | φ 5 | φ 10 | 7 | 10 | M3 | 3.5 | 5.8 |
| S75B 18K + 0805 | 18 | φ 13.5 | φ 15 | K2 | 8 | φ 5 | φ 15 | 12 | 20 | M3 | 3 | 24.2 |
| S75B 18B + 0305 | 18 | φ 13.5 | φ 15 | B1 | 3 | φ 5 | φ 11 | 7 | 10 | M3 | 3.5 | 7.5 |
| S75B 20K + 0805 | 20 | φ 15 | φ 16.5 | K2 | 8 | φ 5 | φ 16.5 | 12 | 20 | M3 | 3 | 30.2 |
| S75B 20B + 0306 | 20 | φ 15 | φ 16.5 | B1 | 3 | φ 6 | φ 12 | 7 | 10 | M4 | 3.5 | 8.6 |
| S75B 24B + 0306 | 24 | φ 18 | φ 19.5 | B1 | 3 | φ 6 | φ 14 | 7 | 10 | M4 | 3.5 | 11.7 |
| S75B 25B + 0306 | 25 | φ 18.75 | φ 20.25 | B1 | 3 | φ 6 | φ 14 | 7 | 10 | M4 | 3.5 | 12.3 |
| S75B 26B + 0306 | 26 | φ 19.5 | φ 21 | B1 | 3 | φ 6 | φ 14 | 7 | 10 | M4 | 3.5 | 12.9 |
| S75B 28B + 0306 | 28 | φ 21 | φ 22.5 | B1 | 3 | φ 6 | φ 14 | 7 | 10 | M4 | 3.5 | 14.1 |

【+】にはセットスクリーンが付いております。
【+】: Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

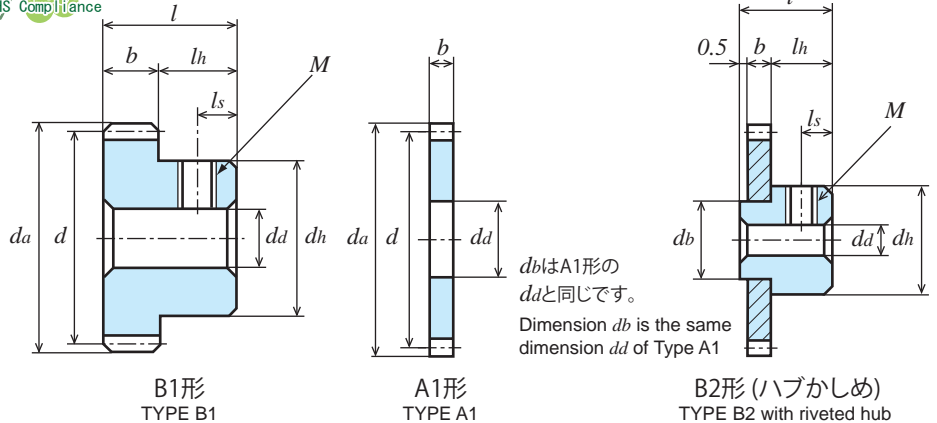
| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|-------|-------|-------|-------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S75B 10K - 0809 | 0.22 | 2.18 | 4.36 | 8.73 | 17.46 | 26.18 | 32.73 |
| S75B 12K - 0811 | 0.31 | 3.06 | 6.11 | 12.22 | 24.45 | 36.67 | 45.84 |
| S75B 14K + 0805 | 0.40 | 3.98 | 7.97 | 15.93 | 31.87 | 47.80 | 59.75 |
| S75B 15K + 0805 | 0.45 | 4.46 | 8.93 | 17.86 | 35.72 | 53.57 | 66.97 |
| S75B 16K + 0805 | 0.50 | 4.95 | 9.91 | 19.82 | 39.64 | 59.45 | 74.32 |
| S75B 16B + 0305 | 0.19 | 1.86 | 3.72 | 7.43 | 14.86 | 22.30 | 27.87 |
| S75B 18K + 0805 | 0.60 | 5.96 | 11.91 | 23.82 | 47.65 | 71.47 | 88.54 |
| S75B 18B + 0305 | 0.22 | 2.23 | 4.47 | 8.93 | 17.87 | 26.80 | 33.20 |
| S75B 20K + 0805 | 0.70 | 6.99 | 13.99 | 27.97 | 55.94 | 83.92 | 102.17 |
| S75B 20B + 0306 | 0.26 | 2.62 | 5.24 | 10.49 | 20.98 | 31.47 | 38.31 |
| S75B 24B + 0306 | 0.34 | 3.42 | 6.84 | 13.67 | 27.35 | 40.23 | 48.28 |
| S75B 25B + 0306 | 0.36 | 3.62 | 7.24 | 14.49 | 28.98 | 42.33 | 50.74 |
| S75B 26B + 0306 | 0.38 | 3.83 | 7.65 | 15.31 | 30.62 | 44.42 | 53.17 |
| S75B 28B + 0306 | 0.42 | 4.24 | 8.48 | 16.96 | 33.92 | 48.56 | 57.96 |

The above numerical values are equivalent to JGMA formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

平歯車 SPUR GEARS

モジュール **0.75** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9 ~ 10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



C3713P 快削黄銅板、C3604B 快削黄銅棒 Material : Brass (ISO CuZn38Pb2, CuZn39Pb3)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|-----|----------------------|
| | | | | | | | | | | M | ls | |
| S75B 30B + 0306 | 30 | φ22.5 | φ24 | B1 | 3 | φ 6 | φ15 | 7 | 10 | M4 | 3.5 | 16.7 |
| S75B 32B + 0306 | 32 | φ24 | φ25.5 | B1 | 3 | φ 6 | φ15 | 7 | 10 | M4 | 3.5 | 18.1 |
| S75B 35B + 0306 | 35 | φ26.25 | φ27.75 | B1 | 3 | φ 6 | φ18 | 7 | 10 | M4 | 3.5 | 24.9 |
| S75B 36B + 0306 | 36 | φ27 | φ28.5 | B1 | 3 | φ 6 | φ18 | 7 | 10 | M4 | 3.5 | 25.7 |
| S75B 40B + 0306 | 40 | φ30 | φ31.5 | B1 | 3 | φ 6 | φ20 | 7 | 10 | M4 | 3.5 | 33.8 |
| S75B 42B + 0306 | 42 | φ31.5 | φ33 | B1 | 3 | φ 6 | φ20 | 7 | 10 | M4 | 3.5 | 35.6 |
| S75B 45B + 0306 | 45 | φ33.75 | φ35.25 | B1 | 3 | φ 6 | φ20 | 7 | 10 | M4 | 3.5 | 38.6 |
| S75B 48B + 0306 | 48 | φ36 | φ37.5 | B1 | 3 | φ 6 | φ20 | 7 | 10 | M4 | 3.5 | 41.7 |
| S75B 50A - 0315 | 50 | φ37.5 | φ39 | A1 | 3 | φ15 | - | - | 3 | - | - | 23.7 |
| S75B 50B + 0306 | 50 | φ37.5 | φ39 | B2 | 3 | φ 6 | φ20 | 7 | 10.5 | M4 | 3.5 | 43.8 |
| S75B 55A - 0315 | 55 | φ41.25 | φ42.75 | A1 | 3 | φ15 | - | - | 3 | - | - | 29.6 |
| S75B 55B + 0306 | 55 | φ41.25 | φ42.75 | B2 | 3 | φ 6 | φ20 | 7 | 10.5 | M4 | 3.5 | 49.7 |
| S75B 56A - 0315 | 56 | φ42 | φ43.5 | A1 | 3 | φ15 | - | - | 3 | - | - | 30.8 |
| S75B 56B + 0306 | 56 | φ42 | φ43.5 | B2 | 3 | φ 6 | φ20 | 7 | 10.5 | M4 | 3.5 | 50.9 |
| S75B 58A - 0315 | 58 | φ43.5 | φ45 | A1 | 3 | φ15 | - | - | 3 | - | - | 33.4 |
| S75B 58B + 0306 | 58 | φ43.5 | φ45 | B2 | 3 | φ 6 | φ20 | 7 | 10.5 | M4 | 3.5 | 53.5 |
| S75B 60A - 0315 | 60 | φ45 | φ46.5 | A1 | 3 | φ15 | - | - | 3 | - | - | 36.1 |
| S75B 60B + 0306 | 60 | φ45 | φ46.5 | B2 | 3 | φ 6 | φ20 | 7 | 10.5 | M4 | 3.5 | 56.2 |

A1形の穴径はプレスの抜き放しですので (H8) の公差仕上げになっておりません。

Bore tolerance of H8 but does not apply to type A1 gears due to the press item.

【+】にはセットスクリューは付いております。

[+]: Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S75B 30B + 0306 | 0.47 | 4.66 | 9.31 | 18.62 | 37.25 | 52.61 | 62.64 |
| S75B 32B + 0306 | 0.51 | 5.08 | 10.16 | 20.31 | 40.59 | 56.62 | 67.24 |
| S75B 35B + 0306 | 0.57 | 5.72 | 11.43 | 22.86 | 45.05 | 62.50 | 73.96 |
| S75B 36B + 0306 | 0.59 | 5.93 | 11.86 | 23.72 | 46.53 | 64.43 | 76.15 |
| S75B 40B + 0306 | 0.68 | 6.79 | 13.59 | 27.17 | 52.33 | 71.97 | 84.68 |
| S75B 42B + 0306 | 0.72 | 7.23 | 14.46 | 28.92 | 55.19 | 75.64 | 88.80 |
| S75B 45B + 0306 | 0.79 | 7.88 | 15.76 | 31.52 | 59.35 | 80.95 | 94.74 |
| S75B 48B + 0306 | 0.85 | 8.54 | 17.08 | 34.16 | 63.47 | 86.16 | 100.53 |
| S75B 50A - 0315 | 0.90 | 8.98 | 17.96 | 35.92 | 66.17 | 89.54 | 104.28 |
| S75B 55A - 0315 | 1.01 | 10.09 | 20.18 | 40.36 | 72.77 | 97.73 | 115.35 |
| S75B 56A - 0315 | 1.03 | 10.31 | 20.62 | 41.25 | 74.06 | 99.32 | 117.63 |
| S75B 58A - 0315 | 1.08 | 10.76 | 21.52 | 43.03 | 76.61 | 102.45 | 122.17 |
| S75B 60A - 0315 | 1.12 | 11.20 | 22.41 | 44.82 | 79.13 | 105.53 | 126.68 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

RoHS 対応

2006年11月生産開始日より欧州 RoHS 指令に対応できる商品を提供しています。

We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

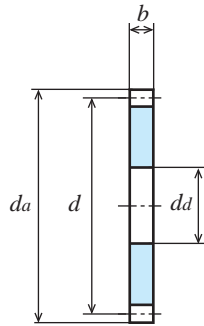
平歯車 SPUR GEARS

モジュール **0.75** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

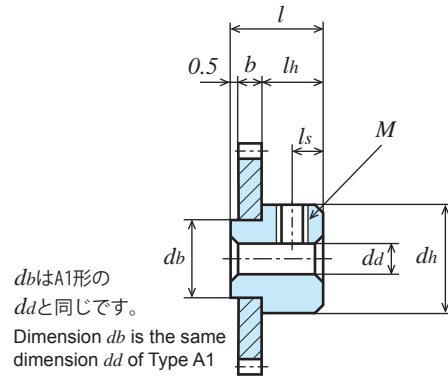
JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず “フルネームで商品記号” を明記してください。
Please refer to the catalogue reference while ordering.



A1形
TYPE A1



B2形 (ハブかしめ)
TYPE B2 with riveted hub

dbはA1形の
ddと同じです。
Dimension db is the same
dimension dd of Type A1

C3713P 快削黄銅板、C3604B 快削黄銅棒 Material : Brass (ISO CuZn38Pb2, CuZn39Pb3)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|-----|----------------------|
| | | | | | | | | | | M | ls | |
| S75B 62A - 0315 | 62 | φ46.5 | φ48 | A1 | 3 | φ15 | - | - | 3 | - | - | 38.8 |
| S75B 62B + 0306 | 62 | φ46.5 | φ48 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 58.9 |
| S75B 64A - 0315 | 64 | φ48 | φ49.5 | A1 | 3 | φ15 | - | - | 3 | - | - | 41.6 |
| S75B 64B + 0306 | 64 | φ48 | φ49.5 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 61.8 |
| S75B 65A - 0315 | 65 | φ48.75 | φ50.25 | A1 | 3 | φ15 | - | - | 3 | - | - | 43.1 |
| S75B 65B + 0306 | 65 | φ48.75 | φ50.25 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 63.2 |
| S75B 66A - 0315 | 66 | φ49.5 | φ51 | A1 | 3 | φ15 | - | - | 3 | - | - | 44.6 |
| S75B 66B + 0306 | 66 | φ49.5 | φ51 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 64.7 |
| S75B 68A - 0315 | 68 | φ51 | φ52.5 | A1 | 3 | φ15 | - | - | 3 | - | - | 47.6 |
| S75B 68B + 0306 | 68 | φ51 | φ52.5 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 67.7 |
| S75B 70A - 0315 | 70 | φ52.5 | φ54 | A1 | 3 | φ15 | - | - | 3 | - | - | 50.7 |
| S75B 70B + 0306 | 70 | φ52.5 | φ54 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 70.8 |
| S75B 72A - 0315 | 72 | φ54 | φ55.5 | A1 | 3 | φ15 | - | - | 3 | - | - | 53.9 |
| S75B 72B + 0306 | 72 | φ54 | φ55.5 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 74.0 |
| S75B 75A - 0315 | 75 | φ56.25 | φ57.75 | A1 | 3 | φ15 | - | - | 3 | - | - | 58.9 |
| S75B 75B + 0306 | 75 | φ56.25 | φ57.75 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 79.0 |
| S75B 80A - 0315 | 80 | φ60 | φ61.5 | A1 | 3 | φ15 | - | - | 3 | - | - | 67.6 |
| S75B 80B + 0306 | 80 | φ60 | φ61.5 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 87.7 |

A1形の穴径はプレスの抜き放しですので (H8) の公差仕上げになっておりません。
Bore tolerance of H8 but does not apply to type A1 gears due to the press item.
【+】にはセットスクリューが付いております。
【+】: Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S75B 62A - 0315 | 1.17 | 11.65 | 23.30 | 46.61 | 81.62 | 108.54 | 131.16 |
| S75B 64A - 0315 | 1.21 | 12.10 | 24.20 | 48.37 | 84.07 | 111.64 | 135.62 |
| S75B 65A - 0315 | 1.23 | 12.33 | 24.65 | 49.15 | 85.28 | 113.50 | 137.83 |
| S75B 66A - 0315 | 1.26 | 12.55 | 25.10 | 49.93 | 86.48 | 115.37 | 140.04 |
| S75B 68A - 0315 | 1.30 | 13.00 | 26.00 | 51.48 | 88.86 | 119.08 | 144.43 |
| S75B 70A - 0315 | 1.35 | 13.45 | 26.90 | 53.02 | 91.21 | 122.77 | 148.79 |
| S75B 72A - 0315 | 1.39 | 13.90 | 27.81 | 54.55 | 93.53 | 126.44 | 153.12 |
| S75B 75A - 0315 | 1.46 | 14.58 | 29.17 | 56.81 | 96.94 | 131.90 | 159.56 |
| S75B 80A - 0315 | 1.57 | 15.72 | 31.43 | 60.54 | 102.48 | 140.91 | 170.15 |

The above numerical values are equivalent to JGMA formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

RoHS 対応

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平歯車

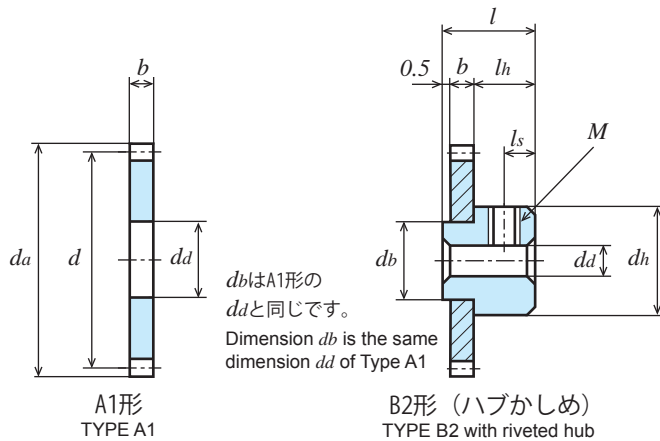
SPUR GEARS

モジュール **0.75** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
 System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
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C3713P 快削黄銅板、C3604B 快削黄銅棒

Material : Brass (ISO CuZn38Pb2, CuZn39Pb3)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|-----|----------------------|
| | | | | | | | | | | M | ls | |
| S75B 85A - 0315 | 85 | φ63.75 | φ65.25 | A1 | 3 | φ15 | - | - | 3 | - | - | 76.9 |
| S75B 85B + 0306 | 85 | φ63.75 | φ65.25 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 97.0 |
| S75B 90A - 0315 | 90 | φ67.5 | φ69 | A1 | 3 | φ15 | - | - | 3 | - | - | 86.7 |
| S75B 90B + 0306 | 90 | φ67.5 | φ69 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 106.9 |
| S75B 95A - 0315 | 95 | φ71.25 | φ72.75 | A1 | 3 | φ15 | - | - | 3 | - | - | 97.2 |
| S75B 95B + 0306 | 95 | φ71.25 | φ72.75 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 117.3 |
| S75B 100A - 0315 | 100 | φ75 | φ76.5 | A1 | 3 | φ15 | - | - | 3 | - | - | 108.1 |
| S75B 100B + 0306 | 100 | φ75 | φ76.5 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 128.3 |
| S75B 105A - 0315 | 105 | φ78.75 | φ80.25 | A1 | 3 | φ15 | - | - | 3 | - | - | 119.7 |
| S75B 105B + 0306 | 105 | φ78.75 | φ80.25 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 139.8 |
| S75B 110A - 0315 | 110 | φ82.5 | φ84 | A1 | 3 | φ15 | - | - | 3 | - | - | 131.8 |
| S75B 110B + 0306 | 110 | φ82.5 | φ84 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 151.9 |
| S75B 115A - 0315 | 115 | φ86.25 | φ87.75 | A1 | 3 | φ15 | - | - | 3 | - | - | 144.5 |
| S75B 115B + 0306 | 115 | φ86.25 | φ87.75 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 164.6 |
| S75B 120A - 0315 | 120 | φ90 | φ91.5 | A1 | 3 | φ15 | - | - | 3 | - | - | 157.7 |
| S75B 120B + 0306 | 120 | φ90 | φ91.5 | B2 | 3 | φ6 | φ20 | 7 | 10.5 | M4 | 3.5 | 177.8 |

A1形の穴径はプレスの抜き出しですので (H8) の公差仕上げになっておりません。
 Bore tolerance of H8 but does not apply to type A1 gears due to the press item.
 【+】にはセットスクリューが付いております。
 【+】: Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S75B 85A - 0315 | 1.68 | 16.84 | 33.67 | 64.12 | 107.70 | 149.62 | 180.35 |
| S75B 90A - 0315 | 1.80 | 17.97 | 35.94 | 67.69 | 112.84 | 158.34 | 191.18 |
| S75B 95A - 0315 | 1.91 | 19.11 | 38.22 | 71.19 | 117.82 | 166.93 | 201.90 |
| S75B 100A - 0315 | 2.03 | 20.25 | 40.50 | 74.62 | 123.95 | 175.39 | 212.48 |
| S75B 105A - 0315 | 2.14 | 21.39 | 42.79 | 77.98 | 130.17 | 183.73 | 222.94 |
| S75B 110A - 0315 | 2.25 | 22.54 | 45.08 | 81.28 | 136.32 | 192.36 | 233.28 |
| S75B 115A - 0315 | 2.37 | 23.69 | 47.37 | 84.52 | 142.40 | 201.01 | 243.49 |
| S75B 120A - 0315 | 2.48 | 24.83 | 49.67 | 87.69 | 148.43 | 209.59 | 253.58 |

The above numerical values are equivalent to JGMA formulas as reference only.
 動力の換算式は P26 をご参照ください。
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RoHS 対応

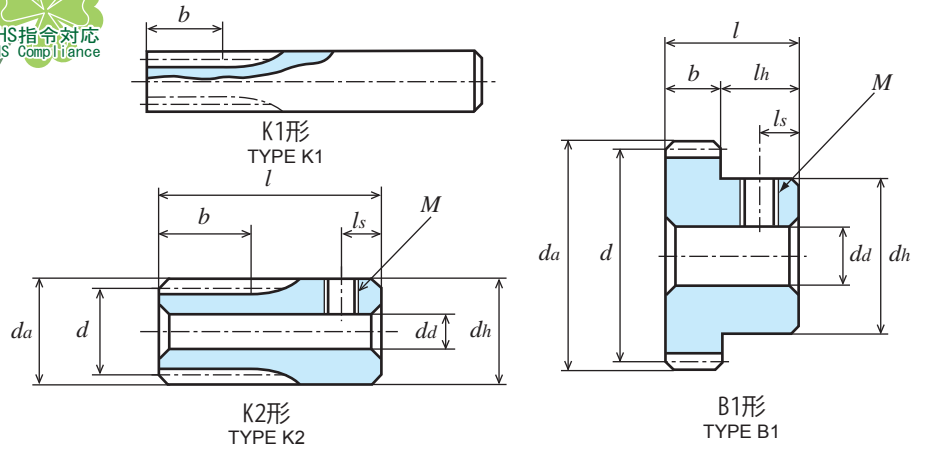
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 We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

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- 歯研平歯車 GROUND SPUR GEARS
- 平歯車 SPUR GEARS
- 内歯車 INTERNAL GEARS
- 歯研ラック GROUND RACKS
- ラック RACKS
- ハブ・スクリューギヤ HELICAL GEARS AND SCREW GEARS
- ワーム・ワームギヤ WORMS AND WORM GEARS
- かさ歯車 BEVEL GEARS
- スプロケット SPROCKETS
- 技術資料 REFERENCE DATA

平歯車 SPUR GEARS

モジュール **0.75** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8~9 級
System of accuracy : JIS B 1702-1(ISO) class 8-9



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|-----|----------------------|
| | | | | | | | | | | M | ls | |
| S75S 10K - 0809 | 10 | φ 7.5 | φ 9 | K1 | 8 | - | φ 9 | 47 | 55 | - | - | 26.3 |
| S75S 12K - 0811 | 12 | φ 9 | φ 10.5 | K1 | 8 | - | φ 11 | 47 | 55 | - | - | 39.1 |
| S75S 14K + 0805 | 14 | φ 10.5 | φ 12 | K2 | 8 | φ 5 | φ 12 | 12 | 20 | M3 | 3 | 12.9 |
| S75S 15K + 0805 | 15 | φ 11.25 | φ 12.75 | K2 | 8 | φ 5 | φ 12.75 | 12 | 20 | M3 | 3 | 15.0 |
| S75S 16B + 0805 | 16 | φ 12 | φ 13.5 | B1 | 8 | φ 5 | φ 10 | 7 | 15 | M4 | 3.5 | 8.9 |
| S75S 18B + 0805 | 18 | φ 13.5 | φ 15 | B1 | 8 | φ 5 | φ 11 | 7 | 15 | M4 | 3.5 | 11.7 |
| S75S 20B + 0806 | 20 | φ 15 | φ 16.5 | B1 | 8 | φ 6 | φ 12 | 7 | 15 | M4 | 3.5 | 13.8 |
| S75S 24B + 0806 | 24 | φ 18 | φ 19.5 | B1 | 8 | φ 6 | φ 14 | 7 | 15 | M4 | 3.5 | 20.8 |
| S75S 25B + 0806 | 25 | φ 18.75 | φ 20.25 | B1 | 8 | φ 6 | φ 14 | 7 | 15 | M4 | 3.5 | 22.2 |
| S75S 28B + 0806 | 28 | φ 21 | φ 22.5 | B1 | 8 | φ 6 | φ 14 | 7 | 15 | M4 | 3.5 | 26.6 |
| S75S 30B + 0806 | 30 | φ 22.5 | φ 24 | B1 | 8 | φ 6 | φ 15 | 7 | 15 | M4 | 3.5 | 31.0 |
| S75S 32B + 0606 | 32 | φ 24 | φ 25.5 | B1 | 6 | φ 6 | φ 15 | 9 | 15 | M4 | 4 | 30.1 |
| S75S 35B + 0606 | 35 | φ 26.25 | φ 27.75 | B1 | 6 | φ 6 | φ 18 | 9 | 15 | M4 | 4 | 39.7 |
| S75S 36B + 0606 | 36 | φ 27 | φ 28.5 | B1 | 6 | φ 6 | φ 18 | 9 | 15 | M4 | 4 | 41.2 |

【+】にはセットスクリューは付いております。
【+】: Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S75S 10K - 0809 | 1.10 | 11.07 | 22.14 | 44.29 | 88.59 | 132.88 | 166.10 |
| S75S 12K - 0811 | 1.53 | 15.28 | 30.56 | 61.12 | 122.24 | 183.36 | 229.20 |
| S75S 14K + 0805 | 1.99 | 19.92 | 39.84 | 79.67 | 159.35 | 239.02 | 298.77 |
| S75S 15K + 0805 | 2.23 | 22.32 | 44.64 | 89.29 | 178.58 | 267.86 | 334.83 |
| S75S 16B + 0805 | 2.48 | 24.77 | 49.54 | 99.09 | 198.18 | 297.27 | 371.59 |
| S75S 18B + 0805 | 2.98 | 29.78 | 59.56 | 119.12 | 238.23 | 357.35 | 442.68 |
| S75S 20B + 0806 | 3.50 | 34.97 | 69.93 | 139.86 | 279.72 | 419.58 | 510.83 |
| S75S 24B + 0806 | 4.56 | 45.58 | 91.17 | 182.33 | 364.66 | 536.45 | 643.79 |
| S75S 25B + 0806 | 4.83 | 48.30 | 96.59 | 193.18 | 386.36 | 564.46 | 676.47 |
| S75S 28B + 0806 | 5.65 | 56.54 | 113.08 | 226.16 | 452.32 | 647.45 | 772.83 |
| S75S 30B + 0806 | 6.21 | 62.08 | 124.17 | 248.66 | 496.66 | 701.46 | 835.14 |
| S75S 32B + 0606 | 5.08 | 50.78 | 101.55 | 203.10 | 405.88 | 566.16 | 672.37 |
| S75S 35B + 0606 | 5.72 | 57.16 | 114.32 | 228.63 | 450.54 | 625.02 | 739.59 |
| S75S 36B + 0606 | 5.93 | 59.30 | 118.60 | 237.20 | 465.26 | 644.30 | 761.51 |

The above numerical values are equivalent to JGMA formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

RoHS 対応

2006年11月生産開始分より欧州 RoHS 指令に対応できる商品を提供しています。
We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

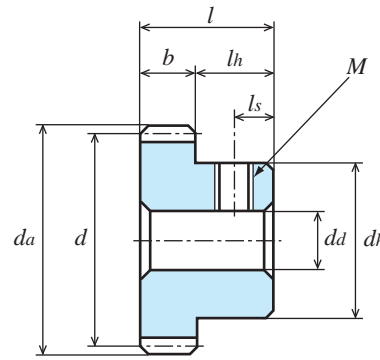
平歯車 SPUR GEARS

モジュール **0.75** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず “フルネームで商品記号” を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | M | ls | |
| S75S 40B + 0606 | 40 | φ30 | φ31.5 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 51.7 |
| S75S 45B + 0606 | 45 | φ33.75 | φ35.25 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 60.5 |
| S75S 48B + 0606 | 48 | φ36 | φ37.5 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 66.3 |
| S75S 50B + 0606 | 50 | φ37.5 | φ39 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 70.4 |
| S75S 56B + 0606 | 56 | φ42 | φ43.5 | B1 | 6 | φ6 | φ20 | 9 | 15 | M4 | 4 | 83.6 |
| S75S 60B + 0606 | 60 | φ45 | φ46.5 | B1 | 6 | φ6 | φ22 | 9 | 15 | M4 | 4 | 97.9 |
| S75S 64B + 0606 | 64 | φ48 | φ49.5 | B1 | 6 | φ6 | φ22 | 9 | 15 | M4 | 4 | 108.2 |
| S75S 70B + 0606 | 70 | φ52.5 | φ54 | B1 | 6 | φ6 | φ22 | 9 | 15 | M4 | 4 | 124.9 |
| S75S 72B + 0606 | 72 | φ54 | φ55.5 | B1 | 6 | φ6 | φ25 | 9 | 15 | M4 | 4 | 138.5 |
| S75S 80B + 0608 | 80 | φ60 | φ61.5 | B1 | 6 | φ8 | φ25 | 9 | 15 | M4 | 4 | 161.3 |
| S75S 90B + 0608 | 90 | φ67.5 | φ69 | B1 | 6 | φ8 | φ30 | 9 | 15 | M4 | 4 | 211.8 |
| S75S 100B + 0608 | 100 | φ75 | φ76.5 | B1 | 6 | φ8 | φ30 | 9 | 15 | M4 | 4 | 251.3 |
| S75S 120B + 0608 | 120 | φ90 | φ91.5 | B1 | 6 | φ8 | φ30 | 9 | 15 | M4 | 4 | 342.9 |

[+] にはセットスクリューは付いております。
[+]: Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S75S 40B + 0606 | 6.79 | 67.94 | 135.87 | 271.74 | 523.34 | 719.70 | 846.78 |
| S75S 45B + 0606 | 7.88 | 78.80 | 157.59 | 315.19 | 593.54 | 809.50 | 947.38 |
| S75S 48B + 0606 | 8.54 | 85.39 | 170.78 | 341.55 | 634.74 | 861.57 | 1,005.26 |
| S75S 50B + 0606 | 8.98 | 89.80 | 179.60 | 359.20 | 661.75 | 895.45 | 1,042.75 |
| S75S 56B + 0606 | 10.31 | 103.12 | 206.23 | 412.46 | 740.57 | 993.21 | 1,176.28 |
| S75S 60B + 0606 | 11.20 | 112.05 | 224.09 | 448.18 | 791.32 | 1,055.28 | 1,266.80 |
| S75S 64B + 0606 | 12.10 | 121.01 | 242.03 | 483.67 | 840.68 | 1,116.37 | 1,356.16 |
| S75S 70B + 0606 | 13.45 | 134.52 | 269.05 | 530.18 | 912.13 | 1,227.65 | 1,487.91 |
| S75S 72B + 0606 | 13.90 | 139.04 | 278.08 | 545.45 | 935.29 | 1,264.36 | 1,531.23 |
| S75S 80B + 0608 | 15.72 | 157.17 | 314.34 | 605.38 | 1,024.75 | 1,409.08 | 1,701.45 |
| S75S 90B + 0608 | 17.97 | 179.72 | 359.44 | 676.87 | 1,128.44 | 1,583.37 | 1,911.84 |
| S75S 100B + 0608 | 20.25 | 202.52 | 405.04 | 746.20 | 1,239.53 | 1,753.91 | 2,124.81 |
| S75S 120B + 0608 | 24.83 | 248.33 | 496.67 | 876.93 | 1,484.26 | 2,095.89 | 2,535.81 |

The above numerical values are equivalent to JGMA formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

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かさ歯車
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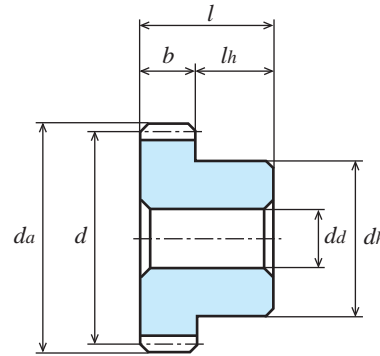
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SPROCKETS

技術資料
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平歯車 SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H8)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| ● S80S 25BF - 0805 | 25 | φ20 | φ21.6 | B1 | 8 | φ5 | φ16 | 10 | 18 | 32.5 |
| ● S80S 25B - 0805H | 25 | φ20 | φ21.6 | B1 | 8 | φ5(H※) | φ16 | 10 | 18 | 32.5 |
| ● S80S 30BF - 0805 | 30 | φ24 | φ25.6 | B1 | 8 | φ5 | φ20 | 10 | 18 | 50.1 |
| ● S80S 30B - 0805H | 30 | φ24 | φ25.6 | B1 | 8 | φ5(H※) | φ20 | 10 | 18 | 50.1 |
| ● S80S 40BF - 0806 | 40 | φ32 | φ33.6 | B1 | 8 | φ6 | φ25 | 10 | 18 | 84.7 |
| ● S80S 40B - 0806H | 40 | φ32 | φ33.6 | B1 | 8 | φ6(H※) | φ25 | 10 | 18 | 84.7 |
| ● S80S 50BF - 0806 | 50 | φ40 | φ41.6 | B1 | 8 | φ6 | φ28 | 10 | 18 | 122.9 |
| ● S80S 50B - 0806H | 50 | φ40 | φ41.6 | B1 | 8 | φ6(H※) | φ28 | 10 | 18 | 122.9 |

●の商品は新商品です。
Products with ● marks are new item.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.
※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.
追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80S 25BF - 0805 | 5.52 | 55.18 | 110.37 | 220.74 | 441.48 | 637.09 | 761.80 |
| S80S 25B - 0805H | 5.85 | 58.46 | 116.91 | 233.83 | 467.65 | 677.83 | 813.51 |
| S80S 30BF - 0805 | 7.07 | 70.68 | 141.37 | 282.73 | 565.46 | 848.19 | 936.16 |
| S80S 30B - 0805H | 7.50 | 74.96 | 149.93 | 299.85 | 599.22 | 841.29 | 1,003.36 |
| S80S 40BF - 0806 | 10.28 | 102.83 | 205.66 | 411.32 | 782.43 | 1,071.87 | 1,256.58 |
| S80S 40B - 0806H | 10.90 | 109.02 | 218.04 | 436.08 | 833.49 | 1,149.74 | 1,355.60 |
| S80S 50BF - 0806 | 13.57 | 135.71 | 271.42 | 542.84 | 985.16 | 1,326.95 | 1,556.59 |
| S80S 50B - 0806H | 14.38 | 143.82 | 287.65 | 575.29 | 1,053.52 | 1,430.70 | 1,686.59 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|--|---|-------|--------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| | 0.26 | 2.62 | 5.24 | 10.47 | 20.94 | 31.41 | 37.70 |
| | 1.16 | 12.85 | 26.48 | 54.61 | 112.59 | 166.11 | 201.30 |
| | 0.38 | 3.77 | 7.54 | 15.50 | 31.00 | 43.98 | 51.83 |
| | 1.70 | 18.82 | 38.80 | 80.02 | 164.78 | 235.47 | 283.64 |
| | 0.69 | 7.02 | 14.03 | 28.06 | 54.45 | 75.40 | 89.53 |
| | 3.11 | 34.39 | 70.89 | 146.17 | 287.99 | 404.36 | 481.47 |
| | 1.12 | 11.20 | 22.41 | 45.24 | 83.77 | 115.61 | 138.22 |
| | 4.96 | 54.88 | 113.15 | 233.26 | 440.39 | 608.71 | 724.70 |

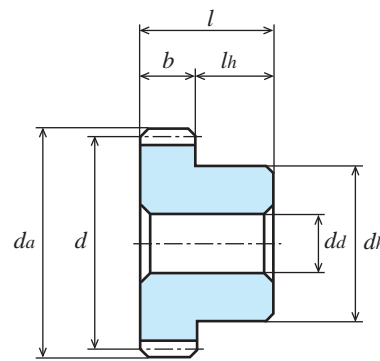
平歯車 SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| ● S80S 60BF - 0806 | 60 | φ48 | φ49.6 | B1 | 8 | φ 6(H8) | φ34 | 10 | 18 | 180.5 |
| ● S80S 60B - 0806H | 60 | φ48 | φ49.6 | B1 | 8 | φ 6(H※) | φ34 | 10 | 18 | 180.5 |
| ● S80S 70BF - 0808 | 70 | φ56 | φ57.6 | B1 | 8 | φ 8 | φ40 | 10 | 18 | 245.7 |
| ● S80S 70B - 0808H | 70 | φ56 | φ57.6 | B1 | 8 | φ 8(H※) | φ40 | 10 | 18 | 245.7 |
| ● S80S 80BF - 0808 | 80 | φ64 | φ65.6 | B1 | 8 | φ 8 | φ45 | 10 | 18 | 319.2 |
| ● S80S 80B - 0808H | 80 | φ64 | φ65.6 | B1 | 8 | φ 8(H※) | φ45 | 10 | 18 | 319.2 |
| ● S80S 90BF - 0808 | 90 | φ72 | φ73.6 | B1 | 8 | φ 8 | φ50 | 10 | 18 | 402.1 |
| ● S80S 90B - 0808H | 90 | φ72 | φ73.6 | B1 | 8 | φ 8(H※) | φ50 | 10 | 18 | 402.1 |
| ● S80S 100BF - 0810 | 100 | φ80 | φ81.6 | B1 | 8 | φ10 | φ60 | 10 | 18 | 525.8 |
| ● S80S 100B - 0810H | 100 | φ80 | φ81.6 | B1 | 8 | φ10(H※) | φ60 | 10 | 18 | 525.8 |
| ● S80S 120BF - 0810 | 120 | φ96 | φ97.6 | B1 | 8 | φ10 | φ70 | 10 | 18 | 744.7 |
| ● S80S 120B - 0810H | 120 | φ96 | φ97.6 | B1 | 8 | φ10(H※) | φ70 | 10 | 18 | 744.7 |

●の商品は新商品です。
Products with ● marks are new item.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.
※

歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.
追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|----------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80S60BF - 0806 | 16.90 | 169.01 | 338.02 | 675.62 | 1,174.49 | 1,559.42 | 1,894.30 |
| S80S60B - 0806H | 17.92 | 179.21 | 358.42 | 716.35 | 1,260.04 | 1,688.73 | 2,055.57 |
| S80S70BF - 0808 | 20.27 | 202.73 | 405.46 | 790.39 | 1,349.57 | 1,834.61 | 2,219.44 |
| S80S70B - 0808H | 21.50 | 214.96 | 429.91 | 840.04 | 1,453.05 | 1,989.95 | 2,412.94 |
| S80S80BF - 0808 | 23.68 | 236.76 | 473.52 | 900.97 | 1,512.09 | 2,102.26 | 2,535.16 |
| S80S80B - 0808H | 25.10 | 250.96 | 501.93 | 959.31 | 1,633.36 | 2,282.96 | 2,760.51 |
| S80S90BF - 0808 | 27.05 | 270.48 | 540.96 | 1,005.69 | 1,663.72 | 2,358.61 | 2,854.02 |
| S80S90B - 0808H | 28.68 | 286.79 | 573.59 | 1,072.86 | 1,801.68 | 2,564.52 | 3,154.83 |
| S80S100BF - 0810 | 30.47 | 304.72 | 609.44 | 1,106.63 | 1,850.53 | 2,609.92 | 3,168.16 |
| S80S100B - 0810H | 32.30 | 323.03 | 646.07 | 1,183.16 | 2,005.39 | 2,842.69 | 3,553.37 |
| S80S120BF - 0810 | 37.33 | 373.31 | 746.20 | 1,296.79 | 2,210.75 | 3,123.87 | 3,771.32 |
| S80S120B - 0810H | 39.58 | 395.81 | 791.06 | 1,391.49 | 2,400.42 | 3,483.25 | 4,354.06 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|----------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80S60BF - 0806 | 1.63 | 16.44 | 32.88 | 66.60 | 118.12 | 162.10 | 201.05 |
| S80S60B - 0806H | 7.27 | 80.41 | 165.79 | 341.55 | 619.33 | 844.91 | 1,038.64 |
| S80S70BF - 0808 | 2.25 | 22.72 | 45.66 | 90.06 | 158.33 | 222.42 | 274.88 |
| S80S70B - 0808H | 10.04 | 111.06 | 228.98 | 461.22 | 822.39 | 1,146.49 | 1,403.86 |
| S80S80BF - 0808 | 2.98 | 30.05 | 60.53 | 116.86 | 203.57 | 291.53 | 362.84 |
| S80S80B - 0808H | 13.28 | 146.92 | 302.91 | 596.81 | 1,047.41 | 1,490.29 | 1,819.73 |
| S80S90BF - 0808 | 3.83 | 38.54 | 77.70 | 147.02 | 252.99 | 371.95 | 464.94 |
| S80S90B - 0808H | 17.00 | 188.04 | 387.67 | 747.52 | 1,294.06 | 1,874.86 | 2,329.10 |
| S80S100BF - 0810 | 4.78 | 48.17 | 97.18 | 180.11 | 314.15 | 463.68 | 581.17 |
| S80S100B - 0810H | 21.20 | 234.49 | 483.43 | 912.62 | 1,594.60 | 2,300.94 | 2,904.37 |
| S80S120BF - 0810 | 7.02 | 70.79 | 143.04 | 254.25 | 454.88 | 682.33 | 851.34 |
| S80S120B - 0810H | 31.06 | 343.56 | 707.81 | 1,283.48 | 2,282.36 | 3,371.30 | 4,255.45 |

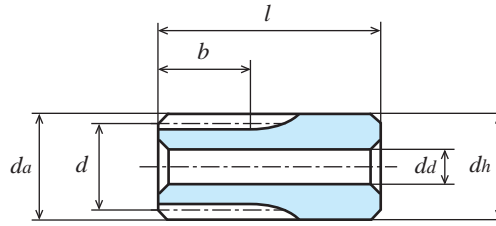
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平歯車

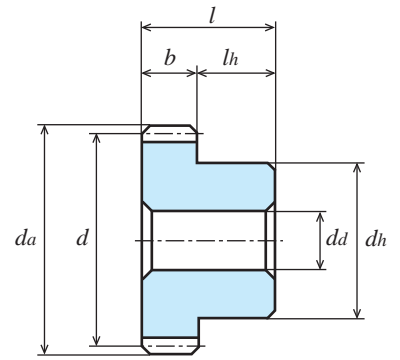
SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
 System of accuracy : JIS B 1702-1(ISO) class 9-10



K2形
TYPE K2



B1形
TYPE B1

ポリアセタール (白色)
 Material : Poly Acetal (White)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter d_a | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|--------------------------------|-----------|-------------------------|------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| S80D 14K - 0704 | 14 | φ11.2 | φ12.8 | K2 | 7 | φ4 | φ12.8 | 13 | 20 | 3.0 |
| S80D 15K - 0704 | 15 | φ12 | φ13.6 | K2 | 7 | φ4 | φ13.6 | 13 | 20 | 3.4 |
| S80D 16B - 0504 | 16 | φ12.8 | φ14.4 | B1 | 5 | φ4 | φ10 | 9 | 14 | 1.7 |
| S80D 18B - 0504 | 18 | φ14.4 | φ16 | B1 | 5 | φ4 | φ10 | 9 | 14 | 1.9 |
| S80D 20B - 0504 | 20 | φ16 | φ17.6 | B1 | 5 | φ4 | φ10 | 9 | 14 | 2.2 |
| S80D 22B - 0505 | 22 | φ17.6 | φ19.2 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | 2.9 |
| S80D 24B - 0505 | 24 | φ19.2 | φ20.8 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | 3.2 |
| S80D 25B - 0505 | 25 | φ20 | φ21.6 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | 3.4 |
| S80D 28B - 0505 | 28 | φ22.4 | φ24 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | 4.0 |
| S80D 30B - 0505 | 30 | φ24 | φ25.6 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | 4.4 |
| S80D 32B - 0505 | 32 | φ25.6 | φ27.2 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | 4.8 |
| S80D 36B - 0506 | 36 | φ28.8 | φ30.4 | B1 | 5 | φ6 | φ14 | 9 | 14 | 6.0 |
| S80D 40B - 0506 | 40 | φ32 | φ33.6 | B1 | 5 | φ6 | φ14 | 9 | 14 | 7.1 |
| S80D 45B - 0506 | 45 | φ36 | φ37.6 | B1 | 5 | φ6 | φ14 | 9 | 14 | 8.6 |

波形スプリングピン付き、歯数 14 ~ 45 呼び径は φ1 です。(ステンレス)
 Gear with Corrugated spring (SUS) as dimension of φ1.0

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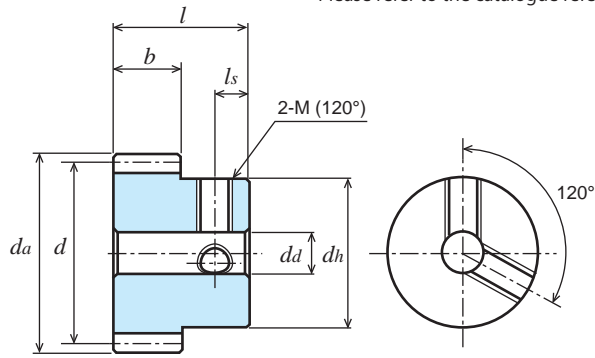
平歯車 SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

ポリアセタール (白色)
Material : Poly Acetal (White)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|---------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S80D 14K * 0703 | 14 | φ11.2 | φ12.8 | K2 | 7 | φ3 | φ12.8 | 13 | 20 | 2-M3 | 3 | 3.1 |
| S80D 15K * 0703 | 15 | φ12 | φ13.6 | K2 | 7 | φ3 | φ13.6 | 13 | 20 | 2-M3 | 3 | 3.5 |
| S80D 16B * 0503 | 16 | φ12.8 | φ14.4 | B1 | 5 | φ3 | φ10 | 7 | 12 | 2-M3 | 4 | 1.5 |
| S80D 18B * 0503 | 18 | φ14.4 | φ16 | B1 | 5 | φ3 | φ12 | 7 | 12 | 2-M3 | 4 | 2.1 |
| S80D 20B * 0503 | 20 | φ16 | φ17.6 | B1 | 5 | φ3 | φ12 | 7 | 12 | 2-M3 | 4 | 2.4 |
| S80D 22B * 0503 | 22 | φ17.6 | φ19.2 | B1 | 5 | φ3 | φ15 | 7 | 12 | 2-M3 | 4 | 3.3 |
| S80D 24B * 0503 | 24 | φ19.2 | φ20.8 | B1 | 5 | φ3 | φ16 | 7 | 12 | 2-M3 | 4 | 3.9 |
| S80D 25B * 0503 | 25 | φ20 | φ21.6 | B1 | 5 | φ3 | φ16 | 7 | 12 | 2-M3 | 4 | 4.0 |
| S80D 28B * 0503 | 28 | φ22.4 | φ24 | B1 | 5 | φ3 | φ20 | 7 | 12 | 2-M3 | 4 | 5.7 |
| S80D 30B * 0503 | 30 | φ24 | φ25.6 | B1 | 5 | φ3 | φ20 | 7 | 12 | 2-M3 | 4 | 6.1 |
| S80D 32B * 0503 | 32 | φ25.6 | φ27.2 | B1 | 5 | φ3 | φ20 | 7 | 12 | 2-M3 | 4 | 6.6 |
| S80D 36B * 0504 | 36 | φ28.8 | φ30.4 | B1 | 5 | φ4 | φ22 | 7 | 12 | 2-M4 | 4 | 8.1 |
| S80D 40B * 0504 | 40 | φ32 | φ33.6 | B1 | 5 | φ4 | φ22 | 7 | 12 | 2-M4 | 4 | 9.2 |
| S80D 45B * 0504 | 45 | φ36 | φ37.6 | B1 | 5 | φ4 | φ22 | 7 | 12 | 2-M4 | 4 | 10.7 |

【*】(アスタ)にはセットスクリーが2個付いております。
[*] : Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80D 14K * 0703 | 0.50 | 5.02 | 10.03 | 20.05 | 40.04 | 59.98 | 74.90 |
| S80D 15K * 0703 | 0.54 | 5.37 | 10.75 | 21.48 | 42.89 | 64.24 | 80.22 |
| S80D 16B * 0503 | 0.41 | 4.10 | 8.19 | 16.36 | 32.67 | 48.93 | 61.10 |
| S80D 18B * 0503 | 0.46 | 4.61 | 9.21 | 18.40 | 36.74 | 55.02 | 68.68 |
| S80D 20B * 0503 | 0.51 | 5.12 | 10.23 | 20.44 | 40.81 | 61.10 | 76.26 |
| S80D 22B * 0503 | 0.56 | 5.63 | 11.25 | 22.48 | 44.87 | 67.17 | 83.83 |
| S80D 24B * 0503 | 0.61 | 6.14 | 12.28 | 24.52 | 48.93 | 73.23 | 91.38 |
| S80D 25B * 0503 | 0.64 | 6.40 | 12.79 | 25.54 | 50.96 | 76.26 | 95.15 |
| S80D 28B * 0503 | 0.72 | 7.16 | 14.32 | 28.60 | 57.05 | 85.34 | 106.46 |
| S80D 30B * 0503 | 0.77 | 7.68 | 15.34 | 30.64 | 61.10 | 91.38 | 113.98 |
| S80D 32B * 0503 | 0.82 | 8.19 | 16.36 | 32.67 | 65.14 | 97.41 | 121.49 |
| S80D 36B * 0504 | 0.92 | 9.21 | 18.40 | 36.74 | 73.23 | 109.47 | 136.47 |
| S80D 40B * 0504 | 1.02 | 10.23 | 20.44 | 40.81 | 81.30 | 121.49 | 151.40 |
| S80D 45B * 0504 | 1.15 | 11.51 | 22.99 | 45.89 | 91.38 | 136.47 | 169.55 |

The above numerical values are Lewis formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

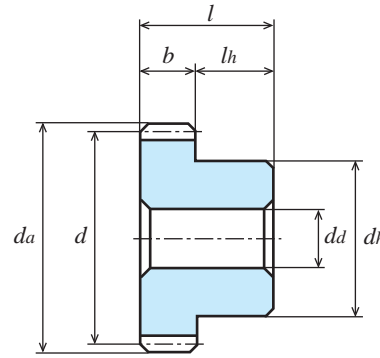
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平歯車

SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
 System of accuracy : JIS B 1702-1(ISO) class 9-10



B1形
TYPE B1

ポリアセタール (白色)
 Material : Poly Acetal (White)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter d_d | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|--------------------------------|-----------|-------------------------|------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| S80D 48B - 0506 | 48 | φ38.4 | φ40 | B1 | 5 | φ6 | φ14 | 9 | 14 | 9.6 |
| S80D 50B - 0506 | 50 | φ40 | φ41.6 | B1 | 5 | φ6 | φ14 | 9 | 14 | 10.3 |
| S80D 56B - 0506 | 56 | φ44.8 | φ46.4 | B1 | 5 | φ6 | φ14 | 9 | 14 | 12.6 |
| S80D 60B - 0506 | 60 | φ48 | φ49.6 | B1 | 5 | φ6 | φ14 | 9 | 14 | 14.2 |
| S80D 64B - 0506 | 64 | φ51.2 | φ52.8 | B1 | 5 | φ6 | φ14 | 9 | 14 | 15.9 |
| S80D 70B - 0508 | 70 | φ56 | φ57.6 | B1 | 5 | φ8 | φ16 | 9 | 14 | 19.0 |
| S80D 72B - 0508 | 72 | φ57.6 | φ59.2 | B1 | 5 | φ8 | φ16 | 9 | 14 | 20.1 |
| S80D 80B - 0508 | 80 | φ64 | φ65.6 | B1 | 5 | φ8 | φ16 | 9 | 14 | 24.2 |
| S80D 90B - 0508 | 90 | φ72 | φ73.6 | B1 | 5 | φ8 | φ20 | 9 | 14 | 31.7 |
| S80D 100B - 0508 | 100 | φ80 | φ81.6 | B1 | 5 | φ8 | φ24 | 9 | 14 | 40.2 |
| S80D 120B - 0508 | 120 | φ96 | φ97.6 | B1 | 5 | φ8 | φ30 | 9 | 14 | 59.0 |

波形スプリングピン付き、歯数 48 ~ 64 呼び径は φ1 です。(ステンレス) No. of teeth from 48B to 64B gears with Corrugated spring (SUS) as dimension of φ1.0.
 歯数 70 ~ 100 呼び径は φ1.4 です。(ステンレス) No. of teeth from 70B to 100B gears with Corrugated spring (SUS) as dimension of φ1.4.
 歯数 108 ~ 120 にはついておりません。 No. of teeth from 108B to 120B gears without Corrugated spring (SUS).

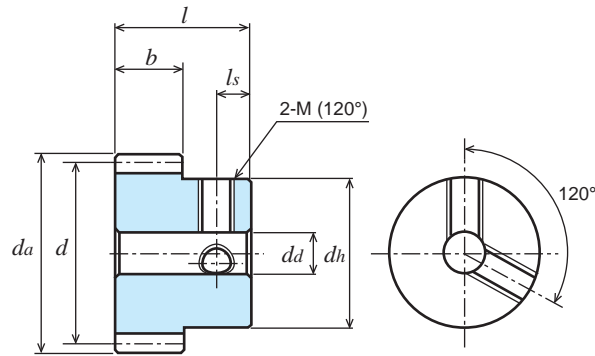
平歯車 SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

ポリアセタール (白色)
Material : Poly Acetal (White)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | ねじ Set Screw | | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|----------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------|-----------|-----------------------------|
| | | | | | | | | | | 2-M(120°) | <i>ls</i> | |
| S80D 48B * 0504 | 48 | φ38.4 | φ40 | B1 | 5 | φ4 | φ22 | 7 | 12 | 2-M4 | 4 | 11.7 |
| S80D 50B * 0504 | 50 | φ40 | φ41.6 | B1 | 5 | φ4 | φ22 | 7 | 12 | 2-M4 | 4 | 12.4 |
| S80D 56B * 0504 | 56 | φ44.8 | φ46.4 | B1 | 5 | φ4 | φ22 | 7 | 12 | 2-M4 | 4 | 14.6 |
| S80D 60B * 0504 | 60 | φ48 | φ49.6 | B1 | 5 | φ4 | φ22 | 7 | 12 | 2-M4 | 4 | 16.3 |
| S80D 64B * 0504 | 64 | φ51.2 | φ52.8 | B1 | 5 | φ4 | φ22 | 7 | 12 | 2-M4 | 4 | 18.0 |
| S80D 70B * 0505 | 70 | φ56 | φ57.6 | B1 | 5 | φ5 | φ24 | 7 | 12 | 2-M4 | 4 | 21.5 |
| S80D 72B * 0505 | 72 | φ57.6 | φ59.2 | B1 | 5 | φ5 | φ24 | 7 | 12 | 2-M4 | 4 | 22.5 |
| S80D 80B * 0505 | 80 | φ64 | φ65.6 | B1 | 5 | φ5 | φ24 | 7 | 12 | 2-M4 | 4 | 26.8 |
| S80D 90B * 0505 | 90 | φ72 | φ73.6 | B1 | 5 | φ5 | φ24 | 7 | 12 | 2-M4 | 4 | 32.8 |
| S80D 100B * 0505 | 100 | φ80 | φ81.6 | B1 | 5 | φ5 | φ24 | 7 | 12 | 2-M4 | 4 | 39.5 |
| S80D 120B * 0505 | 120 | φ96 | φ97.6 | B1 | 5 | φ5 | φ24 | 7 | 12 | 2-M4 | 4 | 55.1 |

【*】(アスタ)にはセットスクリーが2個付いております。
[*]: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80D 48B * 0504 | 1.23 | 12.28 | 24.52 | 48.93 | 97.41 | 145.44 | 180.36 |
| S80D 50B * 0504 | 1.28 | 12.79 | 25.54 | 50.96 | 101.44 | 151.40 | 187.53 |
| S80D 56B * 0504 | 1.43 | 14.32 | 28.60 | 57.05 | 113.48 | 168.83 | 208.87 |
| S80D 60B * 0504 | 1.54 | 15.34 | 30.64 | 61.10 | 121.49 | 180.36 | 222.96 |
| S80D 64B * 0504 | 1.64 | 16.36 | 32.67 | 65.14 | 129.49 | 191.81 | 236.94 |
| S80D 70B * 0505 | 1.79 | 17.89 | 35.73 | 71.21 | 141.46 | 208.87 | 257.71 |
| S80D 72B * 0505 | 1.84 | 18.40 | 36.74 | 73.23 | 145.44 | 214.52 | 264.58 |
| S80D 80B * 0505 | 2.05 | 20.44 | 40.81 | 81.30 | 161.10 | 236.94 | 291.72 |
| S80D 90B * 0505 | 2.30 | 22.99 | 45.89 | 91.38 | 180.36 | 264.58 | 323.84 |
| S80D 100B * 0505 | 2.56 | 25.54 | 50.96 | 101.44 | 199.41 | 291.72 | 355.00 |
| S80D 120B * 0505 | 3.07 | 30.64 | 61.10 | 121.49 | 236.94 | 342.65 | 414.26 |

The above numerical values are Lewis formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

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WORMS AND WORM GEARS

かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

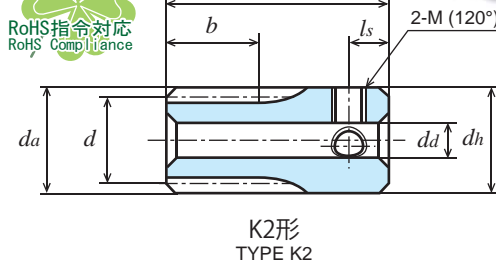
技術データ
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ステンレス平歯車

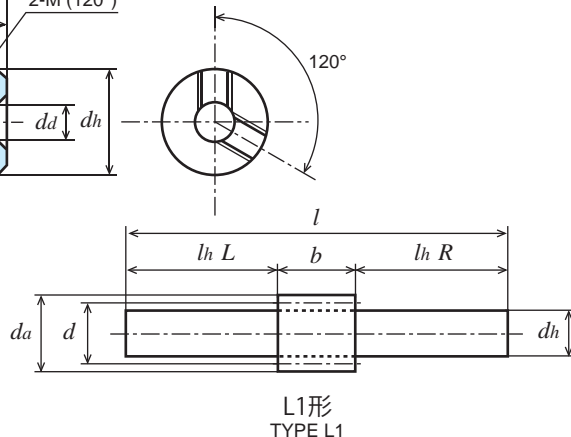
SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9 級
 System of accuracy : JIS B 1702-1(ISO) class 9



New **ねじを2箇所 (120°配) にしました。**
 New item with two threaded holes (120°)



SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S80SU 10K - 1010 | 10 | φ 8 | φ 9.6 | K1 | 10 | - | φ10 | 50 | 60 | - | - | 35.1 |
| S80SU 12K - 1012 | 12 | φ 9.6 | φ 11.2 | K1 | 10 | - | φ12 | 50 | 60 | - | - | 50.6 |
| S80SU 14K * 0704 | 14 | φ 11.2 | φ 12.8 | K2 | 7 | φ4 | φ12.8 | 13 | 20 | 2-M3 | 3 | 16.3 |
| S80SU 14L - 0706 | 14 | φ 11.2 | φ 12.8 | L1 | 7 | - | φ 6 (h9) | L28 R60 | 95 | - | - | 25.2 |
| S80SU 15K * 0704 | 15 | φ 12 | φ 13.6 | K2 | 7 | φ4 | φ13.6 | 13 | 20 | 2-M3 | 3 | 18.8 |
| S80SU 15L - 0706 | 15 | φ 12 | φ 13.6 | L1 | 7 | - | φ 6 (h9) | L28 R60 | 95 | - | - | 26.0 |
| S80SU 16L - 0706 | 16 | φ 12.8 | φ 14.4 | L1 | 7 | - | φ 6 (h9) | L28 R60 | 95 | - | - | 26.9 |
| S80SU 16B * 0504 | 16 | φ 12.8 | φ 14.4 | B1 | 5 | φ4 | φ10 | 7 | 12 | 2-M3 | 3 | 8.0 |
| S80SU 16B * 0704 | 16 | φ 12.8 | φ 14.4 | B1 | 7 | φ4 | φ10 | 7 | 14 | 2-M3 | 3 | 9.8 |
| S80SU 18L - 0708 | 18 | φ 14.4 | φ 16 | L1 | 7 | - | φ 8 (h9) | L28 R60 | 95 | - | - | 44.1 |
| S80SU 18B * 0504 | 18 | φ 14.4 | φ 16 | B1 | 5 | φ4 | φ10 | 7 | 12 | 2-M3 | 3 | 9.3 |
| S80SU 18B * 0704 | 18 | φ 14.4 | φ 16 | B1 | 7 | φ4 | φ10 | 7 | 14 | 2-M3 | 3 | 11.7 |
| S80SU 20L - 0710 | 20 | φ 16 | φ 17.6 | L1 | 7 | - | φ10 (h9) | L28 R60 | 95 | - | - | 66.0 |
| S80SU 20B * 0504 | 20 | φ 16 | φ 17.6 | B1 | 5 | φ4 | φ10 | 7 | 12 | 2-M3 | 3 | 10.9 |
| S80SU 20B * 0704 | 20 | φ 16 | φ 17.6 | B1 | 7 | φ4 | φ10 | 7 | 14 | 2-M3 | 3 | 13.9 |

SUS304 の商品にはセットスクリューは付いておりません。[*]: Gear with two threaded holes / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80SU 10K - 1010 | 0.78 | 7.76 | 15.52 | 31.03 | 62.07 | 93.10 | 116.37 |
| S80SU 12K - 1012 | 1.09 | 10.87 | 21.73 | 43.46 | 86.93 | 130.39 | 162.99 |
| S80SU 14K * 0704 | 0.99 | 9.91 | 19.83 | 39.66 | 79.32 | 118.98 | 148.72 |
| S80SU 14L - 0706 | 0.99 | 9.91 | 19.83 | 39.66 | 79.32 | 118.98 | 148.72 |
| S80SU 15K * 0704 | 1.11 | 11.11 | 22.22 | 44.45 | 88.89 | 133.34 | 166.67 |
| S80SU 15L - 0706 | 1.11 | 11.11 | 22.22 | 44.45 | 88.89 | 133.34 | 166.67 |
| S80SU 16L - 0706 | 1.23 | 12.33 | 24.66 | 49.32 | 98.65 | 147.97 | 184.82 |
| S80SU 16B * 0504 | 0.88 | 8.81 | 17.62 | 35.23 | 70.46 | 105.70 | 132.01 |
| S80SU 16B * 0704 | 1.23 | 12.33 | 24.66 | 49.32 | 98.65 | 147.97 | 184.82 |
| S80SU 18L - 0708 | 1.48 | 14.82 | 29.65 | 59.29 | 118.59 | 177.88 | 218.07 |
| S80SU 18B * 0504 | 1.06 | 10.59 | 21.18 | 42.35 | 84.70 | 127.06 | 155.76 |
| S80SU 18B * 0704 | 1.48 | 14.82 | 29.65 | 59.29 | 118.59 | 177.88 | 218.07 |
| S80SU 20L - 0710 | 1.74 | 17.40 | 34.81 | 69.62 | 139.24 | 208.69 | 251.40 |
| S80SU 20B * 0504 | 1.24 | 12.43 | 24.86 | 49.73 | 99.46 | 149.07 | 179.57 |
| S80SU 20B * 0704 | 1.74 | 17.40 | 34.81 | 69.62 | 139.24 | 208.69 | 251.40 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

ステンレス平歯車

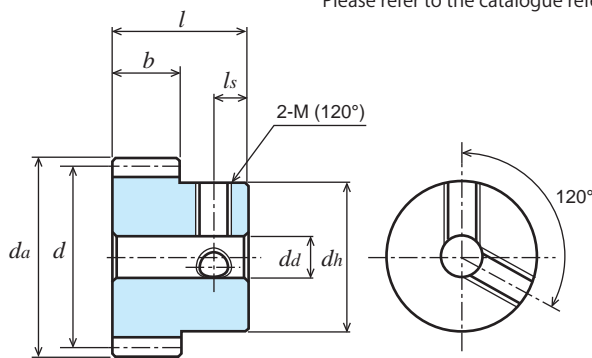
SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9級
 System of accuracy : JIS B 1702-1(ISO) class 9



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S80SU 22B * 0504 | 22 | φ17.6 | φ19.2 | B1 | 5 | φ4 | φ10 | 7 | 12 | 2-M3 | 3 | 12.5 |
| S80SU 22B * 0704 | 22 | φ17.6 | φ19.2 | B1 | 7 | φ4 | φ10 | 7 | 14 | 2-M3 | 3 | 16.2 |
| S80SU 24B * 0505 | 24 | φ19.2 | φ20.8 | B1 | 5 | φ5 | φ15 | 7 | 12 | 2-M4 | 4 | 18.6 |
| S80SU 24B * 0705 | 24 | φ19.2 | φ20.8 | B1 | 7 | φ5 | φ15 | 7 | 14 | 2-M4 | 4 | 22.9 |
| S80SU 25B * 0505 | 25 | φ20 | φ21.6 | B1 | 5 | φ5 | φ15 | 7 | 12 | 2-M4 | 4 | 19.6 |
| S80SU 25B * 0705 | 25 | φ20 | φ21.6 | B1 | 7 | φ5 | φ15 | 7 | 14 | 2-M4 | 4 | 24.2 |
| S80SU 28B * 0505 | 28 | φ22.4 | φ24 | B1 | 5 | φ5 | φ15 | 7 | 12 | 2-M4 | 4 | 22.7 |
| S80SU 28B * 0705 | 28 | φ22.4 | φ24 | B1 | 7 | φ5 | φ15 | 7 | 14 | 2-M4 | 4 | 28.7 |
| S80SU 30B * 0505 | 30 | φ24 | φ25.6 | B1 | 5 | φ5 | φ15 | 7 | 12 | 2-M4 | 4 | 25.0 |
| S80SU 30B * 0705 | 30 | φ24 | φ25.6 | B1 | 7 | φ5 | φ15 | 7 | 14 | 2-M4 | 4 | 31.9 |
| S80SU 32B * 0505 | 32 | φ25.6 | φ27.2 | B1 | 5 | φ5 | φ15 | 9 | 14 | 2-M4 | 4 | 30.0 |
| S80SU 36B * 0506 | 36 | φ28.8 | φ30.4 | B1 | 5 | φ6 | φ18 | 9 | 14 | 2-M4 | 4 | 39.9 |
| S80SU 40B * 0506 | 40 | φ32 | φ33.6 | B1 | 5 | φ6 | φ18 | 9 | 14 | 2-M4 | 4 | 45.9 |
| S80SU 45B * 0506 | 45 | φ36 | φ37.6 | B1 | 5 | φ6 | φ18 | 9 | 14 | 2-M4 | 4 | 54.4 |
| S80SU 48B * 0506 | 48 | φ38.4 | φ40 | B1 | 5 | φ6 | φ18 | 9 | 14 | 2-M4 | 4 | 59.9 |
| S80SU 50B * 0506 | 50 | φ40 | φ41.6 | B1 | 5 | φ6 | φ18 | 9 | 14 | 2-M4 | 4 | 63.9 |

SUS304の商品にはセットスクリューは付いておりません。[*]: Gear with two threaded holes / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80SU 22B * 0504 | 1.43 | 14.30 | 28.61 | 57.22 | 114.44 | 168.97 | 202.93 |
| S80SU 22B * 0704 | 2.00 | 20.03 | 40.05 | 80.10 | 160.21 | 236.56 | 284.10 |
| S80SU 24B * 0505 | 1.62 | 16.21 | 32.41 | 64.83 | 129.66 | 188.65 | 225.90 |
| S80SU 24B * 0705 | 2.27 | 22.69 | 45.38 | 90.76 | 181.52 | 264.10 | 316.25 |
| S80SU 25B * 0505 | 1.72 | 17.17 | 34.34 | 68.69 | 137.37 | 198.42 | 237.26 |
| S80SU 25B * 0705 | 2.40 | 24.04 | 48.08 | 96.16 | 192.32 | 277.79 | 332.16 |
| S80SU 28B * 0505 | 2.10 | 20.10 | 40.21 | 80.41 | 160.83 | 227.34 | 270.71 |
| S80SU 28B * 0705 | 2.81 | 28.14 | 56.29 | 112.58 | 225.16 | 318.28 | 379.00 |
| S80SU 30B * 0505 | 2.21 | 22.07 | 44.15 | 88.30 | 176.45 | 246.13 | 292.31 |
| S80SU 30B * 0705 | 3.09 | 30.90 | 61.81 | 123.61 | 247.03 | 344.58 | 409.23 |
| S80SU 32B * 0505 | 2.41 | 24.07 | 48.14 | 96.28 | 190.50 | 264.69 | 313.54 |
| S80SU 36B * 0506 | 2.81 | 28.11 | 56.23 | 112.45 | 218.15 | 300.82 | 354.57 |
| S80SU 40B * 0506 | 3.22 | 32.21 | 64.41 | 128.83 | 245.14 | 335.60 | 393.73 |
| S80SU 45B * 0506 | 3.74 | 37.36 | 74.71 | 149.42 | 277.69 | 376.92 | 439.78 |
| S80SU 48B * 0506 | 4.05 | 40.48 | 80.96 | 161.92 | 296.75 | 400.82 | 466.79 |
| S80SU 50B * 0506 | 4.26 | 42.57 | 85.14 | 170.29 | 309.24 | 416.36 | 488.56 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

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ステンレス平歯車

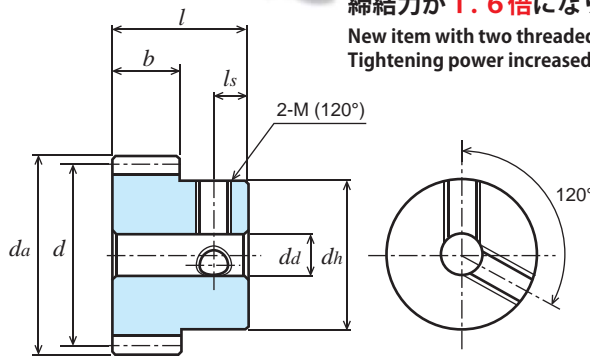
SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9 級
 System of accuracy : JIS B 1702-1(ISO) class 9



New **ねじを2箇所 (120°配) にしました。**
締結力が 1.6 倍になりました。
 New item with two threaded holes (120°)
 Tightening power increased by 1.6 times.



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S80SU 54B * 0506 | 54 | φ43.2 | φ44.8 | B1 | 5 | φ 6 | φ18 | 9 | 14 | 2-M4 | 4 | 72.1 |
| S80SU 56B * 0506 | 56 | φ44.8 | φ46.4 | B1 | 5 | φ 6 | φ18 | 9 | 14 | 2-M4 | 4 | 76.5 |
| S80SU 60B * 0506 | 60 | φ48 | φ49.6 | B1 | 5 | φ 6 | φ18 | 9 | 14 | 2-M4 | 4 | 85.8 |
| S80SU 64B * 0506 | 64 | φ51.2 | φ52.8 | B1 | 5 | φ 6 | φ18 | 9 | 14 | 2-M4 | 4 | 95.7 |
| S80SU 70B * 0508 | 70 | φ56 | φ57.6 | B1 | 5 | φ 8 | φ28 | 9 | 14 | 2-M4 | 4 | 134.4 |
| S80SU 72B * 0508 | 72 | φ57.6 | φ59.2 | B1 | 5 | φ 8 | φ28 | 9 | 14 | 2-M4 | 4 | 140.0 |
| S80SU 80B * 0508 | 80 | φ64 | φ65.6 | B1 | 5 | φ 8 | φ28 | 9 | 14 | 2-M4 | 4 | 164.3 |
| S80SU 80B * 0510 | 80 | φ64 | φ65.6 | B1 | 5 | φ10 | φ28 | 9 | 14 | 2-M4 | 4 | 161.3 |
| S80SU 90B * 0508 | 90 | φ72 | φ73.6 | B1 | 5 | φ 8 | φ28 | 9 | 14 | 2-M4 | 4 | 198.1 |
| S80SU 100B * 0508 | 100 | φ80 | φ81.6 | B1 | 5 | φ 8 | φ28 | 9 | 14 | 2-M4 | 4 | 236.0 |
| S80SU 100B * 0510 | 100 | φ80 | φ81.6 | B1 | 5 | φ10 | φ28 | 9 | 14 | 2-M4 | 4 | 233.0 |
| S80SU 120B * 0508 | 120 | φ96 | φ97.6 | B1 | 5 | φ 8 | φ30 | 9 | 14 | 2-M4 | 4 | 330.0 |
| S80SU 120B * 0510 | 120 | φ96 | φ97.6 | B1 | 5 | φ10 | φ30 | 9 | 14 | 2-M4 | 4 | 327.1 |

SUS304 の商品にはセットスクリューは付いておりません。
 [*] : Gear with two threaded holes / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|--------|--------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80SU 54B * 0506 | 4.68 | 46.77 | 93.55 | 187.10 | 333.68 | 446.48 | 531.67 |
| S80SU 56B * 0506 | 4.89 | 48.88 | 97.77 | 195.54 | 345.63 | 461.09 | 553.02 |
| S80SU 60B * 0506 | 5.31 | 53.12 | 106.24 | 212.30 | 369.00 | 490.02 | 595.27 |
| S80SU 64B * 0506 | 5.74 | 57.37 | 114.74 | 227.01 | 391.70 | 525.18 | 636.94 |
| S80SU 70B * 0508 | 6.38 | 63.77 | 127.55 | 248.65 | 424.50 | 577.17 | 698.30 |
| S80SU 72B * 0508 | 6.59 | 65.92 | 131.83 | 255.75 | 435.12 | 594.31 | 718.46 |
| S80SU 80B * 0508 | 7.45 | 74.51 | 149.02 | 283.56 | 476.06 | 661.79 | 797.82 |
| S80SU 80B * 0510 | 7.45 | 74.51 | 149.02 | 283.56 | 476.06 | 661.79 | 797.82 |
| S80SU 90B * 0508 | 8.52 | 85.20 | 170.40 | 316.67 | 523.99 | 742.92 | 898.85 |
| S80SU 100B * 0508 | 9.60 | 96.01 | 192.03 | 348.72 | 582.97 | 822.44 | 998.20 |
| S80SU 100B * 0510 | 9.60 | 96.01 | 192.03 | 348.72 | 582.97 | 822.44 | 998.20 |
| S80SU 120B * 0508 | 11.77 | 117.73 | 235.28 | 408.93 | 697.12 | 984.92 | 1,189.46 |
| S80SU 120B * 0510 | 11.77 | 117.73 | 235.28 | 408.93 | 697.12 | 984.92 | 1,189.46 |

The above numerical values are equivalent to JGMA formulas as reference only.
 動力の換算式は P26 をご参照ください。
 Please refer to the conversion formulas of power on page P26.

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ラック
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HELICAL GEARS AND SCREW GEARS

ワーム・ワームホイール
WORMS AND WORM WHEELS

かみ歯
BEVEL GEARS

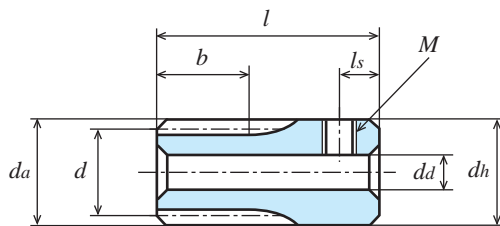
スプロケット
SPROCKETS

技術資料
REFERENCE DATA

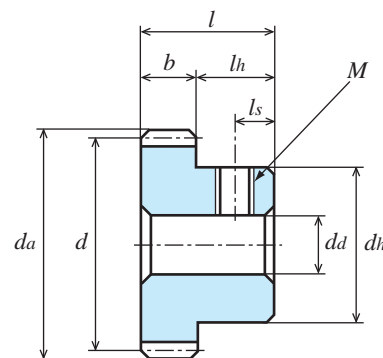
平歯車 SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9 級
System of accuracy : JIS B 1702-1(ISO) class 9



K2形
TYPE K2



B1形
TYPE B1

C3604B 快削黄銅棒 (JIS H 3250) Material : Brass (ISO CuZn39Pb3)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | M | ls | |
| S80B 14K + 0704 | 14 | φ11.2 | φ12.8 | K2 | 7 | φ4 | φ12.8 | 13 | 20 | M3 | 3 | 17.8 |
| S80B 15K + 0704 | 15 | φ12 | φ13.6 | K2 | 7 | φ4 | φ13.6 | 13 | 20 | M3 | 3 | 20.4 |
| S80B 16B + 0504 | 16 | φ12.8 | φ14.4 | B1 | 5 | φ4 | φ10 | 9 | 14 | M3 | 3 | 9.8 |
| S80B 16B + 0704 | 16 | φ12.8 | φ14.4 | B1 | 7 | φ4 | φ10 | 7 | 14 | M3 | 3 | 10.7 |
| S80B 18B + 0504 | 18 | φ14.4 | φ16 | B1 | 5 | φ4 | φ10 | 9 | 14 | M3 | 3 | 11.3 |
| S80B 18B + 0704 | 18 | φ14.4 | φ16 | B1 | 7 | φ4 | φ10 | 7 | 14 | M3 | 3 | 12.7 |
| S80B 20B + 0504 | 20 | φ16 | φ17.6 | B1 | 5 | φ4 | φ10 | 9 | 14 | M3 | 3 | 12.9 |
| S80B 20B + 0704 | 20 | φ16 | φ17.6 | B1 | 7 | φ4 | φ10 | 7 | 14 | M3 | 3 | 15.0 |
| S80B 24B + 0505 | 24 | φ19.2 | φ20.8 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | M3 | 3 | 19.2 |
| S80B 24B + 0705 | 24 | φ19.2 | φ20.8 | B1 | 7 | φ5 | φ12.5 | 7 | 14 | M3 | 3 | 22.0 |
| S80B 25B + 0505 | 25 | φ20 | φ21.6 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | M3 | 3 | 20.2 |
| S80B 25B + 0705 | 25 | φ20 | φ21.6 | B1 | 7 | φ5 | φ12.5 | 7 | 14 | M3 | 3 | 23.5 |
| S80B 28B + 0505 | 28 | φ22.4 | φ24 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | M3 | 3 | 23.6 |
| S80B 28B + 0705 | 28 | φ22.4 | φ24 | B1 | 7 | φ5 | φ12.5 | 7 | 14 | M3 | 3 | 28.2 |
| S80B 30B + 0505 | 30 | φ24 | φ25.6 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | M3 | 3 | 26.1 |
| S80B 30B + 0705 | 30 | φ24 | φ25.6 | B1 | 7 | φ5 | φ12.5 | 7 | 14 | M3 | 3 | 31.7 |
| S80B 32B + 0505 | 32 | φ25.6 | φ27.2 | B1 | 5 | φ5 | φ12.5 | 9 | 14 | M3 | 4 | 28.8 |

【+】にはセットスクリューは付いております。
[+] : Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80B 14K + 0704 | 0.40 | 3.97 | 7.93 | 15.86 | 31.73 | 47.59 | 59.49 |
| S80B 15K + 0704 | 0.44 | 4.44 | 8.89 | 17.78 | 35.56 | 53.33 | 66.67 |
| S80B 16B + 0504 | 0.35 | 3.52 | 7.05 | 14.09 | 28.19 | 42.28 | 52.81 |
| S80B 16B + 0704 | 0.49 | 4.93 | 9.86 | 19.73 | 39.46 | 59.19 | 73.93 |
| S80B 18B + 0504 | 0.42 | 4.24 | 8.47 | 16.94 | 33.88 | 50.82 | 62.30 |
| S80B 18B + 0704 | 0.59 | 5.93 | 11.86 | 23.72 | 47.43 | 71.15 | 87.23 |
| S80B 20B + 0504 | 0.50 | 4.97 | 9.95 | 19.89 | 39.78 | 59.63 | 71.83 |
| S80B 20B + 0704 | 0.70 | 6.96 | 13.92 | 27.85 | 55.70 | 83.48 | 100.56 |
| S80B 24B + 0505 | 0.65 | 6.48 | 12.97 | 25.93 | 51.86 | 75.46 | 90.36 |
| S80B 24B + 0705 | 0.91 | 9.08 | 18.15 | 36.30 | 72.61 | 105.64 | 126.50 |
| S80B 25B + 0505 | 0.69 | 6.87 | 13.74 | 27.47 | 54.95 | 79.37 | 94.90 |
| S80B 25B + 0705 | 0.96 | 9.62 | 19.23 | 38.46 | 76.93 | 111.12 | 132.87 |
| S80B 28B + 0505 | 0.80 | 8.04 | 16.08 | 32.17 | 64.33 | 90.94 | 108.29 |
| S80B 28B + 0705 | 1.13 | 11.26 | 22.52 | 45.03 | 90.06 | 127.31 | 151.60 |
| S80B 30B + 0505 | 0.88 | 8.83 | 17.66 | 35.32 | 70.58 | 98.45 | 116.92 |
| S80B 30B + 0705 | 1.24 | 12.36 | 24.72 | 49.45 | 98.81 | 137.88 | 163.69 |
| S80B 32B + 0505 | 0.96 | 9.63 | 19.26 | 38.51 | 76.20 | 105.88 | 125.42 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

RoHS 対応

2006年11月生産開始日より欧州 RoHS 指令に対応できる商品を提供しています。

We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

平歯車

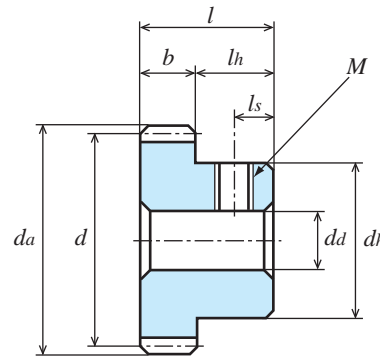
SPUR GEARS

モジュール **0.8** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9 級
 System of accuracy : JIS B 1702-1(ISO) class 9



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
 TYPE B1

C3604B 快削黄銅棒、C3771B 鍛造用黄銅
 Material : Brass (ISO CuZn39Pb3, ISO CuZn38Pb2)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | M | ls | |
| S80B 36B + 0506 | 36 | φ28.8 | φ30.4 | B1 | 5 | φ6 | φ14 | 9 | 14 | M4 | 4 | 35.8 |
| S80B 40B + 0506 | 40 | φ32 | φ33.6 | B1 | 5 | φ6 | φ14 | 9 | 14 | M4 | 4 | 42.3 |
| S80B 45B + 0506 | 45 | φ36 | φ37.6 | B1 | 5 | φ6 | φ14 | 9 | 14 | M4 | 4 | 51.4 |
| S80B 48B + 0506 | 48 | φ38.4 | φ40 | B1 | 5 | φ6 | φ14 | 9 | 14 | M4 | 4 | 57.3 |
| S80B 50B + 0506 | 50 | φ40 | φ41.6 | B1 | 5 | φ6 | φ14 | 9 | 14 | M4 | 4 | 61.5 |
| S80B 56B + 0506 | 56 | φ44.8 | φ46.4 | B1 | 5 | φ6 | φ14 | 9 | 14 | M4 | 4 | 75.1 |
| S80B 60B + 0506 | 60 | φ48 | φ49.6 | B1 | 5 | φ6 | φ14 | 9 | 14 | M4 | 4 | 85.0 |
| S80B 64B + 0506 | 64 | φ51.2 | φ52.8 | B1 | 5 | φ6 | φ16 | 9 | 14 | M4 | 4 | 99.1 |
| S80B 70B + 0508 | 70 | φ56 | φ57.6 | B1 | 5 | φ8 | φ16 | 9 | 14 | M4 | 4 | 113.8 |
| S80B 72B + 0508 | 72 | φ57.6 | φ59.2 | B1 | 5 | φ8 | φ16 | 9 | 14 | M4 | 4 | 119.8 |
| S80B 80B + 0508 | 80 | φ64 | φ65.6 | B1 | 5 | φ8 | φ16 | 9 | 14 | M4 | 4 | 145.8 |
| S80B 90B + 0508 | 90 | φ72 | φ73.6 | B1 | 5 | φ8 | φ20 | 9 | 14 | M4 | 4 | 190.6 |
| S80B 100B + 0508 | 100 | φ80 | φ81.6 | B1 | 5 | φ8 | φ24 | 9 | 14 | M4 | 4 | 241.6 |
| S80B 120B + 0508 | 120 | φ96 | φ97.6 | B1 | 5 | φ8 | φ30 | 9 | 14 | M4 | 4 | 354.8 |

【+】セットスクリューは付いております。【+】: Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S80B 36B + 0506 | 1.12 | 11.25 | 22.49 | 44.98 | 87.26 | 120.33 | 141.83 |
| S80B 40B + 0506 | 1.28 | 12.88 | 25.77 | 51.53 | 98.05 | 134.24 | 157.49 |
| S80B 45B + 0506 | 1.49 | 14.94 | 29.88 | 59.77 | 111.08 | 150.77 | 175.91 |
| S80B 48B + 0506 | 1.61 | 16.19 | 32.38 | 64.77 | 118.70 | 160.33 | 186.72 |
| S80B 50B + 0506 | 1.70 | 17.03 | 34.06 | 68.12 | 123.70 | 166.54 | 195.42 |
| S80B 56B + 0506 | 1.96 | 19.55 | 39.11 | 78.21 | 138.25 | 184.44 | 221.21 |
| S80B 60B + 0506 | 2.12 | 21.25 | 42.49 | 84.92 | 147.60 | 196.01 | 238.11 |
| S80B 64B + 0506 | 2.29 | 22.95 | 45.90 | 90.81 | 156.68 | 210.07 | 254.77 |
| S80B 70B + 0508 | 2.55 | 25.51 | 51.02 | 99.46 | 169.80 | 230.87 | 297.32 |
| S80B 72B + 0508 | 2.64 | 26.37 | 52.73 | 102.30 | 174.05 | 237.72 | 287.38 |
| S80B 80B + 0508 | 2.98 | 29.80 | 59.61 | 113.43 | 190.42 | 264.72 | 319.13 |
| S80B 90B + 0508 | 3.41 | 34.08 | 68.16 | 126.67 | 209.60 | 297.17 | 359.54 |
| S80B 100B + 0508 | 3.84 | 38.40 | 76.81 | 139.49 | 233.19 | 328.98 | 399.28 |
| S80B 120B + 0508 | 4.71 | 47.09 | 94.11 | 163.57 | 278.85 | 393.97 | 475.79 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

RoHS 対応
 2006年11月生産開始分より欧州 RoHS 指令に対応できる商品を提供しています。
 We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

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平歯車 SPUR GEARS

モジュール
MODULE

1

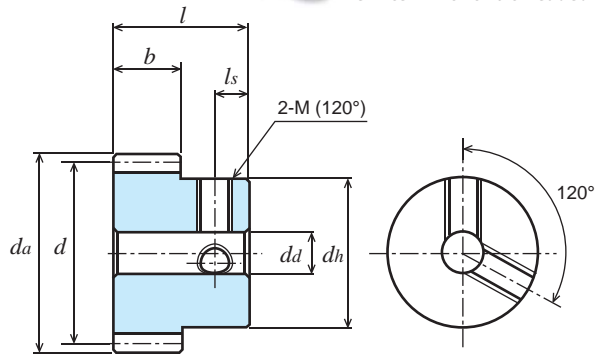
圧力角 20° (並歯)

20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



ねじを2箇所 (120°配) にしました。
New item with two threaded holes (120°)



B1形
TYPE B1

ポリアセタール (白色)
Material : Poly Acetal (White)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|---------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S1D 12A - 1206 | 12 | φ12 | φ14 | A1 | 12 | φ6 | - | - | 12 | | | 1.4 |
| S1D 14A - 1206 | 14 | φ14 | φ16 | A1 | 12 | φ6 | - | - | 12 | | | 2.1 |
| S1D 15A - 1206 | 15 | φ15 | φ17 | A1 | 12 | φ6 | - | - | 12 | | | 2.5 |
| S1D 16A - 1206 | 16 | φ16 | φ18 | A1 | 12 | φ6 | - | - | 12 | | | 2.9 |
| S1D 17B * 0804 | 17 | φ17 | φ19 | B1 | 8 | φ4 | φ14 | 8 | 16 | 2-M4 | 4 | 4.0 |
| S1D 18B * 0804 | 18 | φ18 | φ20 | B1 | 8 | φ4 | φ15 | 8 | 16 | 2-M4 | 4 | 4.5 |
| S1D 20B * 0805 | 20 | φ20 | φ22 | B1 | 8 | φ5 | φ16 | 8 | 16 | 2-M4 | 4 | 5.3 |
| S1D 22B * 0805 | 22 | φ22 | φ24 | B1 | 8 | φ5 | φ18 | 8 | 16 | 2-M4 | 4 | 6.7 |
| S1D 23B * 0805 | 23 | φ23 | φ25 | B1 | 8 | φ5 | φ20 | 8 | 16 | 2-M4 | 4 | 7.7 |
| S1D 24B * 0805 | 24 | φ24 | φ26 | B1 | 8 | φ5 | φ20 | 8 | 16 | 2-M4 | 4 | 8.2 |
| S1D 25B * 0805 | 25 | φ25 | φ27 | B1 | 8 | φ5 | φ22 | 8 | 16 | 2-M4 | 4 | 9.3 |
| S1D 26B * 0805 | 26 | φ26 | φ28 | B1 | 8 | φ5 | φ22 | 8 | 16 | 2-M4 | 4 | 9.8 |
| S1D 28B * 0805 | 28 | φ28 | φ30 | B1 | 8 | φ5 | φ24 | 8 | 16 | 2-M4 | 4 | 11.6 |
| S1D 30B * 0805 | 30 | φ30 | φ32 | B1 | 8 | φ5 | φ24 | 8 | 16 | 2-M4 | 4 | 12.6 |

波形スプリングピン付き、歯数 12 ~ 16 呼び径は φ1 です。(ステンレス) No. of teeth from 12A to 16A gears with Corrugated spring (SUS) as dimension of φ1.0.
【*】(アスタ) にはセットスクリーが 2 個付いております。【*】: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1D 12A - 1206 | 0.88 | 8.82 | 17.64 | 35.25 | 70.40 | 105.44 | 131.66 |
| S1D 14A - 1206 | 1.03 | 10.29 | 20.57 | 41.11 | 82.09 | 122.93 | 153.47 |
| S1D 15A - 1206 | 1.10 | 11.03 | 22.04 | 44.05 | 87.93 | 131.66 | 164.35 |
| S1D 16A - 1206 | 1.18 | 11.76 | 23.51 | 46.98 | 93.77 | 140.39 | 175.23 |
| S1D 17B * 0804 | 0.83 | 8.33 | 16.65 | 33.27 | 66.41 | 99.41 | 124.07 |
| S1D 18B * 0804 | 0.88 | 8.82 | 17.63 | 35.22 | 70.30 | 105.22 | 131.31 |
| S1D 20B * 0805 | 0.98 | 9.80 | 19.59 | 39.13 | 78.07 | 116.82 | 145.76 |
| S1D 22B * 0805 | 1.08 | 10.78 | 21.54 | 43.03 | 85.83 | 128.41 | 160.19 |
| S1D 23B * 0805 | 1.13 | 11.27 | 22.52 | 44.98 | 89.71 | 134.20 | 167.40 |
| S1D 24B * 0805 | 1.18 | 11.76 | 23.50 | 46.93 | 93.59 | 139.98 | 174.60 |
| S1D 25B * 0805 | 1.23 | 12.25 | 24.48 | 48.88 | 97.47 | 145.76 | 181.79 |
| S1D 26B * 0805 | 1.27 | 12.74 | 25.45 | 50.83 | 101.34 | 151.54 | 188.98 |
| S1D 28B * 0805 | 1.37 | 13.72 | 27.41 | 54.73 | 109.09 | 163.08 | 203.33 |
| S1D 30B * 0805 | 1.47 | 14.70 | 29.36 | 58.62 | 116.82 | 174.60 | 217.65 |

The above numerical values are Lewis formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formula of power on page P26.

平歯車 SPUR GEARS

モジュール
MODULE

1

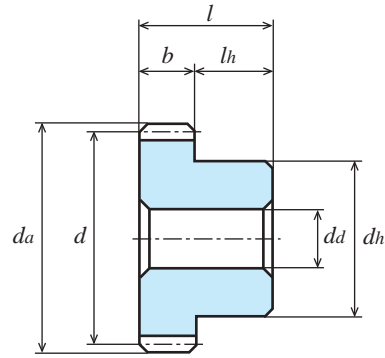
圧力角 20° (並歯)

20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

ポリアセタール (白色)
Material : Poly Acetal (White)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|----------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| S1D 17B - 0806 | 17 | φ17 | φ19 | B1 | 8 | φ6 | φ14 | 8 | 16 | 3.7 |
| S1D 18B - 0808 | 18 | φ18 | φ20 | B1 | 8 | φ8 | φ15 | 8 | 16 | 3.7 |
| S1D 20B - 0808 | 20 | φ20 | φ22 | B1 | 8 | φ8 | φ16 | 8 | 16 | 4.7 |
| S1D 22B - 0808 | 22 | φ22 | φ24 | B1 | 8 | φ8 | φ18 | 8 | 16 | 6.0 |
| S1D 23B - 0808 | 23 | φ23 | φ25 | B1 | 8 | φ8 | φ18 | 8 | 16 | 6.4 |
| S1D 24B - 0808 | 24 | φ24 | φ26 | B1 | 8 | φ8 | φ18 | 8 | 16 | 6.8 |
| S1D 25B - 0808 | 25 | φ25 | φ27 | B1 | 8 | φ8 | φ18 | 8 | 16 | 7.3 |
| S1D 26B - 0808 | 26 | φ26 | φ28 | B1 | 8 | φ8 | φ20 | 8 | 16 | 8.4 |
| S1D 28B - 0808 | 28 | φ28 | φ30 | B1 | 8 | φ8 | φ20 | 8 | 16 | 9.4 |
| S1D 30B - 0808 | 30 | φ30 | φ32 | B1 | 8 | φ8 | φ20 | 8 | 16 | 10.4 |

波形スプリングピン付き、歯数 17 ~ 18 呼び径は φ1 です。(ステンレス)
歯数 20 ~ 80 呼び径は φ1.4 です。(ステンレス)

No. of teeth from 17B to 18B gears with Corrugated spring (SUS) as dimension of φ1.0.
No. of teeth from 20B to 80B gears with Corrugated spring (SUS) as dimension of φ1.4.

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平歯車
SPUR GEARS

内歯車
INTERNAL GEARS

歯研削ラック
GROUND RACKS

ラック
RACKS

（リ）カハ・スクリューギヤ
HELICAL GEARS AND SCREW GEARS

ウォーム・ウォームホイール
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かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

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平歯車 SPUR GEARS

モジュール
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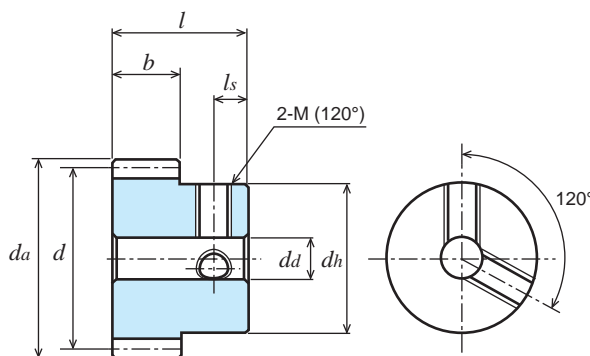
1

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



New **ねじを2箇所 (120°配) にしました。**
New item with two threaded holes (120°)



B1形
TYPE B1

ポリアセタール (白色)
Material : Poly Acetal (White)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|---------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S1D 32B * 0605 | 32 | φ32 | φ34 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 11.5 |
| S1D 34B * 0605 | 34 | φ34 | φ36 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 12.4 |
| S1D 35B * 0605 | 35 | φ35 | φ37 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 12.8 |
| S1D 36B * 0605 | 36 | φ36 | φ38 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 13.3 |
| S1D 38B * 0605 | 38 | φ38 | φ40 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 14.3 |
| S1D 40B * 0605 | 40 | φ40 | φ42 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 15.3 |
| S1D 42B * 0605 | 42 | φ42 | φ44 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 16.4 |
| S1D 44B * 0605 | 44 | φ44 | φ46 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 17.5 |
| S1D 45B * 0605 | 45 | φ45 | φ47 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 18.1 |
| S1D 48B * 0605 | 48 | φ48 | φ50 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 20.0 |
| S1D 50B * 0605 | 50 | φ50 | φ52 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 21.3 |
| S1D 52B * 0605 | 52 | φ52 | φ54 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 22.6 |
| S1D 55B * 0605 | 55 | φ55 | φ57 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 24.8 |

【*】(アスタ)にはセットスクリーが2個付いております。

【*】: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1D 32B * 0605 | 2.10 | 20.97 | 41.90 | 83.65 | 166.65 | 249.01 | 310.33 |
| S1D 34B * 0605 | 2.23 | 22.28 | 44.52 | 88.85 | 176.98 | 264.39 | 328.97 |
| S1D 35B * 0605 | 2.30 | 22.94 | 45.82 | 91.46 | 182.14 | 272.06 | 338.26 |
| S1D 36B * 0605 | 2.36 | 23.59 | 47.13 | 94.06 | 187.30 | 279.73 | 347.53 |
| S1D 38B * 0605 | 2.49 | 24.90 | 49.74 | 99.26 | 197.61 | 295.06 | 366.00 |
| S1D 40B * 0605 | 2.62 | 26.21 | 52.36 | 104.46 | 207.91 | 310.33 | 384.38 |
| S1D 42B * 0605 | 2.75 | 27.52 | 54.97 | 109.66 | 218.20 | 325.25 | 402.67 |
| S1D 44B * 0605 | 2.89 | 28.83 | 57.58 | 114.85 | 228.48 | 340.12 | 420.87 |
| S1D 48B * 0605 | 3.15 | 31.44 | 62.80 | 125.23 | 249.01 | 369.68 | 457.01 |
| S1D 50B * 0605 | 3.28 | 32.75 | 65.40 | 130.42 | 259.26 | 384.38 | 474.95 |
| S1D 52B * 0605 | 3.41 | 34.06 | 68.01 | 135.60 | 269.50 | 399.02 | 492.80 |
| S1D 55B * 0605 | 3.61 | 36.02 | 71.92 | 143.37 | 284.84 | 420.87 | 519.41 |

The above numerical values are Lewis formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formula of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

1

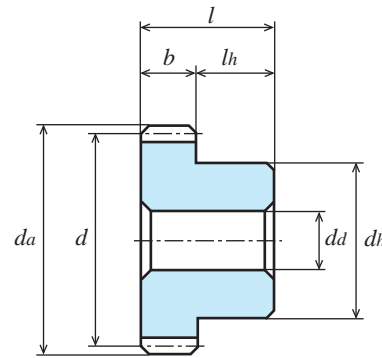
圧力角 20° (並歯)

20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy: JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

ポリアセタール (白色)
Material: Poly Acetal (White)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter dd | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|-------------------------------|-----------|-------------------------|-----------------------------|------------------------------|--------------------------------|-----------------------------|------------------------|
| S1D 32B-0608 | 32 | φ32 | φ34 | B1 | 6 | φ8 | φ20 | 8 | 14 | 9.4 |
| S1D 34B-0608 | 34 | φ34 | φ36 | B1 | 6 | φ8 | φ20 | 8 | 14 | 10.2 |
| S1D 35B-0608 | 35 | φ35 | φ37 | B1 | 6 | φ8 | φ20 | 8 | 14 | 10.7 |
| S1D 36B-0608 | 36 | φ36 | φ38 | B1 | 6 | φ8 | φ20 | 8 | 14 | 11.2 |
| S1D 38B-0608 | 38 | φ38 | φ40 | B1 | 6 | φ8 | φ20 | 8 | 14 | 12.2 |
| S1D 40B-0608 | 40 | φ40 | φ42 | B1 | 6 | φ8 | φ20 | 8 | 14 | 13.2 |
| S1D 42B-0608 | 42 | φ42 | φ44 | B1 | 6 | φ8 | φ20 | 8 | 14 | 14.3 |
| S1D 44B-0608 | 44 | φ44 | φ46 | B1 | 6 | φ8 | φ20 | 8 | 14 | 15.4 |
| S1D 45B-0608 | 45 | φ45 | φ47 | B1 | 6 | φ8 | φ20 | 8 | 14 | 16.0 |
| S1D 48B-0608 | 48 | φ48 | φ50 | B1 | 6 | φ8 | φ20 | 8 | 14 | 17.9 |
| S1D 50B-0608 | 50 | φ50 | φ52 | B1 | 6 | φ8 | φ20 | 8 | 14 | 19.2 |
| S1D 52B-0608 | 52 | φ52 | φ54 | B1 | 6 | φ8 | φ20 | 8 | 14 | 20.5 |
| S1D 55B-0608 | 55 | φ55 | φ57 | B1 | 6 | φ8 | φ20 | 8 | 14 | 22.7 |

波形スプリングピン付き、歯数 20 ~ 80 呼び径は φ1.4 です。(ステンレス) No. of teeth from 20B to 80B gears with Corrugated spring (SUS) as dimension of φ1.4.

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ラック
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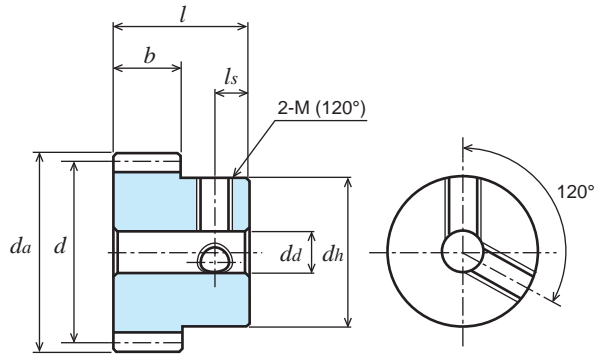
1

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



New **ねじを2箇所 (120°配) にしました。**
New item with two threaded holes (120°)



B1形
TYPE B1

ポリアセタール (白色)
Material : Poly Acetal (White)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|---------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S1D 56B * 0605 | 56 | φ 56 | φ 58 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 25.5 |
| S1D 60B * 0605 | 60 | φ 60 | φ 62 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 28.6 |
| S1D 64B * 0605 | 64 | φ 64 | φ 66 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 31.9 |
| S1D 70B * 0605 | 70 | φ 70 | φ 72 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 37.2 |
| S1D 72B * 0605 | 72 | φ 72 | φ 74 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 39.1 |
| S1D 80B * 0605 | 80 | φ 80 | φ 82 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 47.2 |
| S1D 90B * 0605 | 90 | φ 90 | φ 92 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 58.5 |
| S1D 100B * 0605 | 100 | φ100 | φ102 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 71.1 |
| S1D 120B * 0605 | 120 | φ120 | φ122 | B1 | 6 | φ5 | φ24 | 8 | 14 | 2-M4 | 4 | 100.4 |

【*】(アスタ)にはセットスクリーが2個付いております。
【*】: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

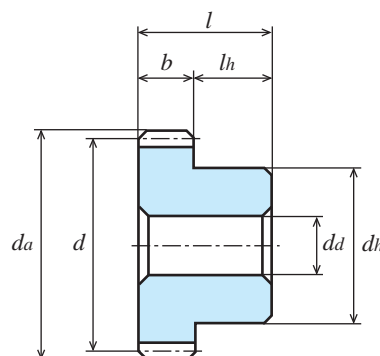
| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1D 56B * 0605 | 3.67 | 36.68 | 73.23 | 145.96 | 289.95 | 428.13 | 528.23 |
| S1D 60B * 0605 | 3.94 | 39.29 | 78.44 | 156.31 | 310.33 | 457.01 | 563.31 |
| S1D 64B * 0605 | 4.20 | 41.92 | 83.65 | 166.65 | 330.21 | 485.67 | 597.95 |
| S1D 70B * 0605 | 4.59 | 45.82 | 91.46 | 182.14 | 359.85 | 528.23 | 647.51 |
| S1D 72B * 0605 | 4.72 | 47.13 | 94.06 | 187.30 | 369.68 | 542.31 | 663.79 |
| S1D 80B * 0605 | 5.25 | 52.36 | 104.46 | 207.91 | 408.74 | 597.95 | 727.65 |
| S1D 90B * 0605 | 5.90 | 58.88 | 117.45 | 233.62 | 457.01 | 663.79 | 804.69 |
| S1D 100B * 0605 | 6.56 | 65.40 | 130.42 | 259.26 | 504.65 | 727.65 | 875.66 |
| S1D 120B * 0605 | 7.87 | 78.44 | 156.31 | 310.33 | 597.95 | 849.11 | 997.80 |

The above numerical values are Lewis formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formula of power on page P26.

JIS B 1702-1 (ISO) 9~10 級
System of accuracy: JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

ポリアセタール (白色)
Material: Poly Acetal (White)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>dd</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|----------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| S1D 56B-0608 | 56 | φ 56 | φ 58 | B1 | 6 | φ8 | φ20 | 8 | 14 | 23.4 |
| S1D 60B-0608 | 60 | φ 60 | φ 62 | B1 | 6 | φ8 | φ20 | 8 | 14 | 26.5 |
| S1D 64B-0608 | 64 | φ 64 | φ 66 | B1 | 6 | φ8 | φ20 | 8 | 14 | 29.8 |
| S1D 70B-0608 | 70 | φ 70 | φ 72 | B1 | 6 | φ8 | φ20 | 8 | 14 | 35.1 |
| S1D 72B-0608 | 72 | φ 72 | φ 74 | B1 | 6 | φ8 | φ20 | 8 | 14 | 37.0 |
| S1D 80B-0608 | 80 | φ 80 | φ 82 | B1 | 6 | φ8 | φ20 | 8 | 14 | 45.1 |
| S1D 90B-0608 | 90 | φ 90 | φ 92 | B1 | 6 | φ8 | φ30 | 8 | 14 | 60.8 |
| S1D 100B-0608 | 100 | φ100 | φ102 | B1 | 6 | φ8 | φ30 | 8 | 14 | 73.4 |
| S1D 120B-0608 | 120 | φ120 | φ122 | B1 | 6 | φ8 | φ30 | 8 | 14 | 102.7 |

波形スプリングピン付き、歯数 20 ~ 80 呼び径は φ1.4 です。(ステンレス)
歯数 90 ~ 120 にはついておりません。

No. of teeth from 20B to 80B gears with Corrugated spring (SUS) as dimension of φ1.4.
No. of teeth from 90 to 120B gears without Corrugated spring.

平歯車 SPUR GEARS

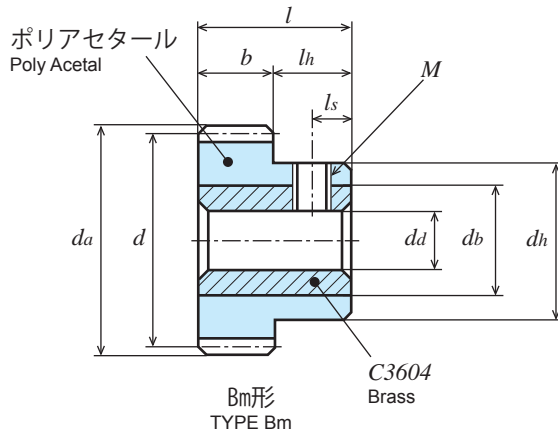
モジュール
MODULE

1

圧力角 20° (並歯)

20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



ポリアセタール (白色) 黄銅ブッシュ入り (C3604B) Material : Poly Acetal (White) with Brass Bushing

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | ブッシュ外径 db | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|--------------|----------------------|
| | | | | | | | | | | M | ls | | |
| S1DB 20B + 1008 | 20 | φ20 | φ22 | Bm | 10 | φ 8 | φ16 | 10 | 20 | M4 | 4 | φ12 | 16.8 |
| S1DB 24B + 1008 | 24 | φ24 | φ26 | Bm | 10 | φ 8 | φ20 | 10 | 20 | M4 | 4 | φ12 | 17.5 |
| S1DB 25B + 1008 | 25 | φ25 | φ27 | Bm | 10 | φ 8 | φ20 | 10 | 20 | M4 | 4 | φ12 | 18.0 |
| S1DB 28B + 1010 | 28 | φ28 | φ30 | Bm | 10 | φ10 | φ24 | 10 | 20 | M4 | 4 | φ16 | 35.0 |
| S1DB 30B + 1010 | 30 | φ30 | φ32 | Bm | 10 | φ10 | φ24 | 10 | 20 | M4 | 4 | φ16 | 36.4 |
| S1DB 32B + 1010 | 32 | φ32 | φ34 | Bm | 10 | φ10 | φ24 | 10 | 20 | M4 | 4 | φ16 | 37.8 |
| S1DB 36B + 1010 | 36 | φ36 | φ38 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 38.0 |
| S1DB 40B + 1010 | 40 | φ40 | φ42 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 41.4 |
| S1DB 45B + 1010 | 45 | φ45 | φ47 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 46.1 |
| S1DB 48B + 1010 | 48 | φ48 | φ50 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 49.2 |
| S1DB 50B + 1010 | 50 | φ50 | φ52 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 51.4 |

【+】にはセットスクリーンが付いております。
[+] : Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1DB 20B + 1008 | 1.61 | 16.08 | 32.14 | 64.20 | 128.08 | 191.66 | 239.15 |
| S1DB 24B + 1008 | 1.93 | 19.29 | 38.55 | 77.00 | 153.55 | 229.66 | 286.46 |
| S1DB 25B + 1008 | 2.01 | 20.09 | 40.16 | 80.20 | 159.91 | 239.15 | 298.26 |
| S1DB 28B + 1010 | 2.25 | 22.50 | 44.97 | 89.79 | 178.97 | 267.55 | 333.59 |
| S1DB 30B + 1010 | 2.41 | 24.11 | 48.18 | 96.18 | 191.66 | 286.46 | 357.10 |
| S1DB 32B + 1010 | 2.57 | 25.72 | 51.38 | 102.57 | 204.34 | 305.33 | 380.51 |
| S1DB 36B + 1010 | 2.90 | 28.93 | 57.79 | 115.33 | 229.66 | 343.00 | 426.13 |
| S1DB 40B + 1010 | 3.22 | 32.14 | 64.20 | 128.08 | 254.94 | 380.51 | 471.31 |
| S1DB 45B + 1010 | 3.62 | 36.15 | 72.20 | 144.01 | 286.46 | 426.13 | 527.17 |
| S1DB 48B + 1010 | 3.86 | 38.55 | 77.00 | 153.55 | 305.33 | 453.29 | 560.37 |
| S1DB 50B + 1010 | 4.02 | 40.16 | 80.20 | 159.91 | 317.90 | 471.31 | 582.37 |

The above numerical values are Lewis formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formula of power on page P26.

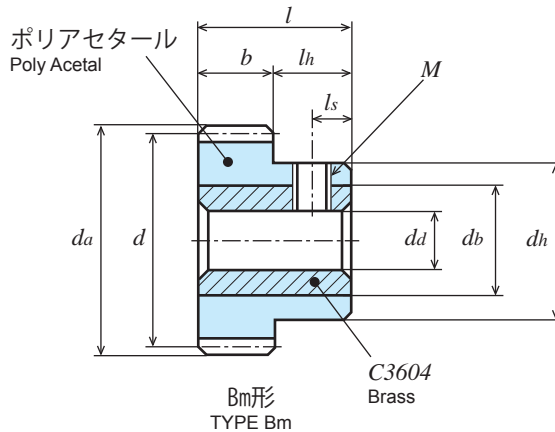
RoHS 対応

2006年11月生産開始分より欧州 RoHS 指令に対応できる商品を提供しています。
We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず “フルネームで商品記号” を明記してください。
Please refer to the catalogue reference while ordering.



ポリアセタール (白色) 黄銅ブッシュ入り (C3604B)

Material : Poly Acetal (White) with Brass Bushing

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | ブッシュ外径 Bushing Outer Diameter db | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|--|----------------------|
| | | | | | | | | | | M | ls | | |
| S1DB 56B + 1010 | 56 | φ 56 | φ 58 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 58.5 |
| S1DB 60B + 1010 | 60 | φ 60 | φ 62 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 63.7 |
| S1DB 64B + 1010 | 64 | φ 64 | φ 66 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 69.2 |
| S1DB 70B + 1010 | 70 | φ 70 | φ 72 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 78.2 |
| S1DB 72B + 1010 | 72 | φ 72 | φ 74 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 81.4 |
| S1DB 80B + 1010 | 80 | φ 80 | φ 82 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 94.9 |
| S1DB 90B + 1010 | 90 | φ 90 | φ 92 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 113.9 |
| S1DB 100B + 1010 | 100 | φ100 | φ102 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 135.1 |
| S1DB 120B + 1010 | 120 | φ120 | φ122 | Bm | 10 | φ10 | φ30 | 10 | 20 | M4 | 4 | φ16 | 184.1 |

【+】にはセットスクリーンが付いております。
【+】: Gear with threaded hole / with set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1DB 56B + 1010 | 4.50 | 44.97 | 89.79 | 178.97 | 355.53 | 524.95 | 647.70 |
| S1DB 60B + 1010 | 4.83 | 48.18 | 96.18 | 191.66 | 380.51 | 560.37 | 690.72 |
| S1DB 64B + 1010 | 5.15 | 51.38 | 102.57 | 204.34 | 404.89 | 595.51 | 733.18 |
| S1DB 70B + 1010 | 5.63 | 56.19 | 112.14 | 223.34 | 441.23 | 647.70 | 793.96 |
| S1DB 72B + 1010 | 5.79 | 57.79 | 115.33 | 229.66 | 453.29 | 664.96 | 813.91 |
| S1DB 80B + 1010 | 6.43 | 64.20 | 128.08 | 254.94 | 501.19 | 733.18 | 892.22 |
| S1DB 90B + 1010 | 7.24 | 72.20 | 144.01 | 286.46 | 560.37 | 813.91 | 986.69 |
| S1DB 100B + 1010 | 8.04 | 80.20 | 159.91 | 317.90 | 618.78 | 892.22 | 1,073.70 |
| S1DB 108B + 1010 | 8.68 | 86.59 | 172.62 | 343.00 | 664.96 | 953.11 | 1,136.21 |
| S1DB 112B + 1010 | 9.01 | 89.79 | 178.97 | 355.53 | 687.86 | 982.98 | 1,166.16 |
| S1DB 120B + 1010 | 9.65 | 96.18 | 191.66 | 380.51 | 733.18 | 1,041.15 | 1,223.46 |

The above numerical values are Lewis formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formula of power on page P26.

RoHS 対応

2006年11月生産開始分より欧州 RoHS 指令に対応できる商品を提供しています。
We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

ステンレス平歯車

SPUR GEARS

モジュール
MODULE

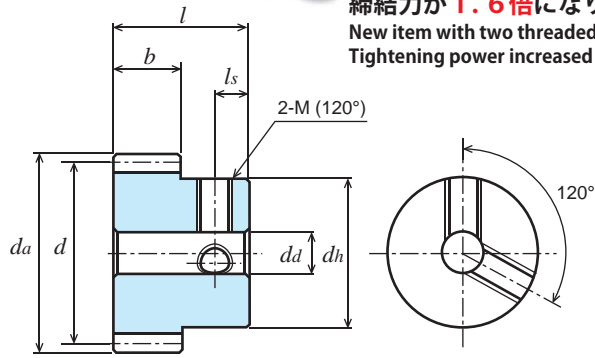
1

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9級
System of accuracy : JIS B 1702-1(ISO) class 9



New **ねじを2箇所 (120°配) にしました。**
締結力が**1.6倍**になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S1SU 14K * 0806 | 14 | φ14 | φ16 | K2 | 8 | φ6 | φ16 | 17 | 25 | 2-M4 | 4 | 30.4 |
| S1SU 15K * 0806 | 15 | φ15 | φ17 | K2 | 8 | φ6 | φ17 | 17 | 25 | 2-M4 | 4 | 35.3 |
| S1SU 16K * 0806 | 16 | φ16 | φ18 | K2 | 8 | φ6 | φ18 | 17 | 25 | 2-M4 | 4 | 40.5 |
| S1SU 17B * 0806 | 17 | φ17 | φ19 | B1 | 8 | φ6 | φ14 | 8 | 16 | 2-M4 | 4 | 19.9 |
| S1SU 18B * 0806 | 18 | φ18 | φ20 | B1 | 8 | φ6 | φ14 | 8 | 16 | 2-M4 | 4 | 21.7 |
| S1SU 18B * 1006 | 18 | φ18 | φ20 | B1 | 10 | φ6 | φ14 | 10 | 20 | 2-M4 | 4 | 27.2 |
| S1SU 20B * 0806 | 20 | φ20 | φ22 | B1 | 8 | φ6 | φ16 | 8 | 16 | 2-M4 | 4 | 28.3 |
| S1SU 20B * 1006 | 20 | φ20 | φ22 | B1 | 10 | φ6 | φ16 | 10 | 20 | 2-M4 | 4 | 35.5 |
| S1SU 21B * 0806 | 21 | φ21 | φ23 | B1 | 8 | φ6 | φ18 | 8 | 16 | 2-M4 | 4 | 33.5 |
| S1SU 22B * 0806 | 22 | φ22 | φ24 | B1 | 8 | φ6 | φ18 | 8 | 16 | 2-M4 | 4 | 35.7 |
| S1SU 24B * 0806 | 24 | φ24 | φ26 | B1 | 8 | φ6 | φ18 | 8 | 16 | 2-M4 | 4 | 40.3 |
| S1SU 24B * 1006 | 24 | φ24 | φ26 | B1 | 10 | φ6 | φ18 | 10 | 20 | 2-M4 | 4 | 50.6 |
| S1SU 25B * 0806 | 25 | φ25 | φ27 | B1 | 8 | φ6 | φ18 | 8 | 16 | 2-M4 | 4 | 42.7 |
| S1SU 25B * 1006 | 25 | φ25 | φ27 | B1 | 10 | φ6 | φ20 | 10 | 20 | 2-M4 | 4 | 58.2 |
| S1SU 26B * 0806 | 26 | φ26 | φ28 | B1 | 8 | φ6 | φ20 | 8 | 16 | 2-M4 | 4 | 48.9 |

SUS304 の商品にはセットスクリューは付いておりません。[*] : Gear with two threaded holes / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1SU 14K * 0806 | 1.77 | 17.71 | 35.41 | 70.82 | 141.64 | 212.46 | 261.67 |
| S1SU 15K * 0806 | 1.98 | 19.84 | 39.68 | 79.37 | 158.73 | 238.10 | 289.88 |
| S1SU 16K * 0806 | 2.20 | 22.02 | 44.04 | 88.08 | 176.16 | 264.03 | 318.05 |
| S1SU 17B * 0806 | 2.42 | 24.23 | 48.46 | 96.92 | 193.84 | 287.82 | 346.06 |
| S1SU 18B * 0806 | 2.65 | 26.47 | 52.94 | 105.88 | 211.76 | 311.52 | 373.85 |
| S1SU 18B * 1006 | 3.31 | 33.09 | 66.18 | 132.35 | 264.70 | 389.40 | 467.32 |
| S1SU 20B * 0806 | 3.11 | 31.08 | 62.16 | 124.32 | 248.64 | 359.14 | 429.43 |
| S1SU 20B * 1006 | 3.89 | 38.85 | 77.70 | 155.40 | 310.80 | 448.92 | 536.79 |
| S1SU 21B * 0806 | 3.34 | 33.40 | 66.81 | 133.62 | 267.24 | 382.52 | 456.60 |
| S1SU 22B * 0806 | 3.58 | 35.76 | 71.52 | 143.04 | 286.09 | 405.86 | 483.62 |
| S1SU 24B * 0806 | 4.05 | 40.52 | 81.04 | 162.07 | 323.88 | 451.79 | 536.54 |
| S1SU 24B * 1006 | 5.06 | 50.65 | 101.29 | 202.59 | 404.85 | 564.74 | 670.68 |
| S1SU 25B * 0806 | 4.29 | 42.93 | 85.86 | 171.72 | 341.02 | 474.52 | 562.62 |
| S1SU 25B * 1006 | 5.37 | 53.66 | 107.32 | 214.65 | 426.27 | 593.15 | 703.28 |
| S1SU 26B * 0806 | 4.54 | 45.36 | 90.71 | 181.43 | 358.07 | 497.04 | 588.38 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formula of power on page P26.

ステンレス平歯車

SPUR GEARS

モジュール
MODULE

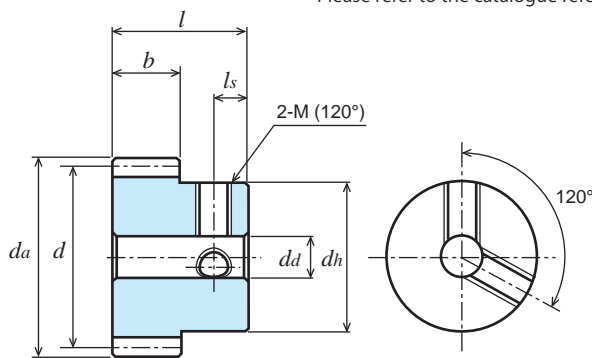
1

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9 級
System of accuracy : JIS B 1702-1(ISO) class 9



御注文には必ず “フルネームで商品記号” を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S1SU 28B * 0806 | 28 | φ28 | φ30 | B1 | 8 | φ6 | φ20 | 8 | 16 | 2-M4 | 4 | 54.2 |
| S1SU 28B * 1006 | 28 | φ28 | φ30 | B1 | 10 | φ6 | φ20 | 10 | 20 | 2-M4 | 4 | 68.1 |
| S1SU 30B * 0806 | 30 | φ30 | φ32 | B1 | 8 | φ6 | φ24 | 8 | 16 | 2-M4 | 4 | 68.5 |
| S1SU 30B * 0806 | 30 | φ30 | φ32 | B1 | 8 | φ6 | φ24 | 8 | 16 | 2-M4 | 4 | 68.5 |
| S1SU 30B * 1006 | 30 | φ30 | φ32 | B1 | 10 | φ6 | φ24 | 10 | 20 | 2-M4 | 4 | 86.0 |
| S1SU 32B * 0606 | 32 | φ32 | φ34 | B1 | 6 | φ6 | φ24 | 10 | 16 | 2-M4 | 4 | 69.1 |
| S1SU 34B * 0606 | 34 | φ34 | φ36 | B1 | 6 | φ6 | φ24 | 10 | 16 | 2-M4 | 4 | 74.0 |
| S1SU 35B * 0606 | 35 | φ35 | φ37 | B1 | 6 | φ6 | φ24 | 10 | 16 | 2-M4 | 4 | 76.6 |
| S1SU 36B * 0608 | 36 | φ36 | φ38 | B1 | 6 | φ8 | φ24 | 10 | 16 | 2-M4 | 4 | 76.6 |
| S1SU 40B * 0608 | 40 | φ40 | φ42 | B1 | 6 | φ8 | φ28 | 10 | 16 | 2-M4 | 4 | 100.6 |
| S1SU 42B * 0608 | 42 | φ42 | φ44 | B1 | 6 | φ8 | φ28 | 10 | 16 | 2-M4 | 4 | 106.7 |
| S1SU 44B * 0608 | 44 | φ44 | φ46 | B1 | 6 | φ8 | φ28 | 10 | 16 | 2-M4 | 4 | 113.1 |
| S1SU 45B * 0608 | 45 | φ45 | φ47 | B1 | 6 | φ8 | φ28 | 10 | 16 | 2-M4 | 4 | 116.5 |
| S1SU 48B * 0608 | 48 | φ48 | φ50 | B1 | 6 | φ8 | φ28 | 10 | 16 | 2-M4 | 4 | 126.9 |
| S1SU 50B * 0608 | 50 | φ50 | φ52 | B1 | 6 | φ8 | φ28 | 10 | 16 | 2-M4 | 4 | 134.2 |

SUS304 の商品にはセットスクリューは付いておりません。

[*] : Gear with two threaded holes / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1SU 28B * 0806 | 5.03 | 50.26 | 100.52 | 201.03 | 391.90 | 541.43 | 638.95 |
| S1SU 28B * 1006 | 6.28 | 62.82 | 125.65 | 251.29 | 489.88 | 676.79 | 798.68 |
| S1SU 30B * 0806 | 5.52 | 55.18 | 110.37 | 220.74 | 425.11 | 584.61 | 687.84 |
| S1SU 30B * 1006 | 6.90 | 68.98 | 137.96 | 275.92 | 531.39 | 730.76 | 859.80 |
| S1SU 32B * 0606 | 4.51 | 45.13 | 90.27 | 180.53 | 343.53 | 470.31 | 551.76 |
| S1SU 34B * 0606 | 4.89 | 48.91 | 97.82 | 195.64 | 367.87 | 501.44 | 586.65 |
| S1SU 35B * 0606 | 5.08 | 50.81 | 101.61 | 203.23 | 379.90 | 516.74 | 603.73 |
| S1SU 36B * 0608 | 5.27 | 52.71 | 105.42 | 210.85 | 391.84 | 531.86 | 620.57 |
| S1SU 40B * 0608 | 6.04 | 60.39 | 120.78 | 241.55 | 438.65 | 590.59 | 693.00 |
| S1SU 42B * 0608 | 6.43 | 64.26 | 128.51 | 257.02 | 461.49 | 618.92 | 733.00 |
| S1SU 44B * 0608 | 6.81 | 68.10 | 136.19 | 272.39 | 483.61 | 646.13 | 772.19 |
| S1SU 45B * 0608 | 7.00 | 70.04 | 140.08 | 280.17 | 494.67 | 659.68 | 791.90 |
| S1SU 48B * 0608 | 7.59 | 75.90 | 151.80 | 303.36 | 527.27 | 700.19 | 850.59 |
| S1SU 50B * 0608 | 7.98 | 79.82 | 159.65 | 317.05 | 548.54 | 732.84 | 889.33 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formula of power on page P26.

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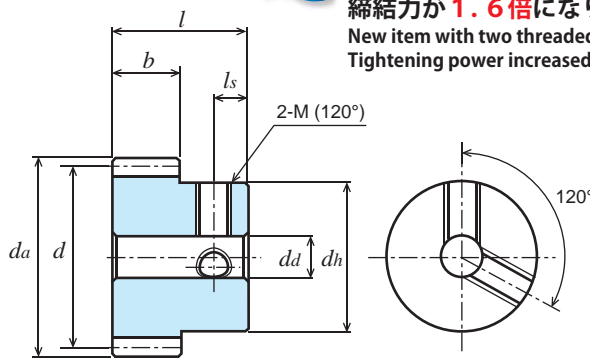
1

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9級
System of accuracy : JIS B 1702-1(ISO) class 9



New **ねじを2箇所 (120°配) にしました。**
締結力が**1.6倍**になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H8) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------|----|----------------------|
| | | | | | | | | | | 2-M(120°) | ls | |
| S1SU 52B * 0608 | 52 | φ 52 | φ 54 | B1 | 6 | φ 8 | φ28 | 10 | 16 | 2-M5 | 5 | 140.9 |
| S1SU 54B * 0608 | 54 | φ 54 | φ 56 | B1 | 6 | φ 8 | φ28 | 10 | 16 | 2-M5 | 5 | 148.8 |
| S1SU 56B * 0610 | 56 | φ 56 | φ 58 | B1 | 6 | φ 10 | φ30 | 10 | 16 | 2-M5 | 5 | 160.6 |
| S1SU 60B * 0610 | 60 | φ 60 | φ 62 | B1 | 6 | φ 10 | φ30 | 10 | 16 | 2-M5 | 5 | 178.0 |
| S1SU 64B * 0610 | 64 | φ 64 | φ 66 | B1 | 6 | φ 10 | φ30 | 10 | 16 | 2-M5 | 5 | 196.5 |
| S1SU 70B * 0610 | 70 | φ 70 | φ 72 | B1 | 6 | φ 10 | φ30 | 10 | 16 | 2-M5 | 5 | 226.6 |
| S1SU 72B * 0610 | 72 | φ 72 | φ 74 | B1 | 6 | φ 10 | φ30 | 10 | 16 | 2-M5 | 5 | 237.2 |
| S1SU 80B * 0610 | 80 | φ 80 | φ 82 | B1 | 6 | φ 10 | φ30 | 10 | 16 | 2-M5 | 5 | 282.6 |
| S1SU 90B * 0610 | 90 | φ 90 | φ 92 | B1 | 6 | φ 10 | φ30 | 10 | 16 | 2-M5 | 5 | 346.1 |
| S1SU 100B * 0610 | 100 | φ 100 | φ 102 | B1 | 6 | φ 10 | φ30 | 10 | 16 | 2-M5 | 5 | 417.1 |
| S1SU 120B * 0610 | 120 | φ 120 | φ 122 | B1 | 6 | φ 10 | φ30 | 10 | 16 | 2-M5 | 5 | 581.6 |

SUS304の商品にはセットスクリューは付いておりません。

[*] : Gear with two threaded holes / without set screw.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1SU 52B * 0608 | 8.38 | 83.76 | 167.51 | 330.61 | 569.42 | 765.27 | 927.74 |
| S1SU 54B * 0608 | 8.77 | 87.70 | 175.40 | 344.05 | 589.94 | 797.50 | 965.84 |
| S1SU 56B * 0610 | 9.17 | 91.66 | 183.32 | 357.37 | 610.11 | 829.53 | 1,003.62 |
| S1SU 60B * 0610 | 9.96 | 99.60 | 199.19 | 383.62 | 649.37 | 892.91 | 1,078.17 |
| S1SU 64B * 0610 | 10.76 | 107.57 | 215.14 | 409.37 | 687.26 | 955.40 | 1,151.78 |
| S1SU 70B * 0610 | 11.96 | 119.58 | 239.15 | 447.06 | 741.67 | 1,047.46 | 1,266.18 |
| S1SU 72B * 0610 | 12.36 | 123.59 | 247.19 | 459.37 | 760.11 | 1,077.69 | 1,303.88 |
| S1SU 80B * 0610 | 13.97 | 139.71 | 279.42 | 507.42 | 848.29 | 1,196.75 | 1,452.49 |
| S1SU 90B * 0610 | 15.98 | 159.75 | 319.50 | 564.12 | 954.81 | 1,348.27 | 1,631.26 |
| S1SU 100B * 0610 | 18.00 | 180.02 | 357.51 | 618.54 | 1,059.38 | 1,497.28 | 1,806.04 |
| S1SU 120B * 0610 | 22.07 | 220.74 | 425.12 | 719.62 | 1,260.58 | 1,784.16 | 2,207.42 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formula of power on page P26.

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平歯車 SPUR GEARS

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圧力角 20° (並歯) 歯数 8 ~ 14

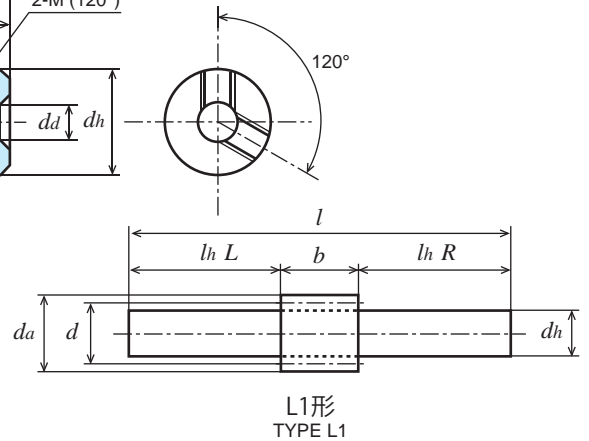
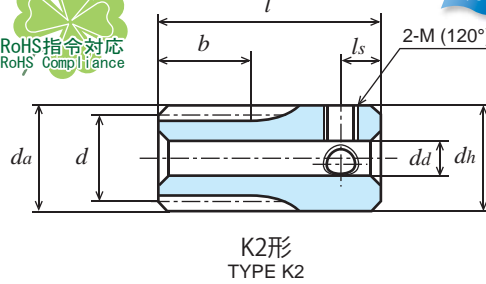
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 8 to Z 14

JIS B 1702-1 (ISO) 8 ~ 9 級
System of accuracy : JIS B 1702-1(ISO) class 8-9



New

ねじを2箇所 (120°配) にしました。
New item with two threaded holes (120°)



S45C 機械構造用炭素鋼 (JIS G 4051) *印を付した商品は転位歯車です。転位係数 x は 0.5 です。
Material : Carbon Steel (ISO C45) * mark has been profile shifted gears. (Rack shift coefficient x = 0.5)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter dd(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 8L - 1206 | 8 | * | φ10.64 | L1 | 12 | - | φ 6 (h9) | L16 R32 | 60 | - | - | - | 16.7 |
| S1S 8L - 1210F | 8 | * | φ10.64 | L2 | 12 | - | φ10.64 | L16 R32 | 60 | - | - | - | 39.5 |
| S1S 10L - 1208 | 10 | * | φ12.66 | L1 | 12 | - | φ 8 (h9) | L16 R32 | 60 | - | - | - | 27.9 |
| S1S 10L - 1212F | 10 | * | φ12.66 | L2 | 12 | - | φ12.66 | L16 R32 | 60 | - | - | - | 56.4 |
| S1S 12K * 1206 | 12 | | φ12 | K2 | 12 | φ6(H8) | φ14 | 18 | 30 | - | 2-M4 | 5 | 25.1 |
| S1S 13K * 1206 | 13 | | φ13 | K2 | 12 | φ6(H8) | φ15 | 18 | 30 | - | 2-M4 | 5 | 30.1 |
| S1S 14A - 0805F | 14 | | φ14 | A1 | 8 | φ5 | - | - | 8 | - | - | - | 8.4 |
| S1S 14A - 0806 | 14 | | φ14 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 7.9 |
| S1S 14A - 1206 | 14 | | φ14 | A1 | 12 | φ6 | - | - | 12 | - | - | - | 11.8 |
| S1S 14B - 0805 | 14 | | φ14 | B1 | 8 | φ5(H8) | φ11 | 8 | 16 | - | - | - | 13.0 |
| S1S 14B - 1005 | 14 | | φ14 | B1 | 10 | φ5(H8) | φ11 | 10 | 20 | - | - | - | 16.47 |
| S1S 14B - 1005H | 14 | | φ14 | B1 | 10 | φ5(H※) | φ11 | 10 | 20 | - | - | - | 16.47 |
| S1S 14K * 0806 | 14 | | φ14 | K2 | 8 | φ6(H8) | φ16 | 17 | 25 | - | 2-M4 | 4 | 30.1 |
| S1S 14K * 1206 | 14 | | φ14 | K2 | 12 | φ6(H8) | φ16 | 18 | 30 | - | 2-M5 | 5 | 35.0 |

【*】(アスタ)にはセットスクリーが2個付いております。【*】: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|--------|--------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 8 | 12 | - | 3.21 | 32.15 | 64.29 | 128.58 | 257.16 | 385.74 | 482.18 |
| 10 | 12 | - | 4.43 | 44.29 | 88.59 | 177.17 | 354.34 | 531.52 | 664.40 |
| 12 | 12 | - | 4.07 | 40.75 | 81.49 | 162.99 | 325.97 | 488.96 | 611.20 |
| 13 | 12 | - | 4.68 | 46.85 | 93.69 | 187.38 | 374.77 | 562.15 | 700.48 |
| 14 | 8 | - | 3.54 | 35.41 | 70.82 | 141.64 | 283.28 | 424.92 | 523.34 |
| 14 | 10 | - | 3.98 | 39.79 | 79.58 | 159.17 | 318.34 | 477.50 | 596.88 |
| 14 | 10 | ○ | 4.71 | 47.12 | 94.24 | 188.49 | 376.98 | 565.46 | 706.83 |
| 14 | 12 | - | 5.31 | 53.12 | 106.23 | 212.46 | 424.92 | 637.38 | 785.01 |

KG 規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|------|-------|-------|-------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.14 | 1.36 | 2.72 | 5.45 | 10.89 | 16.34 | 20.42 |
| 0.71 | 7.91 | 16.34 | 33.51 | 67.02 | 100.53 | 125.66 |
| - | - | - | - | - | - | - |

平歯車

SPUR GEARS

モジュール
MODULE

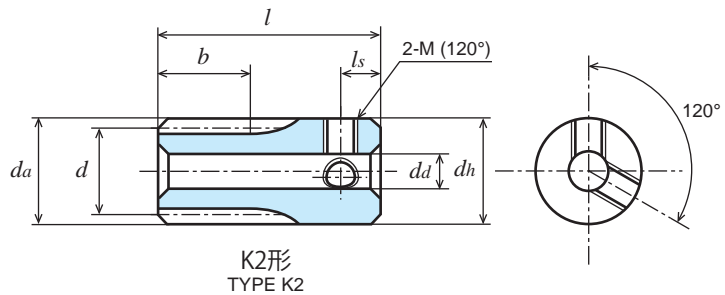
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圧力角 20° (並歯) 歯数 15 ~ 16
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 15 to Z 16

JIS B 1702-1 (ISO) 8 ~ 9 級
System of accuracy : JIS B 1702-1(ISO) class 8-9



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter dd(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キ み ぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|--|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 15A - 0805F | 15 | φ15 | φ17 | A1 | 8 | φ5 | - | - | 8 | - | - | - | 9.9 |
| S1S 15A - 0806 | 15 | φ15 | φ17 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 9.3 |
| S1S 15A - 1206 | 15 | φ15 | φ17 | A1 | 12 | φ6 | - | - | 12 | - | - | - | 14.0 |
| S1S 15B - 0805 | 15 | φ15 | φ17 | B1 | 8 | φ5(H8) | φ12 | 8 | 16 | - | - | - | 15.7 |
| S1S 15B - 1005 | 15 | φ15 | φ17 | B1 | 10 | φ5(H8) | φ12 | 10 | 20 | - | - | - | 19.68 |
| S1S 15B - 1005H | 15 | φ15 | φ17 | B1 | 10 | φ5(H※) | φ12 | 10 | 20 | - | - | - | 19.68 |
| S1S 15K * 0806 | 15 | φ15 | φ17 | K2 | 8 | φ6(H8) | φ17 | 17 | 25 | - | 2-M4 | 4 | 35.0 |
| S1S 15K * 1206 | 15 | φ15 | φ17 | K2 | 12 | φ6(H8) | φ17 | 18 | 30 | - | 2-M5 | 5 | 40.7 |
| S1S 16A - 0805F | 16 | φ16 | φ18 | A1 | 8 | φ5 | - | - | 8 | - | - | - | 11.4 |
| S1S 16A - 0806 | 16 | φ16 | φ18 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 10.9 |
| S1S 16A - 1208 | 16 | φ16 | φ18 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 14.2 |
| S1S 16B - 0805 | 16 | φ16 | φ18 | B1 | 8 | φ5(H8) | φ13 | 8 | 16 | - | - | - | 18.5 |
| S1S 16B - 1005 | 16 | φ16 | φ18 | B1 | 10 | φ5(H8) | φ13 | 10 | 20 | - | - | - | 23.13 |
| S1S 16B - 1005H | 16 | φ16 | φ18 | B1 | 10 | φ5(H※) | φ13 | 10 | 20 | - | - | - | 23.13 |
| S1S 16K * 0806 | 16 | φ16 | φ18 | K2 | 8 | φ6(H8) | φ18 | 17 | 25 | - | 2-M4 | 4 | 40.0 |
| S1S 16K * 0808 | 16 | φ16 | φ18 | K2 | 8 | φ8(H8) | φ18 | 17 | 25 | - | 2-M4 | 4 | 35.9 |
| S1S 16K * 1208 | 16 | φ16 | φ18 | K2 | 12 | φ8(H8) | φ18 | 18 | 30 | - | 2-M5 | 5 | 41.8 |

【*】(アスタ)にはセットスクリューが2個付いております。【*】: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|--------|--------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 15 | 8 | - | 3.97 | 39.68 | 79.37 | 158.73 | 317.47 | 476.20 | 579.76 |
| 15 | 10 | - | 4.50 | 45.03 | 90.06 | 180.11 | 360.22 | 540.33 | 675.41 |
| 15 | 10 | ○ | 5.34 | 53.41 | 106.81 | 213.62 | 427.24 | 640.86 | 801.07 |
| 15 | 12 | - | 5.95 | 59.53 | 119.05 | 238.10 | 476.20 | 714.30 | 869.64 |
| 16 | 8 | - | 4.40 | 44.04 | 88.08 | 176.16 | 352.32 | 528.05 | 636.11 |
| 16 | 10 | - | 5.03 | 50.26 | 100.53 | 201.05 | 402.11 | 603.16 | 753.95 |
| 16 | 10 | ○ | 5.92 | 59.16 | 118.33 | 236.66 | 473.31 | 709.97 | 887.46 |
| 16 | 12 | - | 6.61 | 66.06 | 132.12 | 264.24 | 528.48 | 792.08 | 954.16 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|-------|-------|-------|-------|--------|--------|---|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| - | - | - | - | - | - | - | - |
| 0.16 | 1.57 | 3.14 | 6.28 | 12.57 | 20.11 | 23.56 | |
| 0.83 | 9.11 | 18.85 | 38.54 | 79.58 | 119.38 | 149.22 | |
| - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | |
| 0.19 | 1.88 | 3.77 | 7.54 | 15.08 | 22.62 | 28.27 | |
| 0.94 | 10.47 | 20.94 | 41.89 | 90.47 | 135.71 | 169.64 | |
| - | - | - | - | - | - | - | |

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かさ歯車
BEVEL GEARS

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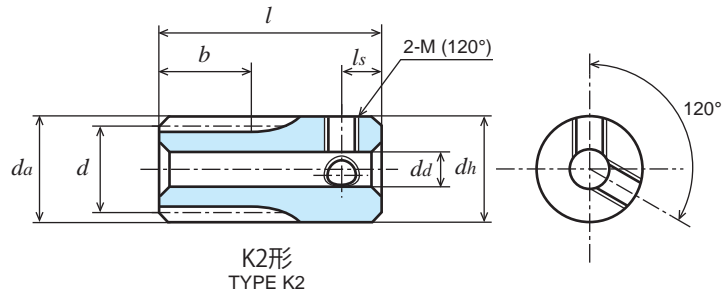
1

圧力角 20° (並歯) 歯数 17 18
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 17 to Z 18

JIS B 1702-1 (ISO) 8 ~ 9 級
System of accuracy : JIS B 1702-1(ISO) class 8-9



御注文には必ず “フルネームで商品記号” を明記してください。
Please refer to the catalogue reference while ordering.



K2形
TYPE K2

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter dd(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キ み ぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|--|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 17A - 0805F | 17 | φ17 | φ19 | A1 | 8 | φ5 | - | - | 8 | - | - | - | 13.0 |
| S1S 17A - 1208F | 17 | φ17 | φ19 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 16.7 |
| S1S 17B - 0805 | 17 | φ17 | φ19 | B1 | 8 | φ5(H8) | φ14 | 8 | 16 | - | - | - | 21.5 |
| S1S 17B - 1005 | 17 | φ17 | φ19 | B1 | 10 | φ5(H8) | φ14 | 10 | 20 | - | - | - | 26.84 |
| S1S 17B - 1005H | 17 | φ17 | φ19 | B1 | 10 | φ5(H※) | φ14 | 10 | 20 | - | - | - | 26.84 |
| S1S 17K * 0808 | 17 | φ17 | φ19 | K2 | 8 | φ8(H8) | φ19 | 17 | 25 | - | 2-M4 | 4 | 41.3 |
| S1S 17K * 1208 | 17 | φ17 | φ19 | K2 | 12 | φ8(H8) | φ19 | 18 | 30 | - | 2-M5 | 5 | 48.2 |
| S1S 18A - 0805F | 18 | φ18 | φ20 | A1 | 8 | φ5 | - | - | 8 | - | - | - | 14.8 |
| S1S 18A - 0806 | 18 | φ18 | φ20 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 14.2 |
| S1S 18A - 1208 | 18 | φ18 | φ20 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 19.2 |
| S1S 18B * 0806 | 18 | φ18 | φ20 | B1 | 8 | φ6 | φ14 | 8 | 16 | - | 2-M4 | 4 | 21.5 |
| S1S 18B - 1006 | 18 | φ18 | φ20 | B1 | 10 | φ6(H8) | φ15 | 10 | 20 | - | - | - | 29.43 |
| S1S 18B - 1006H | 18 | φ18 | φ20 | B1 | 10 | φ6(H※) | φ15 | 10 | 20 | - | - | - | 29.43 |
| S1S 18B * 1008 | 18 | φ18 | φ20 | B1 | 10 | φ8 | φ15 | 10 | 20 | - | 2-M5 | 5 | 25.1 |
| S1S 18K * 0808 | 18 | φ18 | φ20 | K2 | 8 | φ8(H8) | φ20 | 17 | 25 | - | 2-M4 | 4 | 47.1 |
| S1S 18K * 1208 | 18 | φ18 | φ20 | K2 | 12 | φ8(H8) | φ20 | 18 | 30 | - | 2-M4 | 4 | 55.6 |

【*】(アスタ)にはセットスクリューが2個付いております。[*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|--------|--------|--------|--------|----------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 17 | 8 | - | 4.85 | 48.46 | 96.92 | 193.84 | 387.68 | 575.64 | 692.11 |
| 17 | 10 | - | 5.48 | 54.77 | 109.53 | 219.06 | 438.13 | 657.19 | 821.49 |
| 17 | 10 | ○ | 6.42 | 64.19 | 128.38 | 256.76 | 513.52 | 770.29 | 962.86 |
| 17 | 12 | - | 7.27 | 72.69 | 145.38 | 290.76 | 581.53 | 863.46 | 1,038.17 |
| 18 | 8 | - | 5.29 | 52.94 | 105.88 | 211.76 | 423.52 | 635.29 | 794.11 |
| 18 | 10 | - | 6.62 | 66.18 | 132.35 | 264.7 | 529.41 | 794.11 | 992.64 |
| 18 | 10 | ○ | 6.93 | 69.32 | 138.64 | 277.29 | 554.57 | 831.86 | 1,039.82 |
| 18 | 12 | - | 7.94 | 79.41 | 158.82 | 317.64 | 635.29 | 952.94 | 1,191.56 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|--------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.20 | 1.99 | 4.19 | 8.38 | 16.75 | 25.13 | 29.84 |
| 1.05 | 11.52 | 23.04 | 50.26 | 100.53 | 150.79 | 188.49 |
| - | - | - | - | - | - | - |
| 0.26 | 2.62 | 5.24 | 10.47 | 20.94 | 31.41 | 39.27 |
| 1.20 | 13.09 | 27.23 | 54.45 | 108.90 | 163.36 | 204.20 |
| - | - | - | - | - | - | - |

平歯車 SPUR GEARS

モジュール
MODULE

1

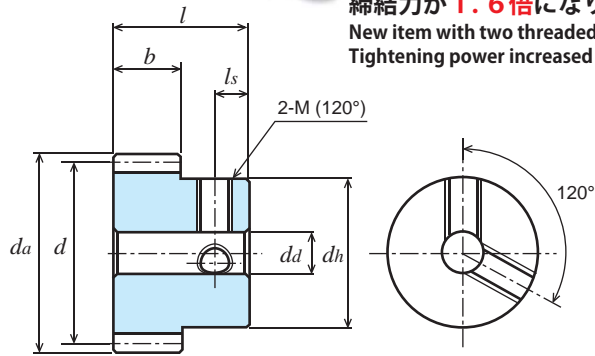
圧力角 20° (並歯) 歯数 19 20

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 19 to Z 20

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が **1.6倍** になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 19A - 0806F | 19 | φ19 | φ21 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 16.0 |
| S1S 19A - 1208F | 19 | φ19 | φ21 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 22.0 |
| S1S 19B - 0806F | 19 | φ19 | φ21 | B1 | 8 | φ6 | φ16 | 8 | 16 | - | - | - | 26.9 |
| S1S 19B - 1208F | 19 | φ19 | φ21 | B1 | 12 | φ8 | φ16 | 8 | 20 | - | - | - | 31.4 |
| S1S 20A - 0806F | 20 | φ20 | φ22 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 18.0 |
| S1S 20A - 0808 | 20 | φ20 | φ22 | A1 | 8 | φ8 | - | - | 8 | - | - | - | 15.0 |
| S1S 20A - 1208F | 20 | φ20 | φ22 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 24.9 |
| S1S 20A = 1210 | 20 | φ20 | φ22 | A1 | 12 | φ10 | - | - | 12 | 3 × 1.4 | - | - | 19.2 |
| S1S 20B - 0806F | 20 | φ20 | φ22 | B1 | 8 | φ6 | φ16 | 8 | 16 | - | - | - | 28.8 |
| S1S 20B * 0806 | 20 | φ20 | φ22 | B1 | 8 | φ6 | φ16 | 8 | 16 | - | 2-M4 | 4 | 28.0 |
| S1S 20B * 0808 | 20 | φ20 | φ22 | B1 | 8 | φ8 | φ16 | 8 | 16 | - | 2-M4 | 4 | 25.4 |
| ● S1S 20B - 1005 | 20 | φ20 | φ22 | B1 | 10 | φ5(H8) | φ16 | 10 | 20 | - | - | - | 37.0 |
| ● S1S 20B - 1005H | 20 | φ20 | φ22 | B1 | 10 | φ5(H※) | φ16 | 10 | 20 | - | - | - | 37.0 |
| ● S1S 20B - 1006 | 20 | φ20 | φ22 | B1 | 10 | φ6(H8) | φ16 | 10 | 20 | - | - | - | 36.03 |
| S1S 20B * 1008 | 20 | φ20 | φ22 | B1 | 10 | φ8 | φ16 | 10 | 20 | - | 2-M5 | 5 | 31.5 |
| S1S 20B - 1206F | 20 | φ20 | φ22 | B1 | 12 | φ6 | φ16 | 8 | 20 | - | - | - | 37.8 |
| S1S 20B * 1206 | 20 | φ20 | φ22 | B1 | 12 | φ6 | φ16 | 8 | 20 | - | 2-M4 | 4 | 37.0 |
| S1S 20B * 1208 | 20 | φ20 | φ22 | B1 | 12 | φ8 | φ16 | 8 | 20 | - | 2-M4 | 4 | 33.7 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key.

【*】(アスタ)にはセットスクリューが2個付いております。 [*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※

歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|--------|----------|----------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 19 | 8 | - | 6.68 | 66.81 | 133.62 | 267.24 | 534.47 | 765.05 | 913.19 |
| 19 | 12 | - | 10.02 | 100.21 | 200.43 | 400.86 | 801.71 | 1,147.57 | 1,369.79 |
| 20 | 8 | - | 6.22 | 62.16 | 124.32 | 248.64 | 497.28 | 718.27 | 858.87 |
| 20 | 10 | - | 7.82 | 78.22 | 156.44 | 312.89 | 625.78 | 904.74 | 1,080.66 |
| 20 | 10 | ○ | 8.30 | 82.97 | 165.95 | 331.90 | 663.80 | 962.04 | 1,154.75 |
| 20 | 12 | - | 9.32 | 93.24 | 186.48 | 372.96 | 745.92 | 1,077.41 | 1,288.30 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|-------|-------|-------|--------|--------|--------|--|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | |
| 0.32 | 3.25 | 6.49 | 12.98 | 25.97 | 38.95 | 45.55 | |
| 1.45 | 16.05 | 33.11 | 68.24 | 140.74 | 207.61 | 251.67 | |
| - | - | - | - | - | - | - | |

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GROUND SPUR GEARS

平歯車
SPUR GEARS

内歯車
INTERNAL GEARS

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ラック
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平歯車

SPUR GEARS

モジュール
MODULE

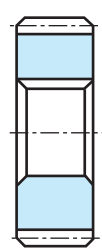
1

圧力角 20° (並歯) 歯数 21 ~ 23
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 21 to Z 23

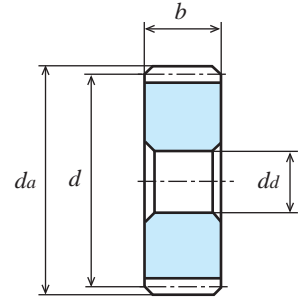
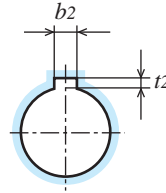
JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



A1形
TYPE A1



A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キ み ぞ Key Way b ₂ × t ₂ | ね じ Set Screw | | 重 量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|--|------------------|----------------|-----------------------|
| | | | | | | | | | | | 2-M(120°) | l _s | |
| S1S 21A - 0806F | 21 | φ21 | φ23 | A1 | 8 | φ 6 | - | - | 8 | - | - | - | 19.1 |
| S1S 21A - 1210F | 21 | φ21 | φ23 | A1 | 12 | φ10 | - | - | 12 | - | - | - | 22.8 |
| S1S 21B - 0806F | 21 | φ21 | φ23 | B1 | 8 | φ 6 | φ18 | 8 | 16 | - | - | - | 33.3 |
| S1S 21B - 1208F | 21 | φ21 | φ23 | B1 | 12 | φ 8 | φ18 | 8 | 20 | - | - | - | 48.6 |
| S1S 22A - 0806F | 22 | φ22 | φ24 | A1 | 8 | φ 6 | - | - | 8 | - | - | - | 22.1 |
| S1S 22A - 1210F | 22 | φ22 | φ24 | A1 | 12 | φ10 | - | - | 12 | - | - | - | 28.4 |
| S1S 22B - 0806F | 22 | φ22 | φ24 | B1 | 8 | φ 6 | φ18 | 8 | 16 | - | - | - | 36.3 |
| S1S 22B - 1208F | 22 | φ22 | φ24 | B1 | 12 | φ 8 | φ18 | 8 | 20 | - | - | - | 43.9 |
| S1S 23A - 0806F | 23 | φ23 | φ25 | A1 | 8 | φ 6 | - | - | 8 | - | - | - | 24.3 |
| S1S 23A - 1210F | 23 | φ23 | φ25 | A1 | 12 | φ10 | - | - | 12 | - | - | - | 31.7 |
| S1S 23B - 0806F | 23 | φ23 | φ25 | B1 | 8 | φ 6 | φ20 | 8 | 16 | - | - | - | 42.3 |
| S1S 23B - 1208F | 23 | φ23 | φ25 | B1 | 12 | φ 8 | φ20 | 8 | 20 | - | - | - | 51.0 |

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|--------|----------|----------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 21 | 8 | - | 6.68 | 66.81 | 133.62 | 267.24 | 534.47 | 765.05 | 913.19 |
| 21 | 12 | - | 10.02 | 100.21 | 200.43 | 400.86 | 801.71 | 1,147.57 | 1,369.79 |
| 22 | 8 | - | 7.15 | 71.52 | 143.04 | 286.09 | 572.18 | 811.72 | 967.23 |
| 22 | 12 | - | 10.73 | 107.28 | 214.57 | 429.13 | 858.27 | 1,217.58 | 1,450.84 |
| 23 | 8 | - | 7.63 | 76.28 | 152.56 | 305.11 | 610.23 | 858.05 | 1,020.71 |
| 23 | 12 | - | 11.44 | 114.42 | 228.84 | 457.67 | 915.34 | 1,287.07 | 1,531.06 |

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-----|-----|-----|-----|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

1

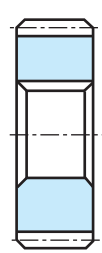
圧力角 20° (並歯) 歯数 24

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 24

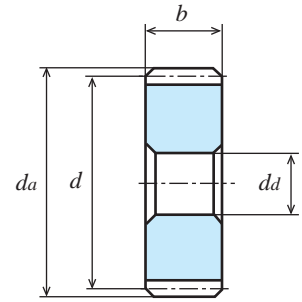
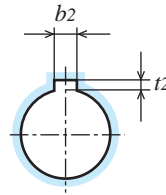
JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



A1形
TYPE A1



A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマイぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 24A - 0806F | 24 | φ24 | φ26 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 26.6 |
| S1S 24A - 0808 | 24 | φ24 | φ26 | A1 | 8 | φ8 | - | - | 8 | - | - | - | 25.3 |
| S1S 24A - 1208F | 24 | φ24 | φ26 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 37.9 |
| S1S 24A = 1210 | 24 | φ24 | φ26 | A1 | 12 | φ10 | - | - | 12 | 3 × 1.4 | - | - | 34.8 |
| S1S 24B - 0806 | 24 | φ24 | φ26 | B1 | 8 | φ6 | φ16 | 8 | 16 | - | - | - | 37.5 |
| S1S 24B * 0806 | 24 | φ24 | φ26 | B1 | 8 | φ6 | φ16 | 8 | 16 | - | 2-M4 | 4 | 36.7 |
| S1S 24B * 0808 | 24 | φ24 | φ26 | B1 | 8 | φ8 | φ16 | 8 | 16 | - | 2-M4 | 4 | 34.1 |
| S1S 24B - 1006 | 24 | φ24 | φ26 | B1 | 10 | φ6(H8) | φ20 | 10 | 20 | - | - | - | 55.77 |
| S1S 24B - 1006H | 24 | φ24 | φ26 | B1 | 10 | φ6(H※) | φ20 | 10 | 20 | - | - | - | 55.77 |
| S1S 24B * 1008 | 24 | φ24 | φ26 | B1 | 10 | φ8 | φ20 | 10 | 20 | - | 2-M5 | 5 | 50.7 |
| S1S 24B - 1208F | 24 | φ24 | φ26 | B1 | 12 | φ8 | φ20 | 8 | 20 | - | - | - | 54.5 |
| S1S 24B * 1208 | 24 | φ24 | φ26 | B1 | 12 | φ8 | φ20 | 8 | 20 | - | 2-M4 | 4 | 53.5 |
| S1S 24B * 1210 | 24 | φ24 | φ26 | B1 | 12 | φ10 | φ20 | 8 | 20 | - | 2-M5 | 4 | 48.7 |

【=】(イコール)にはキーマ材が付いております。【=】: Gear with key way / with key.

【*】(アスタ)にはセットスクリューが2個付いております。【*】: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

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許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|--------|----------|----------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 24 | 8 | - | 8.10 | 81.04 | 162.07 | 324.14 | 647.77 | 903.58 | 1,073.09 |
| 24 | 10 | - | 10.13 | 101.29 | 202.59 | 405.18 | 809.71 | 1,129.47 | 1,341.36 |
| 24 | 10 | ○ | 11.21 | 112.05 | 224.09 | 448.18 | 896.36 | 1,187.47 | 1,484.34 |
| 24 | 12 | - | 12.16 | 121.55 | 243.11 | 486.21 | 971.65 | 1,355.36 | 1,609.63 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|-------|-------|-------|--------|--------|--------|---|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| - | - | - | - | - | - | - | - |
| 0.47 | 4.71 | 9.63 | 19.27 | 38.54 | 54.03 | 65.97 | |
| 2.17 | 24.09 | 48.17 | 96.34 | 192.68 | 287.76 | 361.27 | |
| - | - | - | - | - | - | - | - |

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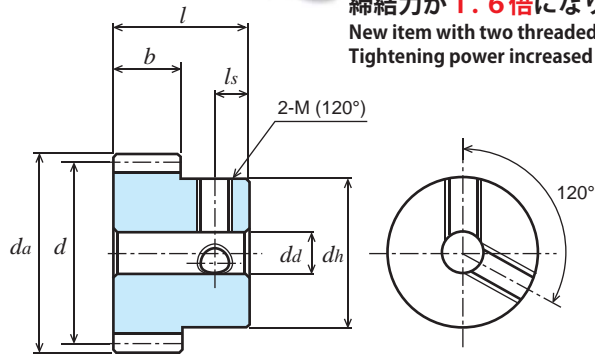
圧力角 20° (並歯) 歯数 25 26

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 25 to Z 26

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が**1.6倍**になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)
Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 25A - 0806F | 25 | φ25 | φ27 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 29.1 |
| S1S 25A - 0808 | 25 | φ25 | φ27 | A1 | 8 | φ8 | - | - | 8 | - | - | - | 27.7 |
| S1S 25A = 0810 | 25 | φ25 | φ27 | A1 | 8 | φ10 | - | - | 8 | 3 × 1.4 | - | - | 25.6 |
| S1S 25A - 1208F | 25 | φ25 | φ27 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 41.5 |
| S1S 25A = 1210 | 25 | φ25 | φ27 | A1 | 12 | φ10 | - | - | 12 | 3 × 1.4 | - | - | 38.5 |
| S1S 25B - 0806 | 25 | φ25 | φ27 | B1 | 8 | φ6 | φ16 | 8 | 16 | - | - | - | 39.9 |
| S1S 25B * 0806 | 25 | φ25 | φ27 | B1 | 8 | φ6 | φ16 | 8 | 16 | - | 2-M4 | 4 | 39.1 |
| S1S 25B * 0808 | 25 | φ25 | φ27 | B1 | 8 | φ8 | φ16 | 8 | 16 | - | 2-M4 | 4 | 36.5 |
| S1S 25BF - 1005 | 25 | φ25 | φ27 | B1 | 10 | φ5(H8) | φ20 | 10 | 20 | - | - | - | 59.7 |
| S1S 25B - 1006 | 25 | φ25 | φ27 | B1 | 10 | φ6(H8) | φ20 | 10 | 20 | - | - | - | 58.79 |
| S1S 25B - 1005H | 25 | φ25 | φ27 | B1 | 10 | φ5(H※) | φ20 | 10 | 20 | - | - | - | 59.7 |
| S1S 25B * 1008 | 25 | φ25 | φ27 | B1 | 10 | φ8 | φ20 | 10 | 20 | - | 2-M5 | 5 | 53.8 |
| S1S 25B - 1208F | 25 | φ25 | φ27 | B1 | 12 | φ8 | φ20 | 8 | 20 | - | - | - | 58.1 |
| S1S 25B * 1208 | 25 | φ25 | φ27 | B1 | 12 | φ8 | φ20 | 8 | 20 | - | 2-M4 | 4 | 57.1 |
| S1S 25B * 1210 | 25 | φ25 | φ27 | B1 | 12 | φ10 | φ20 | 8 | 20 | - | 2-M5 | 4 | 52.4 |
| S1S 26A - 0806F | 26 | φ26 | φ28 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 31.6 |
| S1S 26A - 1208F | 26 | φ26 | φ28 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 45.3 |
| S1S 26B - 0806F | 26 | φ26 | φ28 | B1 | 8 | φ6 | φ22 | 8 | 16 | - | - | - | 53.7 |
| S1S 26B - 1208F | 26 | φ26 | φ28 | B1 | 12 | φ8 | φ22 | 8 | 20 | - | - | - | 66.0 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key.

【*】(アスタ)にはセットスクリューが2個付いております。 [*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|----------|----------|----------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 25 | 8 | - | 8.59 | 85.86 | 171.72 | 343.43 | 682.04 | 949.04 | 1,125.25 |
| 25 | 10 | - | 10.78 | 107.75 | 215.50 | 431.01 | 855.31 | 1,189.99 | 1,412.09 |
| 25 | 10 | ○ | 11.42 | 114.18 | 228.36 | 456.71 | 907.56 | 1,271.22 | 1,513.78 |
| 25 | 12 | - | 12.88 | 128.79 | 257.57 | 515.15 | 1,023.05 | 1,423.56 | 1,687.87 |
| 26 | 8 | - | 9.07 | 90.71 | 181.43 | 362.85 | 716.14 | 994.08 | 1,176.77 |
| 26 | 12 | - | 13.61 | 136.07 | 272.14 | 544.28 | 1,074.21 | 1,491.12 | 1,765.15 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|--------|--------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.51 | 5.13 | 10.47 | 20.94 | 41.89 | 59.06 | 70.68 |
| 2.32 | 25.62 | 52.84 | 108.93 | 223.17 | 318.11 | 382.55 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

平歯車

SPUR GEARS

モジュール
MODULE

1

圧力角 20° (並歯) 歯数 27 28

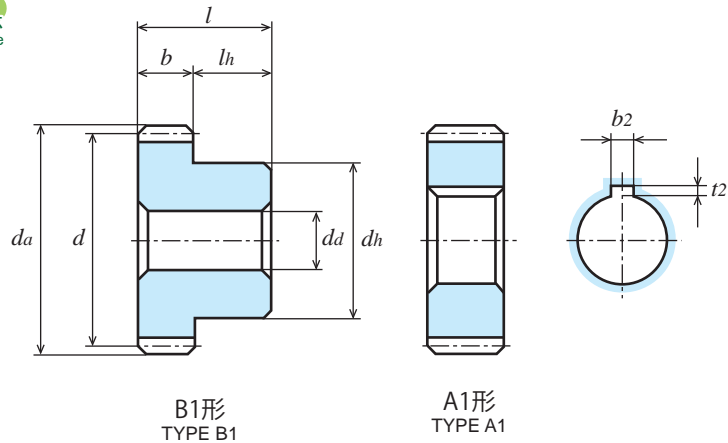
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 27 to Z 28

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter dd(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 27A - 0806F | 27 | φ27 | φ29 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 34.2 |
| S1S 27A - 1208F | 27 | φ27 | φ29 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 49.2 |
| S1S 27B - 0806F | 27 | φ27 | φ29 | B1 | 8 | φ6 | φ24 | 8 | 16 | - | - | - | 60.8 |
| S1S 27B - 1208F | 27 | φ27 | φ29 | B1 | 12 | φ8 | φ24 | 8 | 20 | - | - | - | 74.5 |
| S1S 28A - 0806F | 28 | φ28 | φ30 | A1 | 8 | φ6 | - | - | 8 | - | - | - | 36.9 |
| S1S 28A - 0808 | 28 | φ28 | φ30 | A1 | 8 | φ8 | - | - | 8 | - | - | - | 35.5 |
| S1S 28A - 1208F | 28 | φ28 | φ30 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 55.3 |
| S1S 28A = 1210 | 28 | φ28 | φ30 | A1 | 12 | φ10 | - | - | 12 | 3 × 1.4 | - | - | 50.2 |
| S1S 28A = 1212 | 28 | φ28 | φ30 | A1 | 12 | φ12 | - | - | 12 | 4 × 1.8 | - | - | 46.7 |
| S1S 28B - 0806 | 28 | φ28 | φ30 | B1 | 8 | φ6 | φ20 | 8 | 16 | - | - | - | 54.9 |
| S1S 28B * 0806 | 28 | φ28 | φ30 | B1 | 8 | φ6 | φ20 | 8 | 16 | - | 2-M4 | 4 | 53.7 |
| S1S 28B * 0808 | 28 | φ28 | φ30 | B1 | 8 | φ8 | φ20 | 8 | 16 | - | 2-M4 | 4 | 51.1 |
| S1S 28B * 0810 | 28 | φ28 | φ30 | B1 | 8 | φ10 | φ20 | 8 | 16 | - | 2-M5 | 4 | 52.0 |
| S1S 28B - 1008 | 28 | φ28 | φ30 | B1 | 10 | φ8(H7) | φ24 | 10 | 20 | - | - | - | 76.01 |
| S1S 28B - 1008H | 28 | φ28 | φ30 | B1 | 10 | φ8(H※) | φ24 | 10 | 20 | - | - | - | 76.01 |
| S1S 28B * 1010 | 28 | φ28 | φ30 | B1 | 10 | φ10 | φ24 | 10 | 20 | - | 2-M5 | 5 | 69.7 |
| S1S 28B - 1210F | 28 | φ28 | φ30 | B1 | 12 | φ10 | φ24 | 8 | 20 | - | - | - | 74.1 |
| S1S 28B * 1210 | 28 | φ28 | φ30 | B1 | 12 | φ10 | φ24 | 8 | 20 | - | 2-M5 | 4 | 72.3 |
| S1S 28B * 1212 | 28 | φ28 | φ30 | B1 | 12 | φ12 | φ24 | 8 | 20 | - | 2-M5 | 4 | 67.1 |

[=] (イコール)にはキー材が付いております。 [=]: Gear with Key Way / with Key.

[*] (アスタ)にはセットスクリューが2個付いております。 [*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|----------|----------|----------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 27 | 8 | - | 9.56 | 95.60 | 191.20 | 382.40 | 750.06 | 1,038.69 | 1,227.65 |
| 27 | 12 | - | 14.34 | 143.40 | 286.80 | 573.60 | 1,125.09 | 1,558.03 | 1,841.47 |
| 28 | 8 | - | 10.05 | 100.52 | 201.03 | 402.06 | 783.81 | 1,082.86 | 1,277.89 |
| 28 | 10 | - | 12.56 | 125.65 | 251.29 | 502.58 | 979.76 | 1,353.58 | 1,597.36 |
| 28 | 10 | ○ | 13.51 | 135.08 | 270.17 | 540.33 | 1,080.66 | 1,407.37 | 1,759.22 |
| 28 | 12 | - | 15.08 | 150.77 | 301.55 | 603.10 | 1,175.71 | 1,624.29 | 1,916.83 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|--------|--------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.66 | 6.60 | 13.19 | 26.81 | 52.78 | 74.14 | 87.96 |
| 3.04 | 32.15 | 64.30 | 128.59 | 257.18 | 385.77 | 482.21 |
| - | - | - | - | - | - | - |

目次

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ラック

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かさ歯車

スプロケット

技術仕様

平歯車 SPUR GEARS

モジュール
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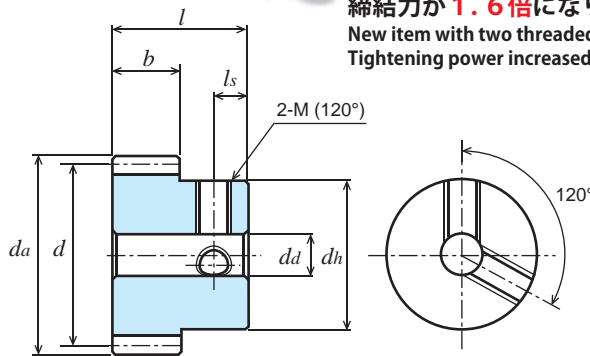
1

圧力角 20° (並歯) 歯数 30
20° PRESSURE ANGLE FULL DEPTH TOOTH Z30

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が1.6倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 30A - 0808F | 30 | φ30 | φ32 | A1 | 8 | φ8 | - | - | 8 | - | - | - | 41.2 |
| S1S 30A = 0810 | 30 | φ30 | φ32 | A1 | 8 | φ10 | - | - | 8 | 3 × 1.4 | - | - | 39.2 |
| S1S 30A = 1010 | 30 | φ30 | φ32 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 49.0 |
| S1S 30A - 1208F | 30 | φ30 | φ32 | A1 | 12 | φ8 | - | - | 12 | - | - | - | 61.9 |
| S1S 30A = 1210 | 30 | φ30 | φ32 | A1 | 12 | φ10 | - | - | 12 | 3 × 1.4 | - | - | 58.8 |
| S1S 30A = 1212 | 30 | φ30 | φ32 | A1 | 12 | φ12 | - | - | 12 | 4 × 1.8 | - | - | 55.3 |
| S1S 30B - 0806 | 30 | φ30 | φ32 | B1 | 8 | φ6 | φ24 | 8 | 16 | - | - | - | 69.3 |
| S1S 30B * 0806 | 30 | φ30 | φ32 | B1 | 8 | φ6 | φ24 | 8 | 16 | - | 2-M4 | 4 | 67.8 |
| S1S 30B * 0808 | 30 | φ30 | φ32 | B1 | 8 | φ8 | φ24 | 8 | 16 | - | 2-M4 | 4 | 65.2 |
| S1S 30B * 0810 | 30 | φ30 | φ32 | B1 | 8 | φ10 | φ24 | 8 | 16 | - | 2-M5 | 4 | 61.1 |
| S1S 30B * 0812 | 30 | φ30 | φ32 | B1 | 8 | φ12 | φ24 | 8 | 16 | - | 2-M5 | 4 | 57.1 |
| ● S1S 30BF - 1006 | 30 | φ30 | φ32 | B1 | 10 | φ6(H8) | φ25 | 10 | 20 | - | - | - | 89.1 |
| ● S1S 30B - 1006H | 30 | φ30 | φ32 | B1 | 10 | φ6(H※) | φ25 | 10 | 20 | - | - | - | 89.1 |
| ● S1S 30B - 1008 | 30 | φ30 | φ32 | B1 | 10 | φ8 | φ25 | 10 | 20 | - | - | - | 86.19 |
| S1S 30B * 1010 | 30 | φ30 | φ32 | B1 | 10 | φ10 | φ25 | 10 | 20 | - | 2-M5 | 5 | 79.8 |
| S1S 30B - 1210 | 30 | φ30 | φ32 | B1 | 12 | φ10 | φ24 | 8 | 20 | - | - | - | 82.7 |
| S1S 30B * 1210 | 30 | φ30 | φ32 | B1 | 12 | φ10 | φ24 | 8 | 20 | - | 2-M5 | 4 | 80.9 |
| S1S 30B * 1212 | 30 | φ30 | φ32 | B1 | 12 | φ12 | φ24 | 8 | 20 | - | 2-M5 | 4 | 75.7 |

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【*】(アスタ)にはセットスクリーが2個付いております。[*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
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許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|----------|----------|----------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 30 | 8 | - | 11.04 | 110.37 | 220.74 | 441.48 | 850.22 | 1,169.22 | 1,375.68 |
| 30 | 10 | - | 13.81 | 138.12 | 276.24 | 552.48 | 1,063.91 | 1,462.66 | 1,721.52 |
| 30 | 10 | ○ | 14.64 | 146.41 | 292.81 | 585.63 | 1,131.61 | 1,567.73 | 1,853.36 |
| 30 | 12 | - | 16.56 | 165.55 | 331.11 | 662.22 | 1,275.33 | 1,753.83 | 2,063.52 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|-------|-------|--------|--------|--------|--------|---|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 0.75 | - | - | - | - | - | - | - |
| 0.75 | 7.64 | 15.29 | 30.58 | 60.32 | 84.19 | 100.53 | |
| 3.39 | 37.55 | 77.41 | 159.60 | 317.91 | 448.27 | 535.15 | |
| - | - | - | - | - | - | - | |

平歯車

SPUR GEARS

モジュール
MODULE

1

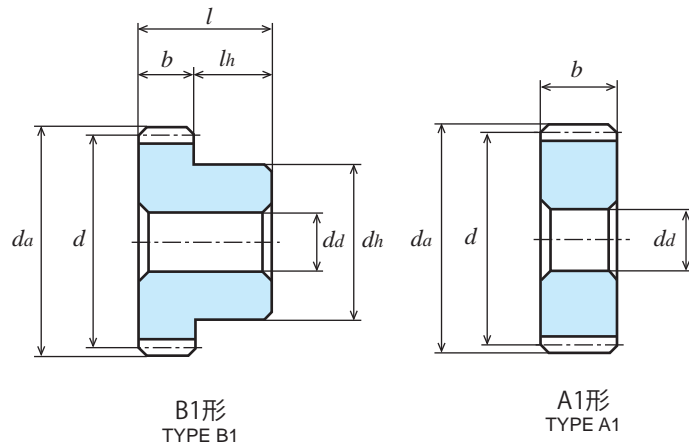
圧力角 20° (並歯) 歯数 32 34

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 32 to Z 34

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キ み ぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|--|-----------------|----------------|----------------------|
| | | | | | | | | | | | 2-M(120°) | l _s | |
| S1S 32A - 0608F | 32 | φ32 | φ34 | A1 | 6 | φ 8 | - | - | 6 | - | - | - | 35.5 |
| S1S 32A = 0610 | 32 | φ32 | φ34 | A1 | 6 | φ10 | - | - | 6 | 3 × 1.4 | - | - | 34.0 |
| S1S 32A = 0612 | 32 | φ32 | φ34 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 32.2 |
| S1S 32A - 1008F | 32 | φ32 | φ34 | A1 | 10 | φ 8 | - | - | 10 | - | - | - | 59.2 |
| S1S 32A = 1010 | 32 | φ32 | φ34 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 56.6 |
| S1S 32A = 1012 | 32 | φ32 | φ34 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 53.7 |
| S1S 32B - 0606 | 32 | φ32 | φ34 | B1 | 6 | φ 6 | φ24 | 10 | 16 | - | - | - | 69.9 |
| S1S 32B * 0606 | 32 | φ32 | φ34 | B1 | 6 | φ 6 | φ24 | 10 | 16 | - | 2-M4 | 4 | 68.4 |
| S1S 32B * 0608 | 32 | φ32 | φ34 | B1 | 6 | φ 8 | φ24 | 10 | 16 | - | 2-M4 | 4 | 65.8 |
| S1S 32B * 0610 | 32 | φ32 | φ34 | B1 | 6 | φ10 | φ24 | 10 | 16 | - | 2-M5 | 5 | 61.7 |
| S1S 32B * 0612 | 32 | φ32 | φ34 | B1 | 6 | φ12 | φ24 | 10 | 16 | - | 2-M5 | 5 | 57.7 |
| S1S 32B - 1010 | 32 | φ32 | φ34 | B1 | 10 | φ10 | φ24 | 10 | 20 | - | - | - | 86.4 |
| S1S 32B * 1010 | 32 | φ32 | φ34 | B1 | 10 | φ10 | φ24 | 10 | 20 | - | 2-M5 | 5 | 84.5 |
| S1S 32B * 1012 | 32 | φ32 | φ34 | B1 | 10 | φ12 | φ24 | 10 | 20 | - | 2-M5 | 5 | 79.4 |
| S1S 34A - 0608F | 34 | φ34 | φ36 | A1 | 6 | φ 8 | - | - | 6 | - | - | - | 40.4 |
| S1S 34A - 1008F | 34 | φ34 | φ36 | A1 | 10 | φ 8 | - | - | 10 | - | - | - | 67.3 |
| S1S 34B - 0606F | 34 | φ34 | φ36 | B1 | 6 | φ 6 | φ28 | 10 | 16 | - | - | - | 87.6 |
| S1S 34B - 1010F | 34 | φ34 | φ36 | B1 | 10 | φ10 | φ28 | 10 | 20 | - | - | - | 107.3 |

[=] (イコール)にはキー材が付いております。 [=] : Gear with key way / with key.

[*] (アスタ)にはセットスクリューが2個付いております。 [*] : Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|--------|--------|--------|----------|----------|----------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 32 | 6 | 9.03 | 90.27 | 180.53 | 361.07 | 687.05 | 940.61 | 1,103.51 | 100 |
| 32 | 10 | 15.04 | 150.45 | 300.89 | 601.78 | 1,145.09 | 1,567.69 | 1,839.19 | 8.62 |
| 34 | 6 | 9.78 | 97.82 | 195.64 | 391.27 | 735.73 | 1,002.88 | 1,173.30 | 14.36 |
| 34 | 10 | 16.30 | 163.03 | 326.06 | 652.12 | 1,226.22 | 1,671.47 | 1,955.49 | 9.34 |
| | | | | | | | | | 15.56 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formula of power on page P26.

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GROUND RACKS

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RACKS

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かさ歯車
BEVEL GEARS

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SPROCKETS

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平歯車 SPUR GEARS

モジュール
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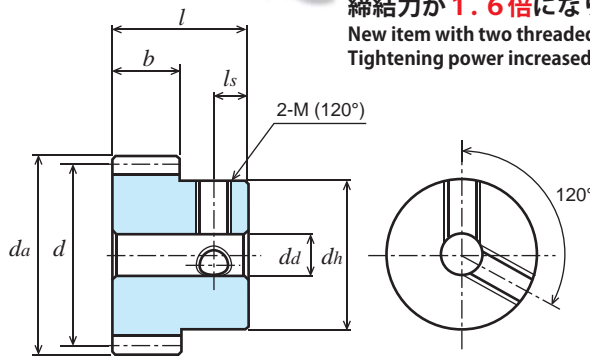
1

圧力角 20° (並歯) 歯数 35
20° PRESSURE ANGLE FULL DEPTH TOOTH Z35

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



New ねじを2箇所 (120°配) にしました。
締結力が1.6倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)
Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 35A - 0608F | 35 | φ35 | φ37 | A1 | 6 | φ8 | - | - | 6 | - | - | - | 43.0 |
| S1S 35A = 0610 | 35 | φ35 | φ37 | A1 | 6 | φ10 | - | - | 6 | 3 × 1.4 | - | - | 41.4 |
| S1S 35A = 0612 | 35 | φ35 | φ37 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 39.7 |
| S1S 35A - 1008F | 35 | φ35 | φ37 | A1 | 10 | φ8 | - | - | 10 | - | - | - | 71.6 |
| S1S 35A = 1010 | 35 | φ35 | φ37 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 69.0 |
| S1S 35A = 1012 | 35 | φ35 | φ37 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 66.1 |
| S1S 35A = 1015 | 35 | φ35 | φ37 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 60.8 |
| S1S 35B - 0606 | 35 | φ35 | φ37 | B1 | 6 | φ6 | φ24 | 10 | 16 | - | - | - | 77.3 |
| S1S 35B * 0606 | 35 | φ35 | φ37 | B1 | 6 | φ6 | φ24 | 10 | 16 | - | 2-M4 | 4 | 75.8 |
| S1S 35B * 0608 | 35 | φ35 | φ37 | B1 | 6 | φ8 | φ24 | 10 | 16 | - | 2-M4 | 4 | 73.2 |
| S1S 35B * 0610 | 35 | φ35 | φ37 | B1 | 6 | φ10 | φ24 | 10 | 16 | - | 2-M5 | 5 | 69.2 |
| S1S 35B * 0612 | 35 | φ35 | φ37 | B1 | 6 | φ12 | φ24 | 10 | 16 | - | 2-M5 | 5 | 65.1 |
| S1S 35B - 1010F | 35 | φ35 | φ37 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 118.7 |
| S1S 35B * 1010 | 35 | φ35 | φ37 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 116.1 |
| S1S 35B * 1012 | 35 | φ35 | φ37 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 111.0 |
| S1S 35B * 1015 | 35 | φ35 | φ37 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 101.4 |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key.

【*】(アスタ)にはセットスクリューが2個付いております。【*】: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

T (N・m)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | 回転速度 (min ⁻¹) revolution/min | |
|---------|---------|---|--------|--------|--------|----------|----------|---|-------|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 35 | 6 | 10.16 | 101.61 | 203.23 | 406.46 | 759.80 | 1,033.48 | 1,207.46 | 9.70 |
| 35 | 10 | 16.94 | 169.36 | 338.72 | 677.43 | 1,266.33 | 1,722.47 | 2,012.43 | 16.17 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion formula of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

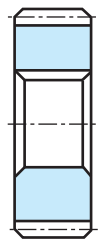
1

圧力角 20° (並歯) 歯数 36 38
20° PRESSURE ANGLE FULL DEPTH TOOTH Z36 to Z38

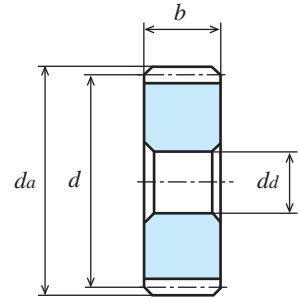
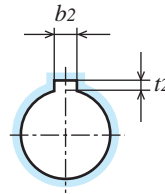
JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



A1形
TYPE A1



A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キ み ぞ Key Way <i>b₂ × t₂</i> | ねじ Set Screw | | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|---|-----------------|----------------------|------------------------------|
| | | | | | | | | | | | 2-M(120°) | <i>l_s</i> | |
| S1S 36A - 0608F | 36 | φ36 | φ38 | A1 | 6 | φ 8 | - | - | 6 | - | - | - | 45.6 |
| S1S 36A = 0610 | 36 | φ36 | φ38 | A1 | 6 | φ10 | - | - | 6 | 3 × 1.4 | - | - | 44.0 |
| S1S 36A = 0612 | 36 | φ36 | φ38 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 42.3 |
| S1S 36A - 1008F | 36 | φ36 | φ38 | A1 | 10 | φ 8 | - | - | 10 | - | - | - | 76.0 |
| S1S 36A = 1010 | 36 | φ36 | φ38 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 73.4 |
| S1S 36A = 1012 | 36 | φ36 | φ38 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 70.5 |
| S1S 36A = 1015 | 36 | φ36 | φ38 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 65.1 |
| S1S 36B - 0608 | 36 | φ36 | φ38 | B1 | 6 | φ 8 | φ24 | 10 | 16 | - | - | - | 77.2 |
| S1S 36B * 0608 | 36 | φ36 | φ38 | B1 | 6 | φ 8 | φ24 | 10 | 16 | - | 2-M4 | 4 | 75.9 |
| S1S 36B * 0610 | 36 | φ36 | φ38 | B1 | 6 | φ10 | φ24 | 10 | 16 | - | 2-M5 | 5 | 71.8 |
| S1S 36B * 0612 | 36 | φ36 | φ38 | B1 | 6 | φ12 | φ24 | 10 | 16 | - | 2-M5 | 5 | 67.7 |
| S1S 36B - 1010F | 36 | φ36 | φ38 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 123.1 |
| S1S 36B * 1010 | 36 | φ36 | φ38 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 120.5 |
| S1S 36B * 1012 | 36 | φ36 | φ38 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 115.4 |
| S1S 36B * 1015 | 36 | φ36 | φ38 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 105.8 |
| S1S 38A - 0608F | 38 | φ38 | φ40 | A1 | 6 | φ 8 | - | - | 6 | - | - | - | 51.1 |
| S1S 38A - 1008F | 38 | φ38 | φ40 | A1 | 10 | φ 8 | - | - | 10 | - | - | - | 85.1 |
| S1S 38B - 0608F | 38 | φ38 | φ40 | B1 | 6 | φ 8 | φ25 | 10 | 16 | - | - | - | 85.6 |
| S1S 38B - 1010F | 38 | φ38 | φ40 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 132.2 |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key.
【*】(アスタ)にはセットスクリューが2個付いております。【*】: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|--------|--------|--------|----------|----------|----------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 36 | 6 | 10.54 | 105.42 | 210.85 | 421.69 | 783.68 | 1,063.73 | 1,241.14 | 100 |
| 36 | 10 | 17.57 | 175.71 | 351.41 | 702.82 | 1,306.12 | 1,772.88 | 2,068.56 | 10.06 |
| 38 | 6 | 11.31 | 113.08 | 226.15 | 452.31 | 830.87 | 1,123.15 | 1,307.07 | 16.77 |
| 38 | 10 | 18.85 | 188.46 | 376.92 | 753.85 | 1,384.78 | 1,871.91 | 2,178.45 | 10.79 |
| | | | | | | | | | 17.99 |

The above numerical values are equivalent to JGMA formulas as reference only.
動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

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スプロケット
SPROCKETS
技術資料
REFERENCE DATA

平歯車

SPUR GEARS

モジュール
MODULE

1

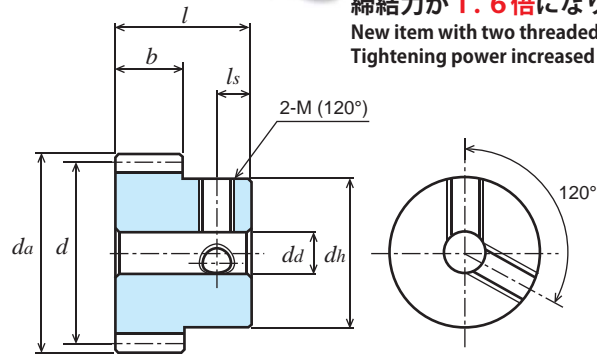
圧力角 20° (並歯) 歯数 40

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 40

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が**1.6倍**になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 40A - 0608F | 40 | φ40 | φ42 | A1 | 6 | φ8 | - | - | 6 | - | - | - | 56.8 |
| S1S 40A = 0610 | 40 | φ40 | φ42 | A1 | 6 | φ10 | - | - | 6 | 3 × 1.4 | - | - | 55.3 |
| S1S 40A = 0612 | 40 | φ40 | φ42 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 53.5 |
| S1S 40A - 1008F | 40 | φ40 | φ42 | A1 | 10 | φ8 | - | - | 10 | - | - | - | 94.7 |
| S1S 40A = 1010 | 40 | φ40 | φ42 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 92.2 |
| S1S 40A = 1012 | 40 | φ40 | φ42 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 89.2 |
| S1S 40A = 1015 | 40 | φ40 | φ42 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 83.9 |
| S1S 40B - 0608 | 40 | φ40 | φ42 | B1 | 6 | φ8 | φ24 | 10 | 16 | - | - | - | 88.4 |
| S1S 40B * 0608 | 40 | φ40 | φ42 | B1 | 6 | φ8 | φ24 | 10 | 16 | - | 2-M4 | 4 | 87.1 |
| S1S 40B * 0610 | 40 | φ40 | φ42 | B1 | 6 | φ10 | φ24 | 10 | 16 | - | 2-M5 | 5 | 83.1 |
| S1S 40B * 0612 | 40 | φ40 | φ42 | B1 | 6 | φ12 | φ24 | 10 | 16 | - | 2-M5 | 5 | 79.0 |
| S1S 40BF - 1006 | 40 | φ40 | φ42 | B1 | 10 | φ6(H8) | φ30 | 10 | 20 | - | - | - | 149.1 |
| S1S 40B - 1006H | 40 | φ40 | φ42 | B1 | 10 | φ6(H※) | φ30 | 10 | 20 | - | - | - | 149.1 |
| S1S 40B - 1010F | 40 | φ40 | φ42 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 141.8 |
| S1S 40B * 1010 | 40 | φ40 | φ42 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 139.3 |
| S1S 40B * 1012 | 40 | φ40 | φ42 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 134.1 |
| S1S 40B * 1015 | 40 | φ40 | φ42 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 124.5 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key.

【*】(アスタ)にはセットスクリューが2個付いております。[*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|----------|----------|----------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 40 | 6 | - | 12.08 | 120.78 | 241.55 | 483.10 | 877.30 | 1,181.18 | 1,386.01 |
| 40 | 10 | - | 20.08 | 200.84 | 401.69 | 803.38 | 1,459.31 | 1,964.04 | 2,304.26 |
| 40 | 10 | ○ | 21.29 | 212.94 | 425.87 | 851.74 | 1,559.77 | 2,118.06 | 2,496.93 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (W)

Allowable transfer capability table (W) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|--------|--------|--------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 1.39 | 13.93 | 28.06 | 56.55 | 104.72 | 144.51 | 171.21 |
| 6.20 | 68.60 | 141.44 | 291.61 | 550.48 | 760.95 | 905.8 |

平歯車

SPUR GEARS

モジュール
MODULE

1

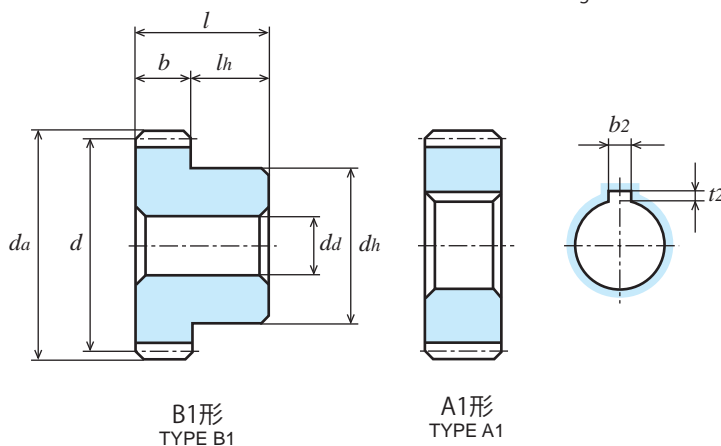
圧力角 20° (並歯) 歯数 42 ~ 45

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 42 to Z 45

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter dd(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 42A - 0608F | 42 | φ42 | φ44 | A1 | 6 | φ 8 | - | - | 6 | - | - | - | 62.9 |
| S1S 42A - 1008F | 42 | φ42 | φ44 | A1 | 10 | φ 8 | - | - | 10 | - | - | - | 104.8 |
| S1S 42B - 0608F | 42 | φ42 | φ44 | B1 | 6 | φ 8 | φ28 | 10 | 16 | - | - | - | 107.3 |
| S1S 42B - 1010F | 42 | φ42 | φ44 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 151.9 |
| S1S 44A - 0608F | 44 | φ44 | φ46 | A1 | 6 | φ 8 | - | - | 6 | - | - | - | 69.3 |
| S1S 44A - 1008F | 44 | φ44 | φ46 | A1 | 10 | φ 8 | - | - | 10 | - | - | - | 115.4 |
| S1S 44B - 0608F | 44 | φ44 | φ46 | B1 | 6 | φ 8 | φ28 | 10 | 16 | - | - | - | 113.6 |
| S1S 44B - 1010F | 44 | φ44 | φ46 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 162.5 |
| S1S 45A - 0608F | 45 | φ45 | φ47 | A1 | 6 | φ 8 | - | - | 6 | - | - | - | 72.5 |
| S1S 45A = 0610 | 45 | φ45 | φ47 | A1 | 6 | φ10 | - | - | 6 | 3 × 1.4 | - | - | 71.0 |
| S1S 45A = 0612 | 45 | φ45 | φ47 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 69.2 |
| S1S 45A - 1008F | 45 | φ45 | φ47 | A1 | 10 | φ 8 | - | - | 10 | - | - | - | 120.9 |
| S1S 45A = 1010 | 45 | φ45 | φ47 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 118.4 |
| S1S 45A = 1012 | 45 | φ45 | φ47 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 115.4 |
| S1S 45A = 1015 | 45 | φ45 | φ47 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 110.1 |
| S1S 45B - 0608 | 45 | φ45 | φ47 | B1 | 6 | φ 8 | φ24 | 10 | 16 | - | - | - | 104.2 |
| S1S 45B * 0608 | 45 | φ45 | φ47 | B1 | 6 | φ 8 | φ24 | 10 | 16 | - | 2-M4 | 4 | 102.9 |
| S1S 45B * 0610 | 45 | φ45 | φ47 | B1 | 6 | φ10 | φ24 | 10 | 16 | - | 2-M5 | 5 | 98.8 |
| S1S 45B * 0612 | 45 | φ45 | φ47 | B1 | 6 | φ12 | φ24 | 10 | 16 | - | 2-M5 | 5 | 94.7 |
| S1S 45B - 1010F | 45 | φ45 | φ47 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 168.0 |
| S1S 45B * 1010 | 45 | φ45 | φ47 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 165.5 |
| S1S 45B * 1012 | 45 | φ45 | φ47 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 160.3 |
| S1S 45B * 1015 | 45 | φ45 | φ47 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 150.7 |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key.

【*】(アスタ)にはセットスクリューが2個付いております。【*】: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|--------|--------|--------|----------|----------|----------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 42 | 6 | 12.85 | 128.51 | 257.02 | 514.05 | 922.98 | 1,237.83 | 1,465.99 | 12.27 |
| 42 | 10 | 21.42 | 214.19 | 428.37 | 856.75 | 1,538.29 | 2,063.06 | 2,443.32 | 20.45 |
| 44 | 6 | 13.62 | 136.19 | 272.39 | 544.77 | 967.23 | 1,292.26 | 1,544.38 | 13.00 |
| 44 | 10 | 22.70 | 226.99 | 453.98 | 907.95 | 1,612.04 | 2,153.77 | 2,573.97 | 21.67 |
| 45 | 6 | 14.01 | 140.08 | 280.17 | 560.34 | 989.34 | 1,319.35 | 1,583.81 | 13.37 |
| 45 | 10 | 23.35 | 233.47 | 466.95 | 933.89 | 1,648.90 | 2,198.92 | 2,639.68 | 22.29 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

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REFERENCE DATA

平歯車

SPUR GEARS

モジュール
MODULE

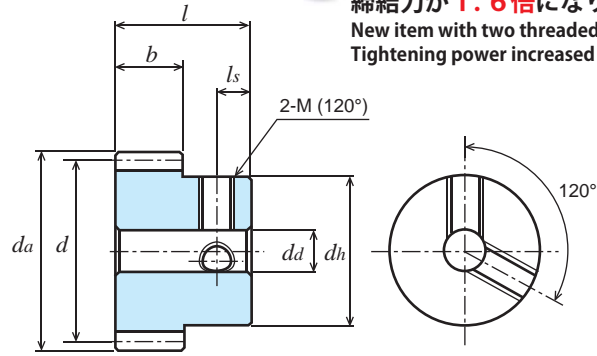
1

圧力角 20° (並歯) 歯数 46 48
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 46 to Z 48

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



New **ねじを2箇所 (120°配) にしました。**
締結力が 1.6 倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)
Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 46A - 0608F | 46 | φ46 | φ48 | A1 | 6 | φ 8 | - | - | 6 | - | - | - | 75.9 |
| S1S 46A - 1010F | 46 | φ46 | φ48 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 124.3 |
| S1S 46B - 0608F | 46 | φ46 | φ48 | B1 | 6 | φ 8 | φ30 | 10 | 16 | - | - | - | 127.5 |
| S1S 46B - 1010F | 46 | φ46 | φ48 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 173.6 |
| S1S 48A - 0608F | 48 | φ48 | φ50 | A1 | 6 | φ 8 | - | - | 6 | - | - | - | 82.9 |
| S1S 48A = 0610 | 48 | φ48 | φ50 | A1 | 6 | φ10 | - | - | 6 | 3 × 1.4 | - | - | 81.3 |
| S1S 48A = 0612 | 48 | φ48 | φ50 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 79.6 |
| S1S 48A - 1010F | 48 | φ48 | φ50 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 135.9 |
| S1S 48A = 1012 | 48 | φ48 | φ50 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 132.6 |
| S1S 48A = 1015 | 48 | φ48 | φ50 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 127.3 |
| S1S 48B - 0608 | 48 | φ48 | φ50 | B1 | 6 | φ 8 | φ24 | 10 | 16 | - | - | - | 114.5 |
| S1S 48B * 0608 | 48 | φ48 | φ50 | B1 | 6 | φ 8 | φ24 | 10 | 16 | - | 2-M4 | 4 | 113.2 |
| S1S 48B * 0610 | 48 | φ48 | φ50 | B1 | 6 | φ10 | φ24 | 10 | 16 | - | 2-M5 | 5 | 109.1 |
| S1S 48B * 0612 | 48 | φ48 | φ50 | B1 | 6 | φ12 | φ24 | 10 | 16 | - | 2-M5 | 5 | 105.0 |
| S1S 48B - 1010 | 48 | φ48 | φ50 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 185.3 |
| S1S 48B * 1010 | 48 | φ48 | φ50 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 182.7 |
| S1S 48B * 1012 | 48 | φ48 | φ50 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 177.5 |
| S1S 48B * 1015 | 48 | φ48 | φ50 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 167.9 |

【=】 (イコール) にはキー材が付いております。【=】: Gear with key way / with key.

【*】 (アスタ) にはセットスクリューが2個付いております。【*】: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (W)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|----------|----------|----------|----------|----------|----------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 46 | 6 | 14.40 | 143.98 | 287.96 | 575.93 | 1,011.26 | 1,346.11 | 1,623.07 | 13.74 |
| 46 | 10 | 24.00 | 239.97 | 479.94 | 959.88 | 1,685.44 | 2,243.51 | 2,705.12 | 22.91 |
| 48 | 6 | 0.015(kW) | 0.15(kW) | 0.30(kW) | 0.60(kW) | 1.05(kW) | 1.40(kW) | 1.70(kW) | 14.32 |
| 48 | 10 | 0.025(kW) | 0.25(kW) | 0.50(kW) | 1.01(kW) | 1.75(kW) | 2.33(kW) | 2.83(kW) | 23.87 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

1

圧力角 20° (並歯) 歯数 50

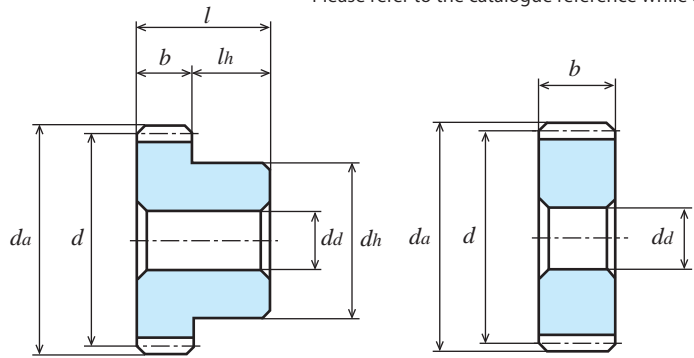
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 50

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter dd(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 50A - 0610F | 50 | φ50 | φ52 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 88.8 |
| S1S 50A = 0612 | 50 | φ50 | φ52 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 86.8 |
| S1S 50A - 1008F | 50 | φ50 | φ52 | A1 | 10 | φ8 | - | - | 10 | - | - | - | 150.2 |
| S1S 50A = 1010 | 50 | φ50 | φ52 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 147.6 |
| S1S 50A = 1012 | 50 | φ50 | φ52 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 144.7 |
| S1S 50A = 1015 | 50 | φ50 | φ52 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 139.4 |
| S1S 50B - 0608 | 50 | φ50 | φ52 | B1 | 6 | φ8 | φ24 | 10 | 16 | - | - | - | 121.8 |
| S1S 50B * 0608 | 50 | φ50 | φ52 | B1 | 6 | φ8 | φ24 | 10 | 16 | - | 2-M4 | 4 | 120.4 |
| S1S 50B * 0610 | 50 | φ50 | φ52 | B1 | 6 | φ10 | φ24 | 10 | 16 | - | 2-M5 | 5 | 116.4 |
| S1S 50B * 0612 | 50 | φ50 | φ52 | B1 | 6 | φ12 | φ24 | 10 | 16 | - | 2-M5 | 5 | 112.3 |
| ● S1S50BF - 1008 | 50 | φ50 | φ52 | B1 | 10 | φ8 | φ35 | 10 | 20 | - | - | - | 221.0 |
| ● S1S50B - 1008H | 50 | φ50 | φ52 | B1 | 10 | φ8(H※) | φ35 | 10 | 20 | - | - | - | 221.0 |
| S1S 50B - 1010 | 50 | φ50 | φ52 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 197.4 |
| S1S 50B * 1010 | 50 | φ50 | φ52 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 194.8 |
| S1S 50B * 1012 | 50 | φ50 | φ52 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 189.6 |
| S1S 50B * 1015 | 50 | φ50 | φ52 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 180.0 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。[=]: Gear with key way / with key.

【*】(アスタ)にはセットスクリーが2個付いております。[*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 50 | 6 | - | 0.015 | 0.15 | 0.31 | 0.63 | 1.09 | 1.46 | 1.77 |
| 50 | 10 | - | 0.026 | 0.260 | 0.530 | 1.050 | 1.820 | 2.430 | 2.950 |
| 50 | 10 | ○ | 0.028 | 0.281 | 0.562 | 1.116 | 1.955 | 2.635 | 3.205 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.002 | 0.020 | 0.050 | 0.090 | 0.160 | 0.220 | 0.270 |
| 0.010 | 0.109 | 0.226 | 0.462 | 0.835 | 1.145 | 1.407 |

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歯研削歯車
SPUR GEAR

内歯車
INTERNAL GEARS

歯研削ラック
GROUND RACKS

ラック
RACKS

ハニカムギヤ
HELIICAL GEARS AND SCREW GEARS

ワーム
WORMS AND WORM WHEELS

かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

技術資料
REFERENCE DATA

平歯車

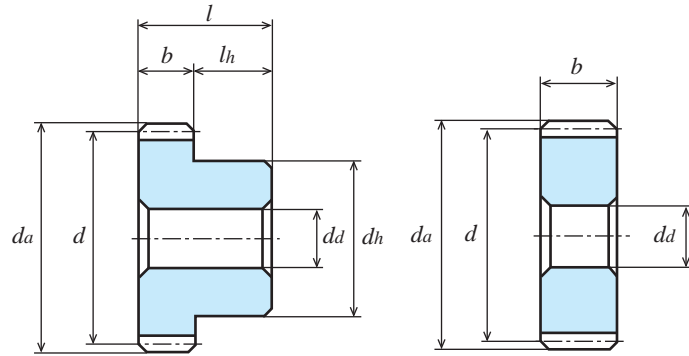
SPUR GEARS

モジュール
MODULE

1

圧力角 20° (並歯) 歯数 52 ~ 55
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 52 to Z 55

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



B1形
TYPE B1

A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キーマイぞ Key Way <i>b₂ × t₂</i> | ねじ Set Screw | | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|--|-----------------|----------------------|------------------------------|
| | | | | | | | | | | | <i>M</i> | <i>l_s</i> | |
| S1S 52A - 0610F | 52 | φ52 | φ54 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 96.3 |
| S1S 52A - 1010F | 52 | φ52 | φ54 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 160.5 |
| S1S 52B - 0610F | 52 | φ52 | φ54 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 188.8 |
| S1S 52B - 1010F | 52 | φ52 | φ54 | B1 | 10 | φ10 | φ46 | 10 | 20 | - | - | - | 284.8 |
| S1S 54A - 0610F | 54 | φ54 | φ56 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 104.2 |
| S1S 54A - 1010F | 54 | φ54 | φ56 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 173.6 |
| S1S 54B - 0610F | 54 | φ54 | φ56 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 196.7 |
| S1S 54B - 1010F | 54 | φ54 | φ56 | B1 | 10 | φ10 | φ46 | 10 | 20 | - | - | - | 297.9 |
| S1S 55A - 0610F | 55 | φ55 | φ57 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 108.2 |
| S1S 55A - 1010F | 55 | φ55 | φ57 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 180.3 |
| S1S 55B - 0610F | 55 | φ55 | φ57 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 200.7 |
| S1S 55B - 1010F | 55 | φ55 | φ57 | B1 | 10 | φ10 | φ46 | 10 | 20 | - | - | - | 304.6 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 52 | 6 | 0.016 | 0.16 | 0.33 | 0.66 | 1.13 | 1.53 | 1.85 | 15.27 |
| 52 | 10 | 0.027 | 0.27 | 0.55 | 1.10 | 1.89 | 2.55 | 3.09 | 25.78 |
| 54 | 6 | 0.017 | 0.17 | 0.35 | 0.68 | 1.17 | 1.59 | 1.93 | 16.23 |
| 54 | 10 | 0.029 | 0.29 | 0.58 | 1.14 | 1.96 | 2.65 | 3.21 | 27.69 |
| 55 | 6 | 0.017 | 0.17 | 0.35 | 0.70 | 1.20 | 1.62 | 1.96 | 16.23 |
| 55 | 10 | 0.029 | 0.29 | 0.59 | 1.16 | 2.00 | 2.71 | 3.28 | 27.69 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

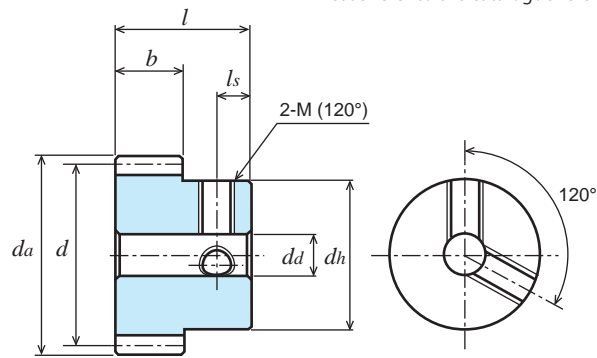
1

圧力角 20° (並歯) 歯数 56 58
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 56 to Z 58

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter dd(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 56A - 0610F | 56 | φ56 | φ58 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 112.3 |
| S1S 56A = 0612 | 56 | φ56 | φ58 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 110.3 |
| S1S 56A - 1010F | 56 | φ56 | φ58 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 187.2 |
| S1S 56A = 1012 | 56 | φ56 | φ58 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 183.9 |
| S1S 56A = 1015 | 56 | φ56 | φ58 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 178.6 |
| S1S 56B - 0610 | 56 | φ56 | φ58 | B1 | 6 | φ10 | φ24 | 10 | 16 | - | - | - | 141.7 |
| S1S 56B * 0610 | 56 | φ56 | φ58 | B1 | 6 | φ10 | φ24 | 10 | 16 | - | 2-M5 | 5 | 139.9 |
| S1S 56B * 0612 | 56 | φ56 | φ58 | B1 | 6 | φ12 | φ24 | 10 | 16 | - | 2-M5 | 5 | 135.8 |
| S1S 56B - 1010 | 56 | φ56 | φ58 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 236.7 |
| S1S 56B * 1010 | 56 | φ56 | φ58 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 234.0 |
| S1S 56B * 1012 | 56 | φ56 | φ58 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 228.9 |
| S1S 56B * 1015 | 56 | φ56 | φ58 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 219.3 |
| S1S 58A - 0610F | 58 | φ58 | φ60 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 114.6 |
| S1S 58A - 1010F | 58 | φ58 | φ60 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 195.1 |
| S1S 58B - 0610F | 58 | φ58 | φ60 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 213.2 |
| S1S 58B - 1010F | 58 | φ58 | φ60 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 361.5 |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key.

【*】(アスタ)にはセットスクリューが2個付いております。【*】: Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 56 | 6 | 0.018 | 0.18 | 0.36 | 0.71 | 1.22 | 1.65 | 2.00 | 100 |
| 56 | 10 | 0.030 | 0.30 | 0.61 | 1.19 | 2.03 | 2.76 | 3.34 | 17.18 |
| 58 | 6 | 0.019 | 0.19 | 0.38 | 0.74 | 1.25 | 1.72 | 2.08 | 28.64 |
| 58 | 10 | 0.031 | 0.31 | 0.63 | 1.23 | 2.09 | 2.87 | 3.47 | 18.14 |
| | | | | | | | | | 29.60 |

KG 規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

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モジュール
MODULE

1

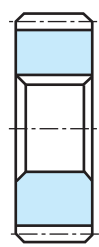
圧力角 20° (並歯) 歯数 60

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 60

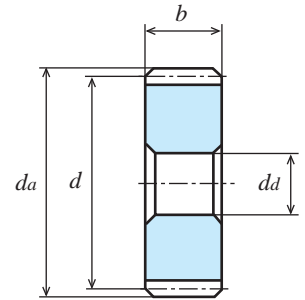
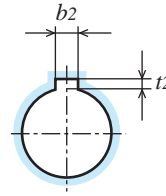
JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が1.6倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



A1形
TYPE A1



A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 60A - 0610F | 60 | φ60 | φ62 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 129.5 |
| S1S 60A = 0612 | 60 | φ60 | φ62 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 127.5 |
| S1S 60A - 1010F | 60 | φ60 | φ62 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 215.8 |
| S1S 60A = 1010 | 60 | φ60 | φ62 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 215.5 |
| S1S 60A = 1012 | 60 | φ60 | φ62 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 212.5 |
| S1S 60A = 1015 | 60 | φ60 | φ62 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 207.2 |
| S1S 60B - 0610 | 60 | φ60 | φ62 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | - | - | 178.9 |
| S1S 60B * 0610 | 60 | φ60 | φ62 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | 2-M5 | 5 | 176.3 |
| S1S 60B * 0612 | 60 | φ60 | φ62 | B1 | 6 | φ12 | φ30 | 10 | 16 | - | 2-M5 | 5 | 172.2 |
| S1S 60B * 0615 | 60 | φ60 | φ62 | B1 | 6 | φ15 | φ30 | 10 | 16 | - | 2-M5 | 5 | 164.6 |
| ● S1S 60BF - 1008 | 60 | φ60 | φ62 | B1 | 10 | φ8 | φ42 | 10 | 20 | - | - | - | 321.9 |
| ● S1S 60B - 1008H | 60 | φ60 | φ62 | B1 | 10 | φ8(H※) | φ42 | 10 | 20 | - | - | - | 321.9 |
| S1S 60B - 1010 | 60 | φ60 | φ62 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 265.3 |
| S1S 60B * 1010 | 60 | φ60 | φ62 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 262.7 |
| S1S 60B * 1012 | 60 | φ60 | φ62 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 257.5 |
| S1S 60B * 1015 | 60 | φ60 | φ62 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 247.9 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキマ材が付いております。【=】: Gear with key way / with key.

【*】(アスタ)にはセットスクリーンが2個付いております。【*】: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 60 | 6 | - | 0.019 | 0.19 | 0.39 | 0.76 | 1.29 | 1.78 | 2.15 |
| 60 | 10 | - | 0.033 | 0.330 | 0.660 | 1.270 | 2.150 | 2.960 | 3.570 |
| 60 | 10 | ○ | 0.035 | 0.350 | 0.700 | 1.353 | 2.321 | 3.212 | 3.888 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

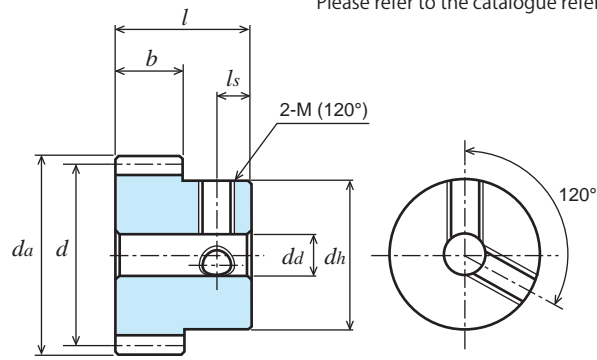
| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.003 | 0.030 | 0.070 | 0.130 | 0.230 | 0.320 | 0.400 |
| 0.015 | 0.160 | 0.331 | 0.659 | 1.165 | 1.641 | 2.006 |

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマゾ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|--|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 62A - 0610F | 62 | φ62 | φ64 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 138.5 |
| S1S 62A - 1010F | 62 | φ62 | φ64 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 230.8 |
| S1S 62B - 0610F | 62 | φ62 | φ64 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 231.0 |
| S1S 62B - 1010F | 62 | φ62 | φ64 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 378.8 |
| S1S 64A - 0610F | 64 | φ64 | φ66 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 147.8 |
| S1S 64A = 0612 | 64 | φ64 | φ66 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 145.9 |
| S1S 64A - 1010F | 64 | φ64 | φ66 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 246.4 |
| S1S 64A = 1012 | 64 | φ64 | φ66 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 243.1 |
| S1S 64A = 1015 | 64 | φ64 | φ66 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 237.8 |
| S1S 64B - 0610 | 64 | φ64 | φ66 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | - | - | 177.3 |
| S1S 64B * 0610 | 64 | φ64 | φ66 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | 2-M5 | 5 | 175.5 |
| S1S 64B * 0612 | 64 | φ64 | φ66 | B1 | 6 | φ12 | φ30 | 10 | 16 | - | 2-M5 | 5 | 171.4 |
| S1S 64B - 1010 | 64 | φ64 | φ66 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 295.9 |
| S1S 64B * 1010 | 64 | φ64 | φ66 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 293.3 |
| S1S 64B * 1012 | 64 | φ64 | φ66 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 288.1 |
| S1S 64B * 1015 | 64 | φ64 | φ66 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 278.5 |

[=] (イコール)にはキーマゾが付いております。 [=] : Gear with key way / with key.

[*] (アスタ)にはセットスクリューが2個付いております。 [*] : Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 62 | 6 | 0.020 | 0.20 | 0.41 | 0.79 | 1.33 | 1.84 | 2.22 | 100 |
| | 10 | 0.034 | 0.34 | 0.69 | 1.32 | 2.22 | 3.08 | 3.71 | |
| 64 | 6 | 0.021 | 0.21 | 0.43 | 0.81 | 1.37 | 1.91 | 2.30 | 100 |
| | 10 | 0.035 | 0.35 | 0.71 | 1.36 | 2.29 | 3.18 | 3.83 | |

KG 規格は“並幅” (軽荷重用) と“広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formula of power on page P26.

平歯車

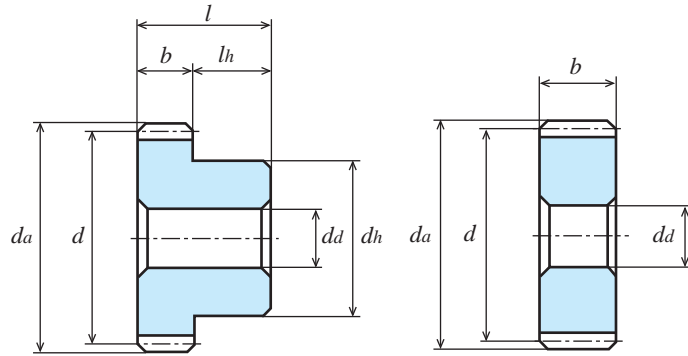
SPUR GEARS

モジュール
MODULE

1

圧力角 20° (並歯) 歯数 65 ~ 70
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 65 to Z 70

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



B1形
TYPE B1

A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | M | ls | |
| S1S 65A - 0610F | 65 | φ65 | φ67 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 152.6 |
| S1S 65A - 1010F | 65 | φ65 | φ67 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 254.3 |
| S1S 65B - 0610F | 65 | φ65 | φ67 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 245.1 |
| S1S 65B - 1010F | 65 | φ65 | φ67 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 402.3 |
| S1S 66A - 0610F | 66 | φ66 | φ68 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 157.4 |
| S1S 66A - 1010F | 66 | φ66 | φ68 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 262.4 |
| S1S 66B - 0610F | 66 | φ66 | φ68 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 249.9 |
| S1S 66B - 1010F | 66 | φ66 | φ68 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 410.4 |
| S1S 68A - 0610F | 68 | φ68 | φ70 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 167.4 |
| S1S 68A - 1010F | 68 | φ68 | φ70 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 278.9 |
| S1S 68B - 0610F | 68 | φ68 | φ70 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 259.8 |
| S1S 68B - 1010F | 68 | φ68 | φ70 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 426.9 |
| S1S 70A - 0610F | 70 | φ70 | φ72 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 177.6 |
| S1S 70A - 1010F | 70 | φ70 | φ72 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 295.9 |
| S1S 70B - 0610F | 70 | φ70 | φ72 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 270.0 |
| S1S 70B - 1010F | 70 | φ70 | φ72 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 442.9 |
| S1S 70BF - 1010 | 70 | φ70 | φ72 | B1 | 10 | φ10 | φ55 | 10 | 20 | - | - | - | 442.9 |
| S1S 70B - 1010H | 70 | φ70 | φ72 | B1 | 10 | φ10(H※) | φ55 | 10 | 20 | - | - | - | 442.9 |

●の商品は新商品です。Products with ● marks are new item.

■の商品は仕様変更商品です。ご購入の際は寸法にご注意ください。

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key.

Products with ■ marks are the changed specification. Beware of each dimension when choosing this product.

【*】(アスタ)にはセットスクリューが2個付いております。

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 65 | 6 | - | 0.021 | 0.21 | 0.43 | 0.83 | 1.39 | 1.94 | 2.34 |
| 65 | 10 | - | 0.036 | 0.36 | 0.73 | 1.38 | 2.32 | 3.23 | 3.90 |
| 66 | 6 | - | 0.022 | 0.22 | 0.44 | 0.84 | 1.41 | 1.97 | 2.38 |
| 66 | 10 | - | 0.037 | 0.37 | 0.74 | 1.40 | 2.35 | 3.28 | 3.96 |
| 68 | 6 | - | 0.023 | 0.23 | 0.46 | 0.86 | 1.44 | 2.03 | 2.45 |
| 68 | 10 | - | 0.038 | 0.38 | 0.77 | 1.44 | 2.41 | 3.38 | 4.09 |
| 70 | 6 | - | 0.023 | 0.23 | 0.47 | 0.94 | 1.48 | 2.09 | 2.53 |
| 70 | 10 | - | 0.040 | 0.400 | 0.790 | 1.480 | 2.460 | 3.470 | 4.190 |
| 70 | 10 | ○ | 0.042 | 0.420 | 0.840 | 1.579 | 2.658 | 3.770 | 4.618 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

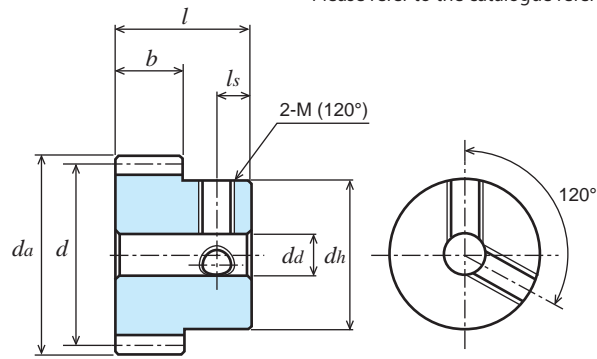
| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.005 | 0.050 | 0.090 | 0.170 | 0.300 | 0.440 | 0.550 |
| 0.020 | 0.222 | 0.457 | 0.886 | 1.537 | 2.219 | 2.745 |

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter dd(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 72A - 0610F | 72 | φ72 | φ74 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 188.1 |
| S1S 72A = 0612 | 72 | φ72 | φ74 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 186.1 |
| S1S 72A - 1010F | 72 | φ72 | φ74 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 313.4 |
| S1S 72A = 1012 | 72 | φ72 | φ74 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 310.2 |
| S1S 72A = 1015 | 72 | φ72 | φ74 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 304.8 |
| S1S 72B - 0610 | 72 | φ72 | φ74 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | - | - | 217.6 |
| S1S 72B * 0610 | 72 | φ72 | φ74 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | 2-M5 | 5 | 215.7 |
| S1S 72B * 0612 | 72 | φ72 | φ74 | B1 | 6 | φ12 | φ30 | 10 | 16 | - | 2-M5 | 5 | 211.6 |
| S1S 72B - 1010 | 72 | φ72 | φ74 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | 363.0 |
| S1S 72B * 1010 | 72 | φ72 | φ74 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | 2-M5 | 5 | 360.4 |
| S1S 72B * 1012 | 72 | φ72 | φ74 | B1 | 10 | φ12 | φ30 | 10 | 20 | - | 2-M5 | 5 | 355.2 |
| S1S 72B * 1015 | 72 | φ72 | φ74 | B1 | 10 | φ15 | φ30 | 10 | 20 | - | 2-M5 | 5 | 345.6 |
| S1S 75A - 0610F | 75 | φ75 | φ77 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 204.4 |
| S1S 75A - 1010F | 75 | φ75 | φ77 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 340.6 |
| S1S 75B - 0610F | 75 | φ75 | φ77 | B1 | 6 | φ10 | φ40 | 10 | 16 | - | - | - | 296.9 |
| S1S 75B - 1010F | 75 | φ75 | φ77 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 488.6 |

[=] (イコール)にはキー材が付いております。 [=] : Gear with key way / with key.

[*] (アスタ)にはセットスクリューが2個付いております。 [*] : Gear with two threaded holes / with two set screws.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min | |
|---------|---------|---|------|------|------|------|-------|-------|---|-------|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | | |
| 72 | 6 | 0.024 | 0.24 | 0.49 | 0.91 | 1.52 | 2.15 | 2.60 | 100 | 22.91 |
| 72 | 10 | 0.041 | 0.41 | 0.82 | 1.53 | 2.53 | 3.59 | 4.34 | 100 | 39.15 |
| 75 | 6 | 0.025 | 0.25 | 0.51 | 0.95 | 1.58 | 2.24 | 2.72 | 100 | 23.87 |
| 75 | 10 | 0.043 | 0.43 | 0.86 | 1.59 | 2.64 | 3.74 | 4.53 | 100 | 41.06 |

KG 規格は (JIS 1721) “並幅” (軽荷重用) と “広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formula of power on page P26.

平歯車 SPUR GEARS

モジュール
MODULE

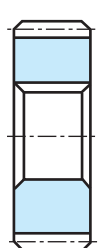
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圧力角 20° (並歯) 歯数 80
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 80

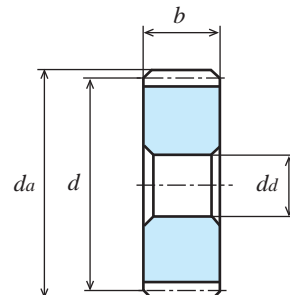
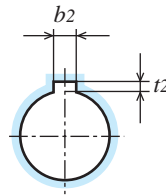
JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が1.6倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



A1形
TYPE A1



A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 80A - 0610F | 80 | φ80 | φ82 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 233.1 |
| S1S 80A = 0612 | 80 | φ80 | φ82 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 231.1 |
| S1S 80A = 0615 | 80 | φ80 | φ82 | A1 | 6 | φ15 | - | - | 6 | 5 × 2.3 | - | - | 227.9 |
| S1S 80A - 1010F | 80 | φ80 | φ82 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 388.4 |
| S1S 80A = 1010 | 80 | φ80 | φ82 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 388.1 |
| S1S 80A = 1012 | 80 | φ80 | φ82 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 385.1 |
| S1S 80A = 1015 | 80 | φ80 | φ82 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 379.8 |
| S1S 80A = 1016 | 80 | φ80 | φ82 | A1 | 10 | φ16 | - | - | 10 | 5 × 2.3 | - | - | 377.9 |
| S1S 80B - 0610 | 80 | φ80 | φ82 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | - | - | 282.6 |
| S1S 80B * 0610 | 80 | φ80 | φ82 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | 2-M5 | 5 | 279.9 |
| S1S 80B * 0612 | 80 | φ80 | φ82 | B1 | 6 | φ12 | φ30 | 10 | 16 | - | 2-M5 | 5 | 275.9 |
| S1S 80B * 0615 | 80 | φ80 | φ82 | B1 | 6 | φ15 | φ30 | 10 | 16 | - | 2-M5 | 5 | 268.3 |
| S1S 80BF - 1010 | 80 | φ80 | φ82 | B1 | 10 | φ10 | φ60 | 10 | 20 | - | - | - | 603.1 |
| S1S 80B - 1010H | 80 | φ80 | φ82 | B1 | 10 | φ10(H※) | φ60 | 10 | 20 | - | - | - | 603.1 |
| S1S 80B - 1010 | 80 | φ80 | φ82 | B1 | 10 | φ10 | φ32 | 10 | 20 | - | - | - | 445.7 |
| S1S 80B * 1010 | 80 | φ80 | φ82 | B1 | 10 | φ10 | φ32 | 10 | 20 | - | 2-M5 | 5 | 442.8 |
| S1S 80B * 1012 | 80 | φ80 | φ82 | B1 | 10 | φ12 | φ32 | 10 | 20 | - | 2-M5 | 5 | 437.6 |
| S1S 80B * 1015 | 80 | φ80 | φ82 | B1 | 10 | φ15 | φ32 | 10 | 20 | - | 2-M5 | 5 | 428.0 |
| S1S 80B * 1016 | 80 | φ80 | φ82 | B1 | 10 | φ16 | φ32 | 10 | 20 | - | 2-M5 | 5 | 424.3 |

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Products with ■ marks are the changed specification.
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[=] (イコール)にはキー材が付いております。 [=]: Gear with key way / with key.

[*] (アスタ)にはセットスクリーが2個付いております。 [*]: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 80 | 6 | - | 0.027 | 0.27 | 0.55 | 1.01 | 1.69 | 2.39 | 2.90 |
| 80 | 10 | - | 0.046 | 0.460 | 0.920 | 1.680 | 2.810 | 3.960 | 4.810 |
| 80 | 10 | ○ | 0.049 | 0.490 | 0.980 | 1.795 | 3.043 | 4.313 | 5.392 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。 Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 0.006 | - | - | - | - | - | - |
| 0.006 | 0.060 | 0.120 | 0.220 | 0.390 | 0.580 | 0.730 |
| 0.026 | 0.293 | 0.604 | 1.141 | 1.993 | 2.876 | 3.631 |

平歯車

SPUR GEARS

モジュール
MODULE

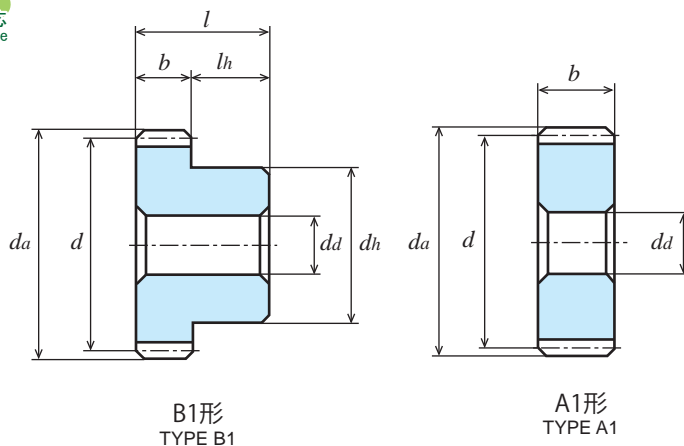
1

圧力角 20° (並歯) 歯数 84 ~ 96
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 84 to Z 96

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | M | ls | |
| S1S 84A - 0610F | 84 | φ84 | φ86 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 257.3 |
| S1S 84A - 1010F | 84 | φ84 | φ86 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 428.9 |
| S1S 84B - 0610F | 84 | φ84 | φ86 | B1 | 6 | φ10 | φ50 | 10 | 16 | - | - | - | 405.3 |
| S1S 84B - 1010F | 84 | φ84 | φ86 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 576.8 |
| S1S 85A - 0610F | 85 | φ85 | φ87 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 263.6 |
| S1S 85A - 1010F | 85 | φ85 | φ87 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 439.3 |
| S1S 85B - 0610F | 85 | φ85 | φ87 | B1 | 6 | φ10 | φ50 | 10 | 16 | - | - | - | 411.5 |
| S1S 85B - 1010F | 85 | φ85 | φ87 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 587.3 |
| S1S 90A - 0610F | 90 | φ90 | φ92 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 295.9 |
| S1S 90A - 1010F | 90 | φ90 | φ92 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 493.2 |
| S1S 90B - 0610F | 90 | φ90 | φ92 | B1 | 6 | φ10 | φ50 | 10 | 16 | - | - | - | 443.9 |
| S1S 90B - 1010F | 90 | φ90 | φ92 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 641.2 |
| ● S1S 90BF - 1010 | 90 | φ90 | φ92 | B1 | 10 | φ10 | φ65 | 10 | 20 | - | - | - | 746.3 |
| ■ S1S 90B - 1010H | 90 | φ90 | φ92 | B1 | 10 | φ10(H※) | φ65 | 10 | 20 | - | - | - | 746.3 |
| S1S 96A - 0610F | 96 | φ96 | φ98 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 337.2 |
| S1S 96A - 1010F | 96 | φ96 | φ98 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 562.0 |
| S1S 96B - 0610F | 96 | φ96 | φ98 | B1 | 6 | φ10 | φ50 | 10 | 16 | - | - | - | 485.2 |
| S1S 96B - 1010F | 96 | φ96 | φ98 | B1 | 10 | φ10 | φ50 | 10 | 20 | - | - | - | 710.0 |

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【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key.

Products with ■ marks are the changed specification.

【*】(アスタ)にはセットスクリューが2個付いております。

Beware of each dimension when choosing this product.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 84 | 6 | | 0.029 | 0.29 | 0.59 | 1.06 | 1.78 | 2.51 | 3.04 |
| 84 | 10 | | 0.049 | 0.49 | 0.98 | 1.76 | 2.96 | 4.19 | 5.07 |
| 85 | 6 | | 0.029 | 0.29 | 0.59 | 1.07 | 1.80 | 2.54 | 3.08 |
| 85 | 10 | | 0.049 | 0.49 | 0.99 | 1.78 | 3.00 | 4.24 | 5.13 |
| 90 | 6 | | 0.031 | 0.31 | 0.63 | 1.12 | 1.90 | 2.69 | 3.26 |
| 90 | 10 | | 0.053 | 0.530 | 1.060 | 1.870 | 3.160 | 4.460 | 5.400 |
| 90 | 10 | ○ | 0.056 | 0.560 | 1.120 | 1.999 | 3.427 | 4.929 | 6.162 |
| 96 | 6 | | 0.034 | 0.34 | 0.68 | 1.19 | 2.03 | 2.87 | 3.47 |
| 96 | 10 | | 0.057 | 0.57 | 1.14 | 1.99 | 3.39 | 4.79 | 5.78 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.008 | 0.080 | 0.160 | 0.280 | 0.500 | 0.740 | 0.930 |
| 0.034 | 0.375 | 0.773 | 1.423 | 2.514 | 3.681 | 4.647 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

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平歯車 SPUR GEARS

モジュール
MODULE

1

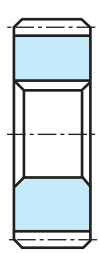
圧力角 20° (並歯) 歯数 100

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 100

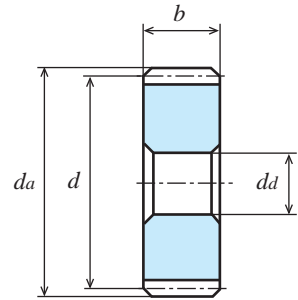
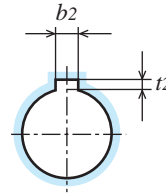
JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が1.6倍になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



A1形
TYPE A1



A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051)
Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 100A - 0610F | 100 | φ100 | φ102 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 366.2 |
| S1S 100A = 0612 | 100 | φ100 | φ102 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 364.3 |
| S1S 100A = 0615 | 100 | φ100 | φ102 | A1 | 6 | φ15 | - | - | 6 | 5 × 2.3 | - | - | 361.1 |
| S1S 100A - 1010F | 100 | φ100 | φ102 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 610.4 |
| S1S 100A = 1010 | 100 | φ100 | φ102 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 610.0 |
| S1S 100A = 1012 | 100 | φ100 | φ102 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 607.1 |
| S1S 100A = 1015 | 100 | φ100 | φ102 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 601.8 |
| S1S 100A = 1016 | 100 | φ100 | φ102 | A1 | 10 | φ16 | - | - | 10 | 5 × 2.3 | - | - | 599.9 |
| S1S 100A = 1018 | 100 | φ100 | φ102 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | 595.2 |
| S1S 100B - 0610 | 100 | φ100 | φ102 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | - | - | 415.8 |
| S1S 100B * 0610 | 100 | φ100 | φ102 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | 2-M5 | 5 | 413.2 |
| S1S 100B * 0612 | 100 | φ100 | φ102 | B1 | 6 | φ12 | φ30 | 10 | 16 | - | 2-M5 | 5 | 409.1 |
| S1S 100B * 0615 | 100 | φ100 | φ102 | B1 | 6 | φ15 | φ30 | 10 | 16 | - | 2-M5 | 5 | 401.5 |
| S1S 100BF - 1010 | 100 | φ100 | φ102 | B1 | 10 | φ10 | φ70 | 10 | 20 | - | - | - | 904.9 |
| S1S 100B - 1010H | 100 | φ100 | φ102 | B1 | 10 | φ10(H※) | φ70 | 10 | 20 | - | - | - | 904.9 |
| S1S 100B - 1012 | 100 | φ100 | φ102 | B1 | 10 | φ12 | φ36 | 10 | 20 | - | - | - | 679.1 |
| S1S 100B * 1012 | 100 | φ100 | φ102 | B1 | 10 | φ12 | φ36 | 10 | 20 | - | 2-M5 | 5 | 676.0 |
| S1S 100B * 1015 | 100 | φ100 | φ102 | B1 | 10 | φ15 | φ36 | 10 | 20 | - | 2-M5 | 5 | 666.4 |
| S1S 100B * 1016 | 100 | φ100 | φ102 | B1 | 10 | φ16 | φ36 | 10 | 20 | - | 2-M5 | 5 | 662.7 |
| S1S 100B * 1018 | 100 | φ100 | φ102 | B1 | 10 | φ18 | φ36 | 10 | 20 | - | 2-M5 | 5 | 654.6 |

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カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 100 | 6 | - | 0.036 | 0.36 | 0.71 | 1.23 | 2.11 | 2.99 | 3.61 |
| 100 | 10 | - | 0.060 | 0.600 | 1.180 | 2.040 | 3.500 | 4.950 | 5.970 |
| 100 | 10 | ○ | 0.063 | 0.631 | 1.254 | 2.196 | 3.804 | 5.552 | 6.940 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.010 | 0.100 | 0.190 | 0.340 | 0.620 | 0.930 | 1.160 |
| 0.042 | 0.468 | 0.958 | 1.730 | 3.090 | 4.590 | 5.794 |

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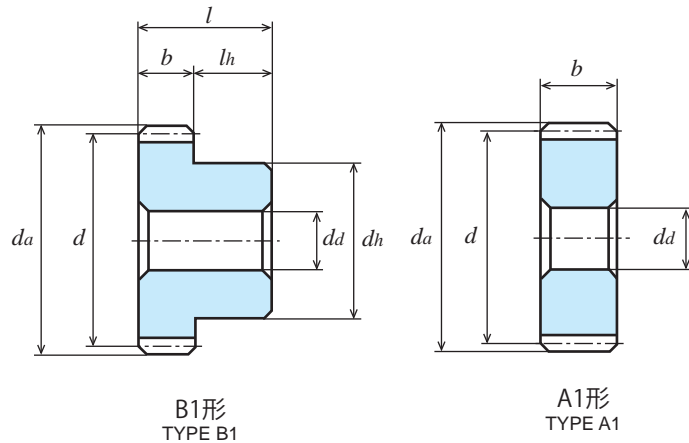
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JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず “フルネームで商品記号” を明記してください。
Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|----------------------|
| | | | | | | | | | | | M | ls | |
| S1S 105A - 0610F | 105 | φ105 | φ107 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 404.1 |
| S1S 105A - 1010F | 105 | φ105 | φ107 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 673.6 |
| S1S 105B - 0610F | 105 | φ105 | φ107 | B1 | 6 | φ10 | φ50 | 10 | 16 | - | - | - | 552.1 |
| S1S 105B - 1012F | 105 | φ105 | φ107 | B1 | 10 | φ12 | φ50 | 10 | 20 | - | - | - | 816.1 |
| S1S 110A - 0610F | 110 | φ110 | φ112 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 443.9 |
| S1S 110A - 1010F | 110 | φ110 | φ112 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 739.8 |
| S1S 110B - 0610F | 110 | φ110 | φ112 | B1 | 6 | φ10 | φ50 | 10 | 16 | - | - | - | 591.9 |
| S1S 110B - 1012F | 110 | φ110 | φ112 | B1 | 10 | φ12 | φ50 | 10 | 20 | - | - | - | 882.4 |
| S1S 115A - 0610F | 115 | φ115 | φ117 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 485.5 |
| S1S 115A - 1010F | 115 | φ115 | φ117 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 809.2 |
| S1S 115B - 0610F | 115 | φ115 | φ117 | B1 | 6 | φ10 | φ50 | 10 | 16 | - | - | - | 633.5 |
| S1S 115B - 1012F | 115 | φ115 | φ117 | B1 | 10 | φ12 | φ50 | 10 | 20 | - | - | - | 951.7 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

T (N · m)

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 | |
| 105 | 6 | 0.038 | 0.38 | 0.74 | 1.28 | 2.22 | 3.14 | 3.80 | 36.28 | |
| 105 | 10 | 0.063 | 0.63 | 1.24 | 2.14 | 3.70 | 5.23 | 6.33 | 60.16 | |
| 110 | 6 | 0.040 | 0.40 | 0.78 | 1.34 | 2.32 | 3.28 | 4.00 | 38.19 | |
| 110 | 10 | 0.066 | 0.66 | 1.30 | 2.23 | 3.87 | 5.47 | 6.67 | 63.02 | |
| 115 | 6 | 0.042 | 0.42 | 0.81 | 1.39 | 2.42 | 3.42 | 4.21 | 40.10 | |
| 115 | 10 | 0.070 | 0.70 | 1.36 | 2.31 | 4.03 | 5.71 | 7.01 | 66.84 | |

KG 規格は “並幅” (軽荷重用) と “広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

1

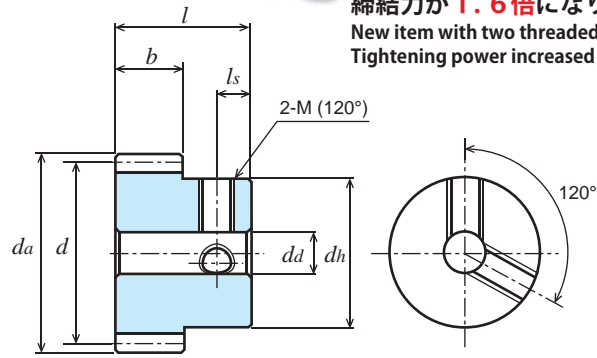
圧力角 20° (並歯) 歯数 120

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 120

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New **ねじを2箇所 (120°配) にしました。**
締結力が**1.6倍**になりました。
New item with two threaded holes (120°)
Tightening power increased by 1.6 times.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)
Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キ み ぞ Key Way b ₂ × l ₂ | ねじ Set Screw | | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|--|-----------------|----|----------------------|
| | | | | | | | | | | | 2-M(120°) | ls | |
| S1S 120A - 0610F | 120 | φ120 | φ122 | A1 | 6 | φ10 | - | - | 6 | - | - | - | 529.0 |
| S1S 120A = 0612 | 120 | φ120 | φ122 | A1 | 6 | φ12 | - | - | 6 | 4 × 1.8 | - | - | 527.0 |
| S1S 120A = 0615 | 120 | φ120 | φ122 | A1 | 6 | φ15 | - | - | 6 | 5 × 2.3 | - | - | 523.8 |
| S1S 120A = 0616 | 120 | φ120 | φ122 | A1 | 6 | φ16 | - | - | 6 | 5 × 2.3 | - | - | 522.7 |
| S1S 120A - 1010F | 120 | φ120 | φ122 | A1 | 10 | φ10 | - | - | 10 | - | - | - | 881.6 |
| S1S 120A = 1010 | 120 | φ120 | φ122 | A1 | 10 | φ10 | - | - | 10 | 3 × 1.4 | - | - | 881.3 |
| S1S 120A = 1012 | 120 | φ120 | φ122 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | 878.4 |
| S1S 120A = 1015 | 120 | φ120 | φ122 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | 873.0 |
| S1S 120A = 1016 | 120 | φ120 | φ122 | A1 | 10 | φ16 | - | - | 10 | 5 × 2.3 | - | - | 871.1 |
| S1S 120A = 1018 | 120 | φ120 | φ122 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | 866.5 |
| S1S 120B - 0610 | 120 | φ120 | φ122 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | - | - | 578.7 |
| S1S 120B * 0610 | 120 | φ120 | φ122 | B1 | 6 | φ10 | φ30 | 10 | 16 | - | 2-M5 | 5 | 576.1 |
| S1S 120B * 0612 | 120 | φ120 | φ122 | B1 | 6 | φ12 | φ30 | 10 | 16 | - | 2-M5 | 5 | 572.0 |
| S1S 120B * 0615 | 120 | φ120 | φ122 | B1 | 6 | φ15 | φ30 | 10 | 16 | - | 2-M5 | 5 | 564.4 |
| S1S 120BF - 1010 | 120 | φ120 | φ122 | B1 | 10 | φ10 | φ90 | 10 | 20 | - | - | - | 1373.2 |
| S1S 120B - 1010H | 120 | φ120 | φ122 | B1 | 10 | φ10(H※) | φ90 | 10 | 20 | - | - | - | 1373.2 |
| S1S 120B - 1012 | 120 | φ120 | φ122 | B1 | 10 | φ12 | φ36 | 10 | 20 | - | - | - | 950.6 |
| S1S 120B * 1012 | 120 | φ120 | φ122 | B1 | 10 | φ12 | φ36 | 10 | 20 | - | 2-M5 | 5 | 947.4 |
| S1S 120B * 1015 | 120 | φ120 | φ122 | B1 | 10 | φ15 | φ36 | 10 | 20 | - | 2-M5 | 5 | 937.8 |
| S1S 120B * 1016 | 120 | φ120 | φ122 | B1 | 10 | φ16 | φ36 | 10 | 20 | - | 2-M5 | 5 | 934.1 |
| S1S 120B * 1018 | 120 | φ120 | φ122 | B1 | 10 | φ18 | φ36 | 10 | 20 | - | 2-M5 | 5 | 926.0 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key.

【*】(アスタ)にはセットスクリーが2個付いております。【*】: Gear with two threaded holes / with two set screws.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 120 | 6 | - | 0.044 | 0.44 | 0.85 | 1.43 | 2.52 | 3.56 | 4.41 |
| 120 | 10 | - | 0.073 | 0.730 | 1.400 | 2.380 | 4.160 | 5.890 | 7.290 |
| 120 | 10 | ○ | 0.077 | 0.773 | 1.494 | 2.563 | 4.535 | 6.803 | 8.504 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formula of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.014 | 0.140 | 0.280 | 0.480 | 0.910 | 1.360 | 1.740 |
| 0.062 | 0.685 | 1.365 | 2.415 | 4.405 | 6.726 | 8.490 |

Memo

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INTERNAL GEARS

歯ラック
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ラック
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へりかき・スクリューギヤ
HELICAL GEARS AND SCREW GEARS

ワーム・ワームホイール
WORMS AND WORM WHEELS

かみ歯
BEVEL GEARS

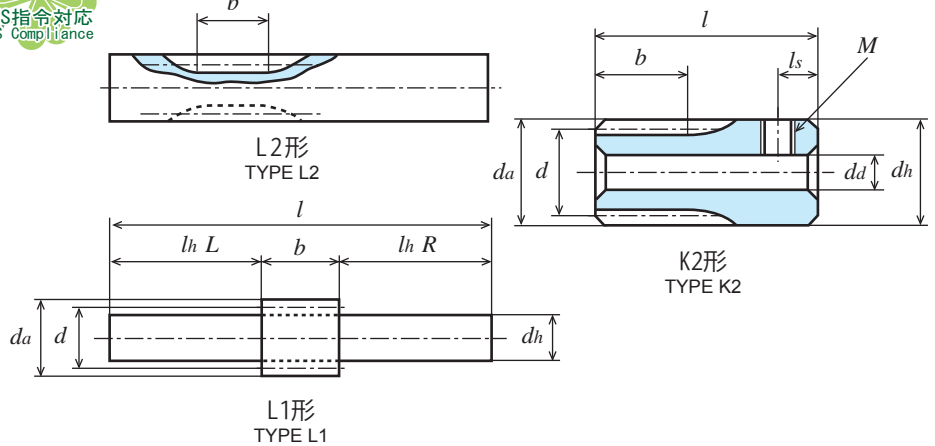
sprockets
sprockets

技術資料
REFERENCE DATA

平歯車 SPUR GEARS

モジュール **1.25** 圧力角 20° (並歯) 歯数 8 ~ 17
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 8 to Z 17

JIS B 1702-1 (ISO) 8級~9級
 System of accuracy: JIS B 1702-1(ISO) class 8-9



S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45) * mark has been profile shifted gears. (Rack shift coefficient $x = 0.5$)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $d_a(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|--------------------------------|-----------|-------------------------|----------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| S1.25S 8L - 1507 | 8 | * | $\phi 13.3$ | L1 | 15 | - | $\phi 7 (h9)$ | L20 R40 | 75 | 29.8 |
| S1.25S 8L - 1513F | 8 | * | $\phi 13.3$ | L2 | 15 | - | $\phi 13.3$ | L20 R40 | 75 | 77.1 |
| S1.25S 9L - 1514F | 9 | * | $\phi 14.56$ | L2 | 15 | - | $\phi 14.56$ | L20 R40 | 75 | 92.9 |
| S1.25S 10L - 1510 | 10 | * | $\phi 15.83$ | L1 | 15 | - | $\phi 10 (h9)$ | L20 R40 | 75 | 54.5 |
| S1.25S 10L - 1515F | 10 | * | $\phi 15.83$ | L2 | 15 | - | $\phi 15.83$ | L20 R40 | 75 | 110.2 |
| S1.25S 11L - 1517F | 11 | * | $\phi 17.1$ | L2 | 15 | - | $\phi 17.1$ | L20 R40 | 75 | 129.0 |
| S1.25S 12K - 1508 | 12 | $\phi 15$ | $\phi 17.5$ | K2 | 15 | $\phi 8(H8)$ | $\phi 17.5$ | 22.5 | 37.5 | 48.5 |
| S1.25S 13K - 1508 | 13 | $\phi 16.25$ | $\phi 18.75$ | K2 | 15 | $\phi 8(H8)$ | $\phi 18.75$ | 22.5 | 37.5 | 58.4 |
| S1.25S 14A - 1506 | 14 | $\phi 17.5$ | $\phi 20$ | A1 | 15 | $\phi 6$ | - | - | 15 | 25.0 |
| S1.25S 14K - 1508 | 14 | $\phi 17.5$ | $\phi 20$ | K2 | 15 | $\phi 8(H8)$ | $\phi 20$ | 22.5 | 37.5 | 69.0 |
| S1.25S 15A - 1506 | 15 | $\phi 18.75$ | $\phi 21.25$ | A1 | 15 | $\phi 6$ | - | - | 15 | 29.2 |
| S1.25S 15K - 1508 | 15 | $\phi 18.75$ | $\phi 21.25$ | K2 | 15 | $\phi 8(H8)$ | $\phi 21.25$ | 22.5 | 37.5 | 80.4 |
| S1.25S 16A - 1506 | 16 | $\phi 20$ | $\phi 22.5$ | A1 | 15 | $\phi 6$ | - | - | 15 | 33.7 |
| S1.25S 16K - 1508 | 16 | $\phi 20$ | $\phi 22.5$ | K2 | 15 | $\phi 8(H8)$ | $\phi 22.5$ | 22.5 | 37.5 | 92.4 |
| S1.25S 17A - 1506 | 17 | $\phi 21.25$ | $\phi 23.75$ | A1 | 15 | $\phi 6$ | - | - | 15 | 38.4 |
| S1.25S 17K - 1508 | 17 | $\phi 21.25$ | $\phi 23.75$ | K2 | 15 | $\phi 8(H8)$ | $\phi 23.75$ | 22.5 | 37.5 | 105.2 |

許容伝達動力表 曲げ強さ (W)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|--------|--------|--------|----------|----------|----------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 8 | 15 | 6.28 | 62.78 | 125.57 | 251.14 | 502.27 | 753.41 | 941.76 | 5.99 |
| 9 | 15 | 7.45 | 74.50 | 149.01 | 298.02 | 596.04 | 894.06 | 1,117.57 | 7.11 |
| 10 | 15 | 8.66 | 86.57 | 173.14 | 346.28 | 692.56 | 1,038.85 | 1,286.84 | 8.26 |
| 11 | 15 | 9.89 | 98.90 | 197.79 | 395.59 | 791.18 | 1,186.76 | 1,448.70 | 9.44 |
| 12 | 15 | 7.96 | 79.58 | 159.17 | 318.33 | 636.66 | 954.99 | 1,162.68 | 7.59 |
| 13 | 15 | 9.15 | 91.50 | 182.99 | 365.98 | 731.97 | 1,094.50 | 1,317.82 | 8.73 |
| 14 | 15 | 10.37 | 103.74 | 207.48 | 414.96 | 829.93 | 1,226.57 | 1,473.36 | 9.90 |
| 15 | 15 | 11.63 | 116.26 | 232.52 | 465.04 | 930.08 | 1,358.82 | 1,628.45 | 11.10 |
| 16 | 15 | 12.90 | 129.02 | 258.04 | 516.09 | 1,032.18 | 1,490.87 | 1,782.70 | 12.32 |
| 17 | 15 | 14.20 | 141.97 | 283.95 | 567.90 | 1,135.79 | 1,622.13 | 1,935.40 | 13.55 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

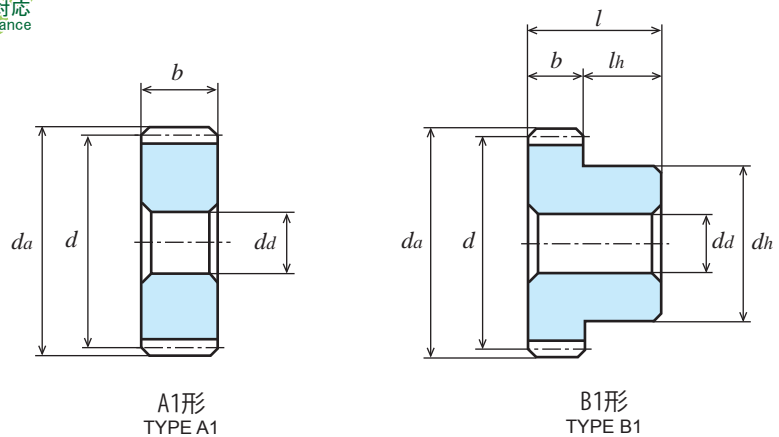
SPUR GEARS

モジュール 1.25 圧力角 20° (並歯) 歯数 18 ~ 22
 MODULE 1.25 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 18 to Z 22

JIS B 1702-1 (ISO) 8級
 System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| S1.25S 18A - 1006F | 18 | φ22.5 | φ25 | A1 | 10 | φ 6 | - | - | 10 | 29.0 |
| S1.25S 18A - 1508F | 18 | φ22.5 | φ25 | A1 | 15 | φ 8 | - | - | 15 | 40.9 |
| S1.25S 18B - 1006F | 18 | φ22.5 | φ25 | B1 | 10 | φ 6(H8) | φ16 | 15 | 25 | 48.5 |
| S1.25S 18B - 1508F | 18 | φ22.5 | φ25 | B1 | 15 | φ 8(H8) | φ16 | 15 | 30 | 58.7 |
| S1.25S 19A - 1006F | 19 | φ23.75 | φ26.25 | A1 | 10 | φ 6 | - | - | 10 | 32.6 |
| S1.25S 19A - 1508F | 19 | φ23.75 | φ26.25 | A1 | 15 | φ 8 | - | - | 15 | 46.3 |
| S1.25S 19B - 1006F | 19 | φ23.75 | φ26.25 | B1 | 10 | φ 6(H8) | φ16 | 15 | 25 | 52.9 |
| S1.25S 19B - 1508F | 19 | φ23.75 | φ26.25 | B1 | 15 | φ 8(H8) | φ16 | 15 | 30 | 64.0 |
| S1.25S 20A - 1008F | 20 | φ25 | φ27.5 | A1 | 10 | φ 8 | - | - | 10 | 34.6 |
| S1.25S 20A - 1510F | 20 | φ25 | φ27.5 | A1 | 15 | φ10 | - | - | 15 | 48.6 |
| S1.25S 20B - 1008F | 20 | φ25 | φ27.5 | B1 | 10 | φ 8(H8) | φ20 | 15 | 25 | 65.7 |
| S1.25S 20B - 1510F | 20 | φ25 | φ27.5 | B1 | 15 | φ10(H8) | φ20 | 15 | 30 | 76.3 |
| S1.25S 21A - 1008F | 21 | φ26.25 | φ28.75 | A1 | 10 | φ 8 | - | - | 10 | 38.5 |
| S1.25S 21A - 1510F | 21 | φ26.25 | φ28.75 | A1 | 15 | φ10 | - | - | 15 | 54.5 |
| S1.25S 21B - 1008F | 21 | φ26.25 | φ28.75 | B1 | 10 | φ 8(H8) | φ20 | 15 | 25 | 69.6 |
| S1.25S 21B - 1510F | 21 | φ26.25 | φ28.75 | B1 | 15 | φ10(H8) | φ20 | 15 | 30 | 82.2 |
| S1.25S 22A - 1008F | 22 | φ27.5 | φ30 | A1 | 10 | φ 8 | - | - | 10 | 42.7 |
| S1.25S 22A - 1510F | 22 | φ27.5 | φ30 | A1 | 15 | φ10 | - | - | 15 | 60.7 |
| S1.25S 22B - 1008F | 22 | φ27.5 | φ30 | B1 | 10 | φ 8(H8) | φ20 | 15 | 25 | 73.8 |
| S1.25S 22B - 1510F | 22 | φ27.5 | φ30 | B1 | 15 | φ10(H8) | φ20 | 15 | 30 | 88.4 |

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|--------|--------|--------|----------|----------|----------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 18 | 10 | 10.34 | 103.40 | 206.80 | 413.60 | 827.19 | 1,168.29 | 1,390.93 | 9.87 |
| 18 | 15 | 15.51 | 155.10 | 310.20 | 620.40 | 1,240.79 | 1,752.43 | 2,086.40 | 14.81 |
| 19 | 10 | 11.24 | 112.40 | 224.79 | 449.59 | 899.18 | 1,256.02 | 1,492.27 | 10.73 |
| 19 | 15 | 16.86 | 168.60 | 337.19 | 674.38 | 1,348.77 | 1,884.04 | 2,238.40 | 16.10 |
| 20 | 10 | 12.14 | 121.41 | 242.81 | 485.63 | 964.43 | 1,341.98 | 1,591.14 | 11.59 |
| 20 | 15 | 18.21 | 182.11 | 364.22 | 728.44 | 1,446.64 | 2,012.97 | 2,386.72 | 17.39 |
| 21 | 10 | 13.05 | 130.49 | 260.97 | 521.95 | 1,028.53 | 1,426.86 | 1,688.42 | 12.46 |
| 21 | 15 | 19.57 | 195.73 | 391.46 | 782.92 | 1,542.80 | 2,140.29 | 2,532.63 | 18.69 |
| 22 | 10 | 13.97 | 139.69 | 279.38 | 558.77 | 1,092.64 | 1,511.30 | 1,784.85 | 13.33 |
| 22 | 15 | 20.95 | 209.54 | 419.08 | 838.15 | 1,638.95 | 2,266.94 | 2,677.28 | 20.01 |

The above numerical values are equivalent to JGMA formulas as reference only.

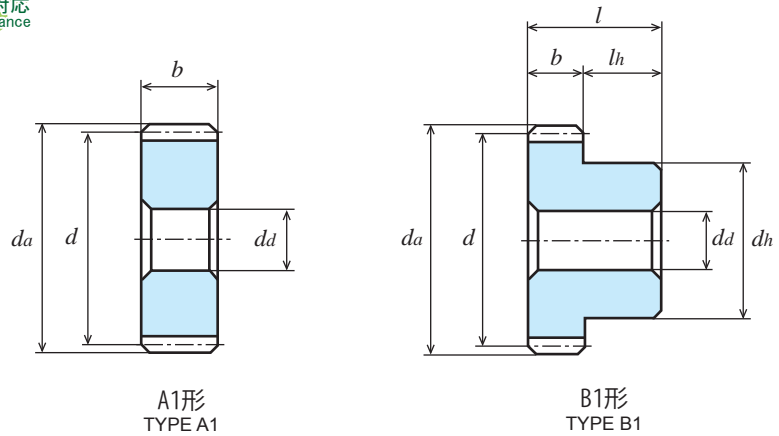
動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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平歯車 SPUR GEARS

モジュール 1.25 圧力角 20° (並歯) 歯数 23 ~ 27
 MODULE 1.25 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 23 to Z 27

JIS B 1702-1 (ISO) 8級
 System of accuracy : JIS B 1702-1(ISO) class 8



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H7)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| S1.25S 23A - 1008F | 23 | φ28.75 | φ31.25 | A1 | 10 | φ 8 | - | - | 10 | 47.0 |
| S1.25S 23A - 1510F | 23 | φ28.75 | φ31.25 | A1 | 15 | φ10 | - | - | 15 | 67.2 |
| S1.25S 23B - 1008F | 23 | φ28.75 | φ31.25 | B1 | 10 | φ 8(H8) | φ24 | 15 | 25 | 94.4 |
| S1.25S 23B - 1510F | 23 | φ28.75 | φ31.25 | B1 | 15 | φ10(H8) | φ24 | 15 | 30 | 111.2 |
| S1.25S 24A - 1008F | 24 | φ30 | φ32.5 | A1 | 10 | φ 8 | - | - | 10 | 51.5 |
| S1.25S 24A - 1510F | 24 | φ30 | φ32.5 | A1 | 15 | φ10 | - | - | 15 | 74.0 |
| S1.25S 24B - 1008F | 24 | φ30 | φ32.5 | B1 | 10 | φ 8(H8) | φ24 | 15 | 25 | 98.9 |
| S1.25S 24B - 1510F | 24 | φ30 | φ32.5 | B1 | 15 | φ10(H8) | φ24 | 15 | 30 | 118.0 |
| S1.25S 25A - 1008F | 25 | φ31.25 | φ33.75 | A1 | 10 | φ 8 | - | - | 10 | 56.3 |
| S1.25S 25A - 1510F | 25 | φ31.25 | φ33.75 | A1 | 15 | φ10 | - | - | 15 | 81.1 |
| S1.25S 25B - 1008F | 25 | φ31.25 | φ33.75 | B1 | 10 | φ 8(H8) | φ24 | 15 | 25 | 103.6 |
| S1.25S 25B - 1510F | 25 | φ31.25 | φ33.75 | B1 | 15 | φ10(H8) | φ24 | 15 | 30 | 125.1 |
| S1.25S 26A - 1008F | 26 | φ32.5 | φ35 | A1 | 10 | φ 8 | - | - | 10 | 61.2 |
| S1.25S 26A - 1510F | 26 | φ32.5 | φ35 | A1 | 15 | φ10 | - | - | 15 | 88.4 |
| S1.25S 26B - 1008F | 26 | φ32.5 | φ35 | B1 | 10 | φ 8(H8) | φ28 | 15 | 25 | 127.8 |
| S1.25S 26B - 1510F | 26 | φ32.5 | φ35 | B1 | 15 | φ10(H8) | φ28 | 15 | 30 | 151.7 |
| S1.25S 27A - 1008F | 27 | φ33.75 | φ36.25 | A1 | 10 | φ 8 | - | - | 10 | 66.3 |
| S1.25S 27A - 1510F | 27 | φ33.75 | φ36.25 | A1 | 15 | φ10 | - | - | 15 | 96.1 |
| S1.25S 27B - 1008F | 27 | φ33.75 | φ36.25 | B1 | 10 | φ 8(H8) | φ28 | 15 | 25 | 132.9 |
| S1.25S 27B - 1510F | 27 | φ33.75 | φ36.25 | B1 | 15 | φ10(H8) | φ28 | 15 | 30 | 159.3 |

許容伝達動力表 曲げ強さ (W) T (N・m)

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|--------|--------|----------|----------|----------|----------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 23 | 10 | 14.90 | 148.98 | 297.96 | 595.92 | 1,156.41 | 1,594.85 | 1,879.96 | 14.22 |
| 23 | 15 | 22.35 | 223.47 | 446.94 | 893.89 | 1,734.62 | 2,392.28 | 2,819.94 | 21.34 |
| 24 | 10 | 15.83 | 158.27 | 316.55 | 633.09 | 1,219.25 | 1,676.71 | 1,972.78 | 15.11 |
| 24 | 15 | 23.74 | 237.41 | 474.82 | 949.64 | 1,828.87 | 2,515.06 | 2,959.16 | 22.67 |
| 25 | 10 | 16.77 | 167.69 | 335.38 | 670.77 | 1,282.11 | 1,758.20 | 2,064.90 | 16.01 |
| 25 | 15 | 25.15 | 251.54 | 503.07 | 1,006.15 | 1,923.16 | 2,637.29 | 3,097.35 | 24.02 |
| 26 | 10 | 17.72 | 177.18 | 354.35 | 708.70 | 1,344.52 | 1,838.70 | 2,155.62 | 16.92 |
| 26 | 15 | 26.58 | 265.76 | 531.53 | 1,063.05 | 2,016.78 | 2,758.05 | 3,233.43 | 25.37 |
| 27 | 10 | 18.67 | 186.72 | 373.44 | 746.88 | 1,406.47 | 1,918.21 | 2,244.93 | 17.83 |
| 27 | 15 | 28.01 | 280.08 | 560.16 | 1,120.31 | 2,109.71 | 2,877.31 | 3,367.39 | 26.74 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

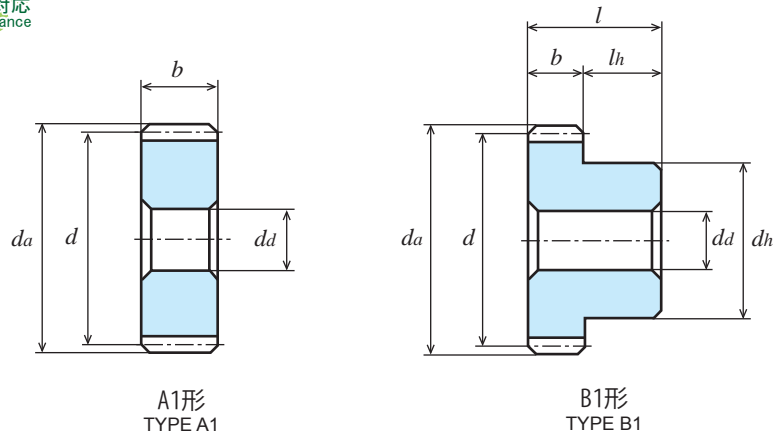
SPUR GEARS

モジュール **1.25** 圧力角 20° (並歯) 歯数 28 ~ 34
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 28 to Z 34

JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず “フルネームで商品記号” を明記してください。
 Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| S1.25S 28A - 1008F | 28 | φ35 | φ37.5 | A1 | 10 | φ 8 | - | - | 10 | 71.6 |
| S1.25S 28A - 1510F | 28 | φ35 | φ37.5 | A1 | 15 | φ10 | - | - | 15 | 104.0 |
| S1.25S 28B - 1008F | 28 | φ35 | φ37.5 | B1 | 10 | φ 8(H8) | φ28 | 15 | 25 | 138.2 |
| S1.25S 28B - 1510F | 28 | φ35 | φ37.5 | B1 | 15 | φ10(H8) | φ28 | 15 | 30 | 167.3 |
| S1.25S 29A - 1008F | 29 | φ36.25 | φ38.75 | A1 | 10 | φ 8 | - | - | 10 | 77.1 |
| S1.25S 29A - 1510F | 29 | φ36.25 | φ38.75 | A1 | 15 | φ10 | - | - | 15 | 112.3 |
| S1.25S 29B - 1008F | 29 | φ36.25 | φ38.75 | B1 | 10 | φ 8(H8) | φ28 | 15 | 25 | 143.7 |
| S1.25S 29B - 1510F | 29 | φ36.25 | φ38.75 | B1 | 15 | φ10(H8) | φ28 | 15 | 30 | 175.5 |
| S1.25S 30A - 1008F | 30 | φ37.5 | φ40 | A1 | 10 | φ 8 | - | - | 10 | 82.8 |
| S1.25S 30A - 1510F | 30 | φ37.5 | φ40 | A1 | 15 | φ10 | - | - | 15 | 120.8 |
| S1.25S 30B - 1008F | 30 | φ37.5 | φ40 | B1 | 10 | φ 8(H8) | φ30 | 15 | 25 | 160.1 |
| S1.25S 30B - 1510F | 30 | φ37.5 | φ40 | B1 | 15 | φ10(H8) | φ30 | 15 | 30 | 194.8 |
| S1.25S 32A - 0810F | 32 | φ40 | φ42.5 | A1 | 8 | φ10 | - | - | 8 | 74.0 |
| S1.25S 32A - 1312F | 32 | φ40 | φ42.5 | A1 | 13 | φ12 | - | - | 13 | 116.7 |
| S1.25S 32B - 0810F | 32 | φ40 | φ42.5 | B1 | 8 | φ10 | φ30 | 10 | 18 | 123.3 |
| S1.25S 32B - 1312F | 32 | φ40 | φ42.5 | B1 | 13 | φ12 | φ30 | 12 | 25 | 172.6 |
| S1.25S 34A - 0810F | 34 | φ42.5 | φ45 | A1 | 8 | φ10 | - | - | 8 | 84.2 |
| S1.25S 34A - 1312F | 34 | φ42.5 | φ45 | A1 | 13 | φ12 | - | - | 13 | 133.2 |
| S1.25S 34B - 0810F | 34 | φ42.5 | φ45 | B1 | 8 | φ10 | φ30 | 10 | 18 | 133.5 |
| S1.25S 34B - 1312F | 34 | φ42.5 | φ45 | B1 | 13 | φ12 | φ30 | 12 | 25 | 189.2 |

許容伝達動力表 曲げ強さ (kW) T (N・m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 28 | 10 | 0.019 | 0.19 | 0.39 | 0.78 | 1.46 | 1.99 | 2.33 | 18.14 |
| 28 | 15 | 0.029 | 0.29 | 0.58 | 1.17 | 2.20 | 2.99 | 3.49 | 27.69 |
| 29 | 10 | 0.020 | 0.20 | 0.41 | 0.82 | 1.52 | 2.07 | 2.41 | 19.09 |
| 29 | 15 | 0.030 | 0.30 | 0.61 | 1.23 | 2.29 | 3.11 | 3.62 | 28.64 |
| 30 | 10 | 0.021 | 0.21 | 0.43 | 0.86 | 1.58 | 2.14 | 2.50 | 20.05 |
| 30 | 15 | 0.032 | 0.32 | 0.64 | 1.29 | 2.38 | 3.22 | 3.75 | 30.55 |
| 32 | 8 | 0.018 | 0.18 | 0.37 | 0.75 | 1.36 | 1.83 | 2.15 | 17.18 |
| 32 | 13 | 0.030 | 0.30 | 0.61 | 1.22 | 2.21 | 2.98 | 3.50 | 28.64 |
| 34 | 8 | 0.020 | 0.20 | 0.40 | 0.81 | 1.45 | 1.95 | 2.32 | 19.09 |
| 34 | 13 | 0.033 | 0.33 | 0.66 | 1.32 | 2.37 | 3.17 | 3.77 | 31.51 |

The above numerical values are equivalent to JGMA formulas as reference only.

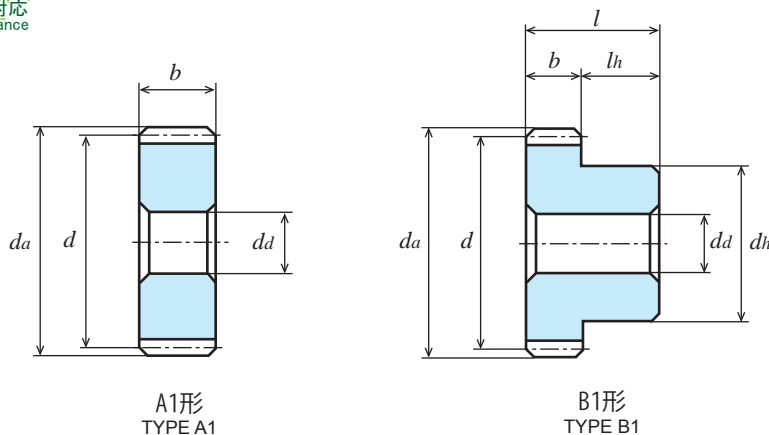
動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

SPUR GEARS

モジュール 1.25 圧力角 20° (並歯) 歯数 35 ~ 42
 MODULE 1.25 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 35 to Z 42

JIS B 1702-1 (ISO) 8級
 System of accuracy : JIS B 1702-1(ISO) class 8



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| S1.25S 35A - 0810F | 35 | φ43.75 | φ46.25 | A1 | 8 | φ10 | - | - | 8 | 89.5 |
| S1.25S 35A - 1312F | 35 | φ43.75 | φ46.25 | A1 | 13 | φ12 | - | - | 13 | 141.9 |
| S1.25S 35B - 0810F | 35 | φ43.75 | φ46.25 | B1 | 8 | φ10 | φ36 | 10 | 18 | 163.2 |
| S1.25S 35B - 1312F | 35 | φ43.75 | φ46.25 | B1 | 13 | φ12 | φ36 | 12 | 25 | 227.1 |
| S1.25S 36A - 0810F | 36 | φ45 | φ47.5 | A1 | 8 | φ10 | - | - | 8 | 95.0 |
| S1.25S 36A - 1312F | 36 | φ45 | φ47.5 | A1 | 13 | φ12 | - | - | 13 | 150.8 |
| S1.25S 36B - 0810F | 36 | φ45 | φ47.5 | B1 | 8 | φ10 | φ36 | 10 | 18 | 168.7 |
| S1.25S 36B - 1312F | 36 | φ45 | φ47.5 | B1 | 13 | φ12 | φ36 | 12 | 25 | 236.0 |
| S1.25S 38A - 0810F | 38 | φ47.5 | φ50 | A1 | 8 | φ10 | - | - | 8 | 106.4 |
| S1.25S 38A - 1312F | 38 | φ47.5 | φ50 | A1 | 13 | φ12 | - | - | 13 | 169.3 |
| S1.25S 38B - 0810F | 38 | φ47.5 | φ50 | B1 | 8 | φ10 | φ36 | 10 | 18 | 180.1 |
| S1.25S 38B - 1312F | 38 | φ47.5 | φ50 | B1 | 13 | φ12 | φ36 | 12 | 25 | 254.5 |
| S1.25S 40A - 0810F | 40 | φ50 | φ52.5 | A1 | 8 | φ10 | - | - | 8 | 118.4 |
| S1.25S 40A - 1312F | 40 | φ50 | φ52.5 | A1 | 13 | φ12 | - | - | 13 | 188.8 |
| S1.25S 40B - 0810F | 40 | φ50 | φ52.5 | B1 | 8 | φ10 | φ40 | 10 | 18 | 210.9 |
| S1.25S 40B - 1312F | 40 | φ50 | φ52.5 | B1 | 13 | φ12 | φ40 | 12 | 25 | 296.6 |
| S1.25S 42A - 0810F | 42 | φ52.5 | φ55 | A1 | 8 | φ10 | - | - | 8 | 131.0 |
| S1.25S 42A - 1312F | 42 | φ52.5 | φ55 | A1 | 13 | φ12 | - | - | 13 | 209.4 |
| S1.25S 42B - 0810F | 42 | φ52.5 | φ55 | B1 | 8 | φ10 | φ40 | 10 | 18 | 223.5 |
| S1.25S 42B - 1312F | 42 | φ52.5 | φ55 | B1 | 13 | φ12 | φ40 | 12 | 25 | 317.1 |

許容伝達動力表 曲げ強さ (kW)

T (N・m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 35 | 8 | 0.021 | 0.21 | 0.42 | 0.84 | 1.50 | 2.01 | 2.40 | 20.05 |
| 35 | 13 | 0.034 | 0.34 | 0.68 | 1.37 | 2.44 | 3.27 | 3.90 | 32.46 |
| 36 | 8 | 0.021 | 0.21 | 0.43 | 0.87 | 1.55 | 2.06 | 2.48 | 20.05 |
| 36 | 13 | 0.035 | 0.35 | 0.71 | 1.42 | 2.52 | 3.36 | 4.03 | 33.42 |
| 38 | 8 | 0.023 | 0.23 | 0.47 | 0.94 | 1.64 | 2.17 | 2.64 | 21.96 |
| 38 | 13 | 0.038 | 0.38 | 0.76 | 1.53 | 2.66 | 3.53 | 4.29 | 36.28 |
| 40 | 8 | 0.025 | 0.25 | 0.50 | 0.99 | 1.72 | 2.31 | 2.80 | 23.87 |
| 40 | 13 | 0.040 | 0.40 | 0.81 | 1.62 | 2.80 | 3.75 | 4.55 | 38.19 |
| 42 | 8 | 0.026 | 0.26 | 0.53 | 1.05 | 1.81 | 2.44 | 2.96 | 34.82 |
| 42 | 13 | 0.043 | 0.43 | 0.87 | 1.71 | 2.94 | 3.97 | 4.81 | 41.06 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion fomulas of power on page P26.

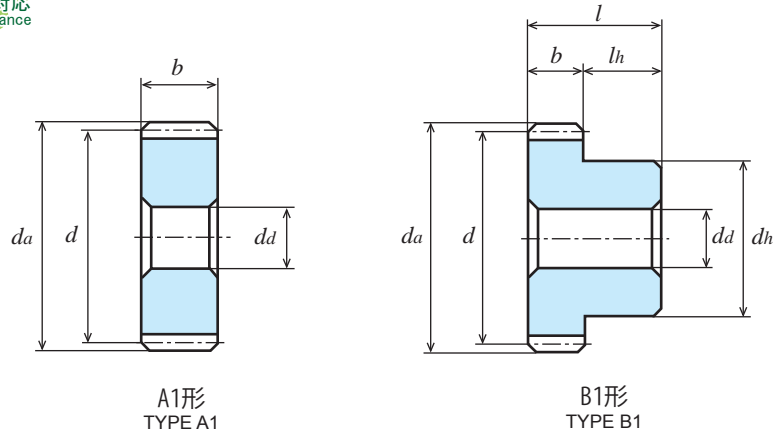
平歯車 SPUR GEARS

モジュール **1.25** 圧力角 20° (並歯) 歯数 44 ~ 50
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 44 to Z 50

JIS B 1702-1 (ISO) 8級
 System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず “フルネームで商品記号” を明記してください。
 Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| S1.25S 44A - 0810F | 44 | φ55 | φ57.5 | A1 | 8 | φ10 | - | - | 8 | 144.3 |
| S1.25S 44A - 1312F | 44 | φ55 | φ57.5 | A1 | 13 | φ12 | - | - | 13 | 230.9 |
| S1.25S 44B - 0810F | 44 | φ55 | φ57.5 | B1 | 8 | φ10 | φ40 | 10 | 18 | 236.8 |
| S1.25S 44B - 1312F | 44 | φ55 | φ57.5 | B1 | 13 | φ12 | φ40 | 12 | 25 | 338.6 |
| S1.25S 45A - 0810F | 45 | φ56.25 | φ58.75 | A1 | 8 | φ10 | - | - | 8 | 151.1 |
| S1.25S 45A - 1312F | 45 | φ56.25 | φ58.75 | A1 | 13 | φ12 | - | - | 13 | 242.1 |
| S1.25S 45B - 0810F | 45 | φ56.25 | φ58.75 | B1 | 8 | φ10 | φ40 | 10 | 18 | 243.6 |
| S1.25S 45B - 1312F | 45 | φ56.25 | φ58.75 | B1 | 13 | φ12 | φ40 | 12 | 25 | 349.8 |
| S1.25S 46A - 0810F | 46 | φ57.5 | φ60 | A1 | 8 | φ10 | - | - | 8 | 158.1 |
| S1.25S 46A - 1312F | 46 | φ57.5 | φ60 | A1 | 13 | φ12 | - | - | 13 | 253.5 |
| S1.25S 46B - 0810F | 46 | φ57.5 | φ60 | B1 | 8 | φ10 | φ40 | 10 | 18 | 250.6 |
| S1.25S 46B - 1312F | 46 | φ57.5 | φ60 | B1 | 13 | φ12 | φ40 | 12 | 25 | 361.2 |
| S1.25S 48A - 0810F | 48 | φ60 | φ62.5 | A1 | 8 | φ10 | - | - | 8 | 172.6 |
| S1.25S 48A - 1312F | 48 | φ60 | φ62.5 | A1 | 13 | φ12 | - | - | 13 | 277.0 |
| S1.25S 48B - 0810F | 48 | φ60 | φ62.5 | B1 | 8 | φ10 | φ40 | 10 | 18 | 265.1 |
| S1.25S 48B - 1312F | 48 | φ60 | φ62.5 | B1 | 13 | φ12 | φ40 | 12 | 25 | 384.7 |
| S1.25S 50A - 0812F | 50 | φ62.5 | φ65 | A1 | 8 | φ12 | - | - | 8 | 185.6 |
| S1.25S 50A - 1314F | 50 | φ62.5 | φ65 | A1 | 13 | φ14 | - | - | 13 | 297.4 |
| S1.25S 50B - 0812F | 50 | φ62.5 | φ65 | B1 | 8 | φ12 | φ45 | 10 | 18 | 301.5 |
| S1.25S 50B - 1314F | 50 | φ62.5 | φ65 | B1 | 13 | φ14 | φ45 | 12 | 25 | 432.7 |

許容伝達動力表 曲げ強さ (kW) T (N・m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 44 | 8 | 0.028 | 0.28 | 0.56 | 1.10 | 1.89 | 2.57 | 3.11 | 26.73 |
| 44 | 13 | 0.046 | 0.46 | 0.92 | 1.80 | 3.08 | 4.18 | 5.06 | 43.92 |
| 45 | 8 | 0.029 | 0.29 | 0.58 | 1.13 | 1.94 | 2.63 | 3.19 | 27.69 |
| 45 | 13 | 0.047 | 0.47 | 0.94 | 1.84 | 3.15 | 4.28 | 5.18 | 44.88 |
| 46 | 8 | 0.030 | 0.29 | 0.59 | 1.16 | 1.98 | 2.70 | 3.27 | 27.69 |
| 46 | 13 | 0.048 | 0.48 | 0.97 | 1.89 | 3.21 | 4.39 | 5.31 | 45.83 |
| 48 | 8 | 0.031 | 0.31 | 0.63 | 1.21 | 2.06 | 2.83 | 3.42 | 29.60 |
| 48 | 13 | 0.051 | 0.51 | 1.02 | 1.97 | 3.35 | 4.60 | 5.56 | 48.70 |
| 50 | 8 | 0.033 | 0.33 | 0.66 | 1.27 | 2.14 | 2.96 | 3.57 | 31.51 |
| 50 | 13 | 0.054 | 0.54 | 1.08 | 2.06 | 3.47 | 4.81 | 5.80 | 51.56 |

The above numerical values are equivalent to JGMA formulas as reference only.

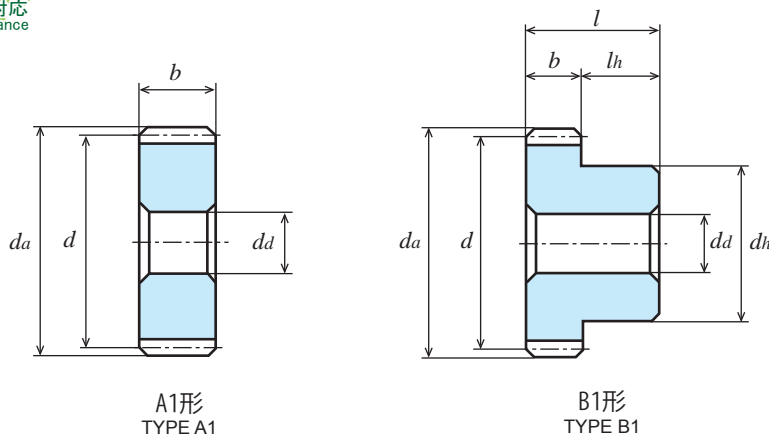
動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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平歯車 SPUR GEARS

モジュール 1.25 圧力角 20° (並歯) 歯数 52 ~ 58
MODULE 1.25 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 52 to Z 58

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|------------------------------|
| S1.25S 52A - 0812F | 52 | φ65 | φ67.5 | A1 | 8 | φ12 | - | - | 8 | 201.3 |
| S1.25S 52A - 1314F | 52 | φ65 | φ67.5 | A1 | 13 | φ14 | - | - | 13 | 322.9 |
| S1.25S 52B - 0812F | 52 | φ65 | φ67.5 | B1 | 8 | φ12 | φ45 | 10 | 18 | 317.3 |
| S1.25S 52B - 1314F | 52 | φ65 | φ67.5 | B1 | 13 | φ14 | φ45 | 12 | 25 | 458.2 |
| S1.25S 54A - 0812F | 54 | φ67.5 | φ70 | A1 | 8 | φ12 | - | - | 8 | 217.6 |
| S1.25S 54A - 1314F | 54 | φ67.5 | φ70 | A1 | 13 | φ14 | - | - | 13 | 349.5 |
| S1.25S 54B - 0812F | 54 | φ67.5 | φ70 | B1 | 8 | φ12 | φ45 | 10 | 18 | 333.6 |
| S1.25S 54B - 1314F | 54 | φ67.5 | φ70 | B1 | 13 | φ14 | φ45 | 12 | 25 | 484.8 |
| S1.25S 55A - 0812F | 55 | φ68.75 | φ71.25 | A1 | 8 | φ12 | - | - | 8 | 226.0 |
| S1.25S 55A - 1314F | 55 | φ68.75 | φ71.25 | A1 | 13 | φ14 | - | - | 13 | 363.1 |
| S1.25S 55B - 0812F | 55 | φ68.75 | φ71.25 | B1 | 8 | φ12 | φ45 | 10 | 18 | 342.1 |
| S1.25S 55B - 1314F | 55 | φ68.75 | φ71.25 | B1 | 13 | φ14 | φ45 | 12 | 25 | 498.4 |
| S1.25S 56A - 0812F | 56 | φ70 | φ72.5 | A1 | 8 | φ12 | - | - | 8 | 234.6 |
| S1.25S 56A - 1314F | 56 | φ70 | φ72.5 | A1 | 13 | φ14 | - | - | 13 | 377.0 |
| S1.25S 56B - 0812F | 56 | φ70 | φ72.5 | B1 | 8 | φ12 | φ45 | 10 | 18 | 350.6 |
| S1.25S 56B - 1314F | 56 | φ70 | φ72.5 | B1 | 13 | φ14 | φ45 | 12 | 25 | 512.3 |
| S1.25S 58A - 0812F | 58 | φ72.5 | φ75 | A1 | 8 | φ12 | - | - | 8 | 252.2 |
| S1.25S 58A - 1314F | 58 | φ72.5 | φ75 | A1 | 13 | φ14 | - | - | 13 | 405.6 |
| S1.25S 58B - 0812F | 58 | φ72.5 | φ75 | B1 | 8 | φ12 | φ45 | 10 | 18 | 368.1 |
| S1.25S 58B - 1314F | 58 | φ72.5 | φ75 | B1 | 13 | φ14 | φ45 | 12 | 25 | 540.9 |

許容伝達動力表 曲げ強さ (kW) T (N・m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 52 | 8 | 0.034 | 0.34 | 0.69 | 1.32 | 2.21 | 3.09 | 3.72 | 32.46 |
| 52 | 13 | 0.056 | 0.56 | 1.13 | 2.15 | 3.60 | 5.02 | 6.06 | 53.47 |
| 54 | 8 | 0.036 | 0.36 | 0.73 | 1.37 | 2.29 | 3.21 | 3.88 | 34.37 |
| 54 | 13 | 0.059 | 0.59 | 1.18 | 2.23 | 3.72 | 5.23 | 6.31 | 56.34 |
| 55 | 8 | 0.037 | 0.37 | 0.74 | 1.40 | 2.33 | 3.28 | 3.96 | 35.33 |
| 55 | 13 | 0.060 | 0.60 | 1.21 | 2.27 | 3.78 | 5.33 | 6.44 | 57.29 |
| 56 | 8 | 0.038 | 0.38 | 0.76 | 1.42 | 2.36 | 3.34 | 4.04 | 36.28 |
| 56 | 13 | 0.062 | 0.62 | 1.24 | 2.32 | 3.84 | 5.43 | 6.57 | 59.20 |
| 58 | 8 | 0.039 | 0.39 | 0.79 | 1.47 | 2.44 | 3.47 | 4.19 | 37.24 |
| 58 | 13 | 0.064 | 0.64 | 1.29 | 2.40 | 3.97 | 5.63 | 6.82 | 61.11 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

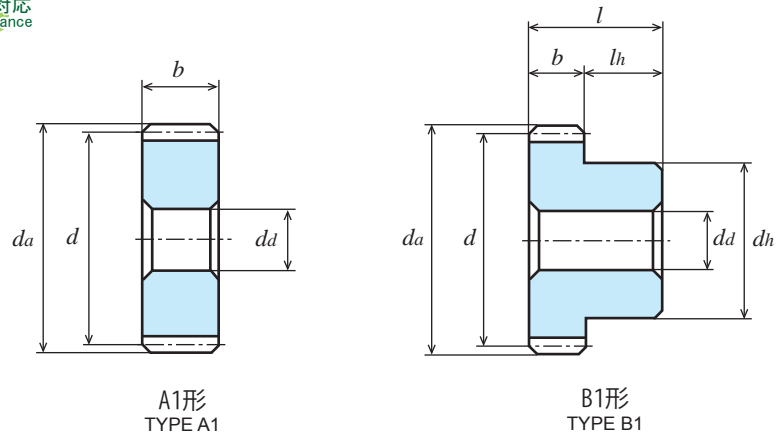
SPUR GEARS

モジュール **1.25** 圧力角 20° (並歯) 歯数 60 ~ 66
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 60 to Z 66

JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず “フルネームで商品記号” を明記してください。
 Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| S1.25S 60A - 0812F | 60 | φ75 | φ77.5 | A1 | 8 | φ12 | - | - | 8 | 270.3 |
| S1.25S 60A - 1314F | 60 | φ75 | φ77.5 | A1 | 13 | φ14 | - | - | 13 | 435.1 |
| S1.25S 60B - 0812F | 60 | φ75 | φ77.5 | B1 | 8 | φ12 | φ50 | 10 | 18 | 415.6 |
| S1.25S 60B - 1314F | 60 | φ75 | φ77.5 | B1 | 13 | φ14 | φ50 | 12 | 25 | 605.6 |
| S1.25S 62A - 0812F | 62 | φ77.5 | φ80 | A1 | 8 | φ12 | - | - | 8 | 289.1 |
| S1.25S 62A - 1314F | 62 | φ77.5 | φ80 | A1 | 13 | φ14 | - | - | 13 | 465.7 |
| S1.25S 62B - 0812F | 62 | φ77.5 | φ80 | B1 | 8 | φ12 | φ50 | 10 | 18 | 434.4 |
| S1.25S 62B - 1314F | 62 | φ77.5 | φ80 | B1 | 13 | φ14 | φ50 | 12 | 25 | 636.2 |
| S1.25S 64A - 0812F | 64 | φ80 | φ82.5 | A1 | 8 | φ12 | - | - | 8 | 308.6 |
| S1.25S 64A - 1314F | 64 | φ80 | φ82.5 | A1 | 13 | φ14 | - | - | 13 | 497.2 |
| S1.25S 64B - 0812F | 64 | φ80 | φ82.5 | B1 | 8 | φ12 | φ50 | 10 | 18 | 453.8 |
| S1.25S 64B - 1314F | 64 | φ80 | φ82.5 | B1 | 13 | φ14 | φ50 | 12 | 25 | 667.7 |
| S1.25S 65A - 0812F | 65 | φ81.25 | φ83.75 | A1 | 8 | φ12 | - | - | 8 | 318.5 |
| S1.25S 65A - 1314F | 65 | φ81.25 | φ83.75 | A1 | 13 | φ14 | - | - | 13 | 513.4 |
| S1.25S 65B - 0812F | 65 | φ81.25 | φ83.75 | B1 | 8 | φ12 | φ50 | 10 | 18 | 463.8 |
| S1.25S 65B - 1314F | 65 | φ81.25 | φ83.75 | B1 | 13 | φ14 | φ50 | 12 | 25 | 683.9 |
| S1.25S 66A - 0812F | 66 | φ82.5 | φ85 | A1 | 8 | φ12 | - | - | 8 | 328.6 |
| S1.25S 66A - 1314F | 66 | φ82.5 | φ85 | A1 | 13 | φ14 | - | - | 13 | 529.8 |
| S1.25S 66B - 0812F | 66 | φ82.5 | φ85 | B1 | 8 | φ12 | φ50 | 10 | 18 | 473.9 |
| S1.25S 66B - 1314F | 66 | φ82.5 | φ85 | B1 | 13 | φ14 | φ50 | 12 | 25 | 700.3 |

許容伝達動力表 曲げ強さ (kW) T (N・m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 60 | 8 | 0.041 | 0.41 | 0.82 | 1.52 | 2.53 | 3.59 | 4.35 | 39.15 |
| 60 | 13 | 0.067 | 0.67 | 1.34 | 2.48 | 4.12 | 5.84 | 7.07 | 63.98 |
| 62 | 8 | 0.043 | 0.43 | 0.86 | 1.57 | 2.63 | 3.71 | 4.50 | 41.06 |
| 62 | 13 | 0.070 | 0.70 | 1.40 | 2.56 | 4.27 | 6.03 | 7.32 | 66.84 |
| 64 | 8 | 0.044 | 0.44 | 0.89 | 1.62 | 2.72 | 3.83 | 4.65 | 42.01 |
| 64 | 13 | 0.072 | 0.72 | 1.45 | 2.64 | 4.42 | 6.23 | 7.57 | 68.75 |
| 65 | 8 | 0.045 | 0.45 | 0.91 | 1.65 | 2.76 | 3.90 | 4.73 | 42.97 |
| 65 | 13 | 0.074 | 0.74 | 1.48 | 2.68 | 4.49 | 6.34 | 7.69 | 70.66 |
| 66 | 8 | 0.046 | 0.46 | 0.92 | 1.67 | 2.81 | 3.96 | 4.81 | 43.92 |
| 66 | 13 | 0.075 | 0.75 | 1.51 | 2.72 | 4.56 | 6.44 | 7.81 | 71.62 |

The above numerical values are equivalent to JGMA formulas as reference only.

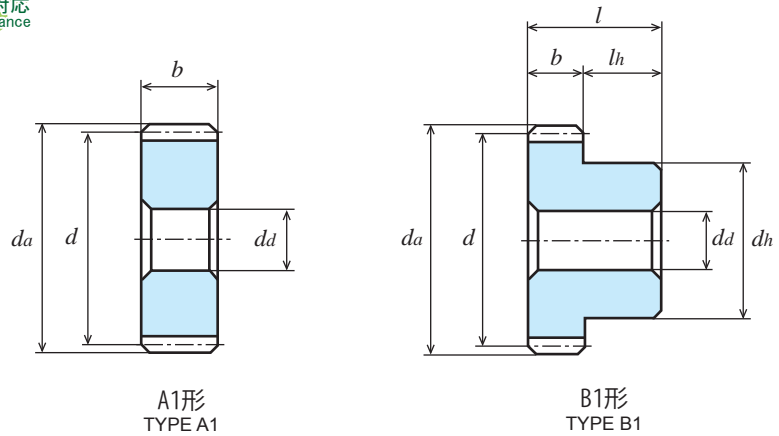
動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

SPUR GEARS

モジュール **1.25** 圧力角 20° (並歯) 歯数 68 ~ 80
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 68 to Z 80

JIS B 1702-1 (ISO) 8級
 System of accuracy : JIS B 1702-1(ISO) class 8



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| S1.25S 68A - 0812F | 68 | φ 85 | φ 87.5 | A1 | 8 | φ12 | - | - | 8 | 349.3 |
| S1.25S 68A - 1314F | 68 | φ 85 | φ 87.5 | A1 | 13 | φ14 | - | - | 13 | 563.4 |
| S1.25S 68B - 0812F | 68 | φ 85 | φ 87.5 | B1 | 8 | φ12 | φ50 | 10 | 18 | 494.5 |
| S1.25S 68B - 1314F | 68 | φ 85 | φ 87.5 | B1 | 13 | φ14 | φ50 | 12 | 25 | 733.8 |
| S1.25S 70A - 0814F | 70 | φ 87.5 | φ 90 | A1 | 8 | φ14 | - | - | 8 | 368.0 |
| S1.25S 70A - 1316F | 70 | φ 87.5 | φ 90 | A1 | 13 | φ16 | - | - | 13 | 593.1 |
| S1.25S 70B - 0814F | 70 | φ 87.5 | φ 90 | B1 | 8 | φ14 | φ55 | 10 | 18 | 542.4 |
| S1.25S 70B - 1316F | 70 | φ 87.5 | φ 90 | B1 | 13 | φ16 | φ55 | 12 | 25 | 798.0 |
| S1.25S 72A - 0814F | 72 | φ 90 | φ 92.5 | A1 | 8 | φ14 | - | - | 8 | 389.8 |
| S1.25S 72A - 1316F | 72 | φ 90 | φ 92.5 | A1 | 13 | φ16 | - | - | 13 | 628.7 |
| S1.25S 72B - 0814F | 72 | φ 90 | φ 92.5 | B1 | 8 | φ14 | φ55 | 10 | 18 | 564.3 |
| S1.25S 72B - 1316F | 72 | φ 90 | φ 92.5 | B1 | 13 | φ16 | φ55 | 12 | 25 | 833.6 |
| S1.25S 75A - 0814F | 75 | φ 93.75 | φ 96.25 | A1 | 8 | φ14 | - | - | 8 | 423.8 |
| S1.25S 75A - 1316F | 75 | φ 93.75 | φ 96.25 | A1 | 13 | φ16 | - | - | 13 | 683.9 |
| S1.25S 75B - 0814F | 75 | φ 93.75 | φ 96.25 | B1 | 8 | φ14 | φ55 | 10 | 18 | 598.3 |
| S1.25S 75B - 1316F | 75 | φ 93.75 | φ 96.25 | B1 | 13 | φ16 | φ55 | 12 | 25 | 888.8 |
| S1.25S 80A - 0814F | 80 | φ100 | φ102.5 | A1 | 8 | φ14 | - | - | 8 | 483.6 |
| S1.25S 80A - 1316F | 80 | φ100 | φ102.5 | A1 | 13 | φ16 | - | - | 13 | 781.0 |
| S1.25S 80B - 0814F | 80 | φ100 | φ102.5 | B1 | 8 | φ14 | φ60 | 10 | 18 | 693.4 |
| S1.25S 80B - 1316F | 80 | φ100 | φ102.5 | B1 | 13 | φ16 | φ60 | 12 | 25 | 1,028.0 |

許容伝達動力表 曲げ強さ (kW) T (N・m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 68 | 8 | 0.048 | 0.48 | 0.96 | 1.72 | 2.90 | 4.09 | 4.96 | 45.83 |
| 68 | 13 | 0.078 | 0.78 | 1.56 | 2.80 | 4.71 | 6.65 | 8.06 | 74.48 |
| 70 | 8 | 0.049 | 0.49 | 0.99 | 1.77 | 2.98 | 4.22 | 5.11 | 46.79 |
| 70 | 13 | 0.080 | 0.80 | 1.61 | 2.87 | 4.85 | 6.85 | 8.30 | 76.39 |
| 72 | 8 | 0.051 | 0.51 | 1.02 | 1.81 | 3.07 | 4.34 | 5.25 | 48.70 |
| 72 | 13 | 0.083 | 0.84 | 1.67 | 2.96 | 5.00 | 7.06 | 8.55 | 80.21 |
| 75 | 8 | 0.054 | 0.54 | 1.08 | 1.88 | 3.20 | 4.53 | 5.47 | 51.56 |
| 75 | 13 | 0.087 | 0.88 | 1.76 | 3.07 | 5.22 | 7.37 | 8.90 | 84.03 |
| 80 | 8 | 0.058 | 0.58 | 1.15 | 2.00 | 3.42 | 4.84 | 5.84 | 55.38 |
| 80 | 13 | 0.094 | 0.95 | 1.88 | 3.25 | 5.57 | 7.87 | 9.49 | 90.72 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion fomulas of power on page P26.

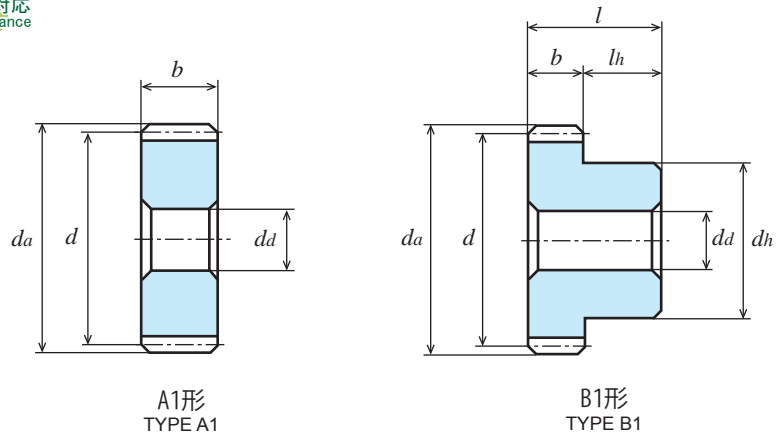
平歯車 SPUR GEARS

モジュール 1.25 圧力角 20° (並歯) 歯数 84 ~ 96
MODULE 1.25 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 84 to Z 96

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------------|
| S1.25S 84A - 0814F | 84 | φ105 | φ107.5 | A1 | 8 | φ14 | - | - | 8 | 0.53 |
| S1.25S 84A - 1316F | 84 | φ105 | φ107.5 | A1 | 13 | φ16 | - | - | 13 | 0.86 |
| S1.25S 84B - 0814F | 84 | φ105 | φ107.5 | B1 | 8 | φ14 | φ60 | 10 | 18 | 0.74 |
| S1.25S 84B - 1316F | 84 | φ105 | φ107.5 | B1 | 13 | φ16 | φ60 | 12 | 25 | 1.11 |
| S1.25S 85A - 0814F | 85 | φ106.25 | φ108.75 | A1 | 8 | φ14 | - | - | 8 | 0.55 |
| S1.25S 85A - 1316F | 85 | φ106.25 | φ108.75 | A1 | 13 | φ16 | - | - | 13 | 0.88 |
| S1.25S 85B - 0814F | 85 | φ106.25 | φ108.75 | B1 | 8 | φ14 | φ60 | 10 | 18 | 0.76 |
| S1.25S 85B - 1316F | 85 | φ106.25 | φ108.75 | B1 | 13 | φ16 | φ60 | 12 | 25 | 1.13 |
| S1.25S 90A - 0816F | 90 | φ112.5 | φ115 | A1 | 8 | φ16 | - | - | 8 | 0.61 |
| S1.25S 90A - 1318F | 90 | φ112.5 | φ115 | A1 | 13 | φ18 | - | - | 13 | 0.99 |
| S1.25S 90B - 0816F | 90 | φ112.5 | φ115 | B1 | 8 | φ16 | φ65 | 10 | 18 | 0.86 |
| S1.25S 90B - 1318F | 90 | φ112.5 | φ115 | B1 | 13 | φ18 | φ65 | 12 | 25 | 1.28 |
| S1.25S 95A - 0816F | 95 | φ118.75 | φ121.25 | A1 | 8 | φ16 | - | - | 8 | 0.68 |
| S1.25S 95A - 1318F | 95 | φ118.75 | φ121.25 | A1 | 13 | φ18 | - | - | 13 | 1.10 |
| S1.25S 95B - 0816F | 95 | φ118.75 | φ121.25 | B1 | 8 | φ16 | φ65 | 10 | 18 | 0.93 |
| S1.25S 95B - 1318F | 95 | φ118.75 | φ121.25 | B1 | 13 | φ18 | φ65 | 12 | 25 | 1.39 |
| S1.25S 96A - 0816F | 96 | φ120 | φ122.5 | A1 | 8 | φ16 | - | - | 8 | 0.70 |
| S1.25S 96A - 1318F | 96 | φ120 | φ122.5 | A1 | 13 | φ18 | - | - | 13 | 1.13 |
| S1.25S 96B - 0816F | 96 | φ120 | φ122.5 | B1 | 8 | φ16 | φ65 | 10 | 18 | 0.94 |
| S1.25S 96B - 1318F | 96 | φ120 | φ122.5 | B1 | 13 | φ18 | φ65 | 12 | 25 | 1.42 |

許容伝達動力表 曲げ強さ (kW)

T (N・m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 84 | 8 | 0.061 | 0.61 | 1.21 | 2.08 | 3.59 | 5.07 | 6.15 | 58.25 |
| 84 | 13 | 0.099 | 1.00 | 1.97 | 3.39 | 5.84 | 8.25 | 10.00 | 95.49 |
| 85 | 8 | 0.062 | 0.62 | 1.22 | 2.10 | 3.63 | 5.13 | 6.23 | 59.20 |
| 85 | 13 | 0.101 | 1.01 | 1.99 | 3.42 | 5.91 | 8.35 | 10.13 | 96.45 |
| 90 | 8 | 0.066 | 0.66 | 1.29 | 2.21 | 3.84 | 5.43 | 6.65 | 63.02 |
| 90 | 13 | 0.108 | 1.08 | 2.11 | 3.60 | 6.25 | 8.84 | 10.82 | 103.13 |
| 95 | 8 | 0.070 | 0.70 | 1.36 | 2.31 | 4.04 | 5.73 | 7.07 | 66.84 |
| 95 | 13 | 0.115 | 1.15 | 2.22 | 3.76 | 6.58 | 9.31 | 11.50 | 109.82 |
| 96 | 8 | 0.071 | 0.71 | 1.37 | 2.33 | 4.09 | 5.78 | 7.16 | 67.80 |
| 96 | 13 | 0.116 | 1.16 | 2.24 | 3.79 | 6.65 | 9.41 | 11.64 | 110.77 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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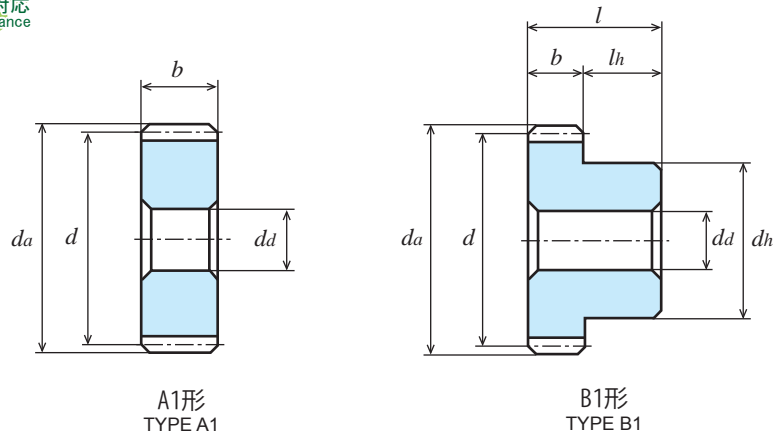
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平歯車 SPUR GEARS

モジュール **1.25** 圧力角 20° (並歯) 歯数 100 ~ 120
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 100 to Z 120

JIS B 1702-1 (ISO) 8級
 System of accuracy : JIS B 1702-1(ISO) class 8



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------------|
| S1.25S 100A - 0816F | 100 | φ125 | φ127.5 | A1 | 8 | φ16 | - | - | 8 | 0.76 |
| S1.25S 100A - 1318F | 100 | φ125 | φ127.5 | A1 | 13 | φ18 | - | - | 13 | 1.23 |
| S1.25S 100B - 0816F | 100 | φ125 | φ127.5 | B1 | 8 | φ16 | φ65 | 10 | 18 | 1.00 |
| S1.25S 100B - 1318F | 100 | φ125 | φ127.5 | B1 | 13 | φ18 | φ65 | 12 | 25 | 1.52 |
| S1.25S 105A - 0816F | 105 | φ131.25 | φ133.75 | A1 | 8 | φ16 | - | - | 8 | 0.84 |
| S1.25S 105A - 1318F | 105 | φ131.25 | φ133.75 | A1 | 13 | φ18 | - | - | 13 | 1.35 |
| S1.25S 105B - 0816F | 105 | φ131.25 | φ133.75 | B1 | 8 | φ16 | φ70 | 10 | 18 | 1.12 |
| S1.25S 105B - 1318F | 105 | φ131.25 | φ133.75 | B1 | 13 | φ18 | φ70 | 12 | 25 | 1.69 |
| S1.25S 110A - 0818F | 110 | φ137.5 | φ140 | A1 | 8 | φ18 | - | - | 8 | 0.92 |
| S1.25S 110A - 1320F | 110 | φ137.5 | φ140 | A1 | 13 | φ20 | - | - | 13 | 1.48 |
| S1.25S 110B - 0818F | 110 | φ137.5 | φ140 | B1 | 8 | φ18 | φ75 | 10 | 18 | 1.24 |
| S1.25S 110B - 1320F | 110 | φ137.5 | φ140 | B1 | 13 | φ20 | φ75 | 12 | 25 | 1.87 |
| S1.25S 115A - 0818F | 115 | φ143.75 | φ146.25 | A1 | 8 | φ18 | - | - | 8 | 1.00 |
| S1.25S 115A - 1320F | 115 | φ143.75 | φ146.25 | A1 | 13 | φ20 | - | - | 13 | 1.62 |
| S1.25S 115B - 0818F | 115 | φ143.75 | φ146.25 | B1 | 8 | φ18 | φ75 | 10 | 18 | 1.33 |
| S1.25S 115B - 1320F | 115 | φ143.75 | φ146.25 | B1 | 13 | φ20 | φ75 | 12 | 25 | 2.01 |
| S1.25S 120A - 0818F | 120 | φ150 | φ152.5 | A1 | 8 | φ18 | - | - | 8 | 1.09 |
| S1.25S 120A - 1320F | 120 | φ150 | φ152.5 | A1 | 13 | φ20 | - | - | 13 | 1.77 |
| S1.25S 120B - 0818F | 120 | φ150 | φ152.5 | B1 | 8 | φ18 | φ80 | 10 | 18 | 1.47 |
| S1.25S 120B - 1320F | 120 | φ150 | φ152.5 | B1 | 13 | φ20 | φ80 | 12 | 25 | 2.22 |

許容伝達動力表 曲げ強さ (kW)

T (N・m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 100 | 8 | 0.075 | 0.75 | 1.43 | 2.41 | 4.26 | 6.02 | 7.50 | 71.62 |
| 100 | 13 | 0.122 | 1.22 | 2.33 | 3.92 | 6.93 | 9.78 | 12.19 | 116.50 |
| 105 | 8 | 0.079 | 0.79 | 1.50 | 2.51 | 4.47 | 6.33 | - | 75.44 |
| 105 | 13 | 0.129 | 1.29 | 2.44 | 4.08 | 7.27 | 10.30 | - | 123.19 |
| 110 | 8 | 0.083 | 0.83 | 1.57 | 2.60 | 4.69 | 6.68 | - | 79.26 |
| 110 | 13 | 0.136 | 1.36 | 2.55 | 4.23 | 7.61 | 10.85 | - | 129.87 |
| 115 | 8 | 0.087 | 0.88 | 1.63 | 2.70 | 4.89 | 7.02 | - | 84.03 |
| 115 | 13 | 0.143 | 1.43 | 2.65 | 4.38 | 7.95 | 11.40 | - | 136.56 |
| 120 | 8 | 0.091 | 0.92 | 1.69 | 2.81 | 5.10 | 7.36 | - | 87.85 |
| 120 | 13 | 0.149 | 1.49 | 2.75 | 4.57 | 8.29 | 11.96 | - | 142.29 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion fomulas of power on page P26.

Memo

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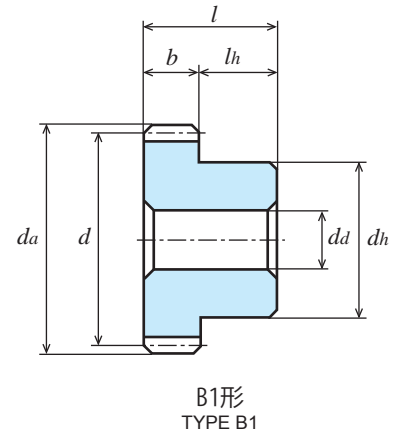
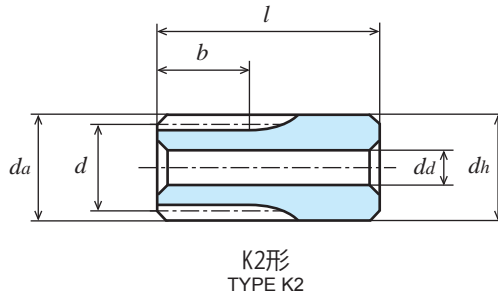
平歯車 SPUR GEARS

モジュール 1.5 圧力角 20° (並歯)
MODULE 1.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



New 仕様変更 省スペース・軽量化。
Specification change Space-saving and weight saving.



ポリアセタール (黒色)
Material : Poly Acetal (Black)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|-------------------------------|-----------|-------------------------|-----------------------------|------------------------------|--------------------------------|-----------------------------|------------------------|
| ▲ S1.5D 14K - 1808 | 14 | φ21 | φ24 | K2 | 18 | φ 8 | φ24 | 22 | 40 | 20.0 |
| ▲ S1.5D 15B - 1808N | 15 | φ22.5 | φ25.5 | B1 | 18 | φ 8 | φ18 | 10 | 28 | 11.7 |
| ▲ S1.5D 16B - 1808N | 16 | φ24 | φ27 | B1 | 18 | φ 8 | φ20 | 10 | 28 | 13.9 |
| ▲ S1.5D 18B - 1810N | 18 | φ27 | φ30 | B1 | 18 | φ10 | φ22 | 10 | 28 | 16.8 |
| ▲ S1.5D 20B - 1810N | 20 | φ30 | φ33 | B1 | 18 | φ10 | φ22 | 10 | 28 | 20.2 |
| ▲ S1.5D 24B - 1814N | 24 | φ36 | φ39 | B1 | 18 | φ14 | φ32 | 10 | 28 | 31.1 |
| ▲ S1.5D 25B - 1814N | 25 | φ37.5 | φ40.5 | B1 | 18 | φ14 | φ32 | 10 | 28 | 33.3 |
| ▲ S1.5D 28B - 1814N | 28 | φ42 | φ45 | B1 | 18 | φ14 | φ32 | 10 | 28 | 40.4 |
| ▲ S1.5D 30B - 1814N | 30 | φ45 | φ48 | B1 | 18 | φ14 | φ32 | 10 | 28 | 45.6 |
| ▲ S1.5D 32B - 1814N | 32 | φ48 | φ51 | B1 | 18 | φ14 | φ32 | 10 | 28 | 51.2 |
| ▲ S1.5D 35B - 1814N | 35 | φ52.5 | φ55.5 | B1 | 18 | φ14 | φ42 | 10 | 28 | 68.4 |
| ▲ S1.5D 36B - 1814N | 36 | φ54 | φ57 | B1 | 18 | φ14 | φ42 | 10 | 28 | 71.6 |

▲の商品は2017年5月20日をもってカタログ商品(規格品)としての生産を中止とします。米国・EU市場の食品接触用途・規制に適合した青 POM® ギヤシリーズをご利用ください。Products with ▲ mark will be terminated with effective 20th May 2017. Alternative products are indicated on separate catalogue of Blue Poly Acetal gears which adapted to relevant regulations for the food industries in the US and EU markets.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1.5D 14K - 1808 | 2.24 | 22.35 | 44.68 | 89.24 | 178.03 | 266.37 | 332.32 |
| S1.5D 15B - 1808N | 2.40 | 23.95 | 47.86 | 95.60 | 190.67 | 285.24 | 355.82 |
| S1.5D 16B - 1808N | 2.56 | 25.54 | 51.05 | 101.95 | 203.31 | 304.09 | 379.28 |
| S1.5D 18B - 1810N | 2.88 | 28.73 | 57.42 | 114.65 | 228.56 | 341.73 | 426.11 |
| S1.5D 20B - 1810N | 3.19 | 31.92 | 63.79 | 127.35 | 253.77 | 379.28 | 472.81 |
| S1.5D 24B - 1814N | 3.83 | 38.30 | 76.52 | 152.70 | 304.09 | 454.15 | 564.21 |
| S1.5D 25B - 1814N | 3.99 | 39.89 | 79.70 | 159.04 | 316.64 | 472.81 | 586.71 |
| S1.5D 28B - 1814N | 4.47 | 44.68 | 89.24 | 178.03 | 354.25 | 528.04 | 653.73 |
| S1.5D 30B - 1814N | 4.79 | 47.86 | 95.60 | 190.67 | 379.28 | 564.21 | 698.01 |
| S1.5D 32B - 1814N | 5.11 | 51.05 | 101.95 | 203.31 | 404.28 | 601.18 | 741.96 |
| S1.5D 35B - 1814N | 5.59 | 55.83 | 111.48 | 222.25 | 441.69 | 653.73 | 807.28 |
| S1.5D 36B - 1814N | 5.75 | 57.42 | 114.65 | 228.56 | 454.15 | 671.48 | 828.90 |

The above numerical values are Lewis formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

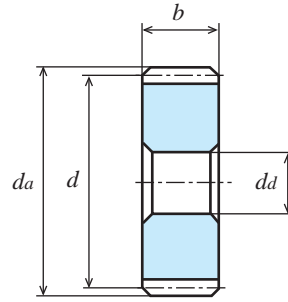
平歯車 SPUR GEARS

モジュール 1.5 圧力角 20° (並歯)
MODULE 1.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy: JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



A1形
TYPE A1

ポリアセタール (黒色)
Material: Poly Acetal (Black)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|----------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| ▲ S1.5D 40A - 1814 | 40 | φ 60 | φ 63 | A1 | 18 | φ14 | - | - | 18 | 67.9 |
| ▲ S1.5D 45A - 1814 | 45 | φ 67.5 | φ 70.5 | A1 | 18 | φ14 | - | - | 18 | 86.9 |
| ▲ S1.5D 48A - 1814 | 48 | φ 72 | φ 75 | A1 | 18 | φ14 | - | - | 18 | 99.4 |
| ▲ S1.5D 50A - 1814 | 50 | φ 75 | φ 78 | A1 | 18 | φ14 | - | - | 18 | 108.2 |
| ▲ S1.5D 56A - 1814 | 56 | φ 84 | φ 87 | A1 | 18 | φ14 | - | - | 18 | 136.7 |
| ▲ S1.5D 60A - 1814 | 60 | φ 90 | φ 93 | A1 | 18 | φ14 | - | - | 18 | 157.6 |
| ▲ S1.5D 64A - 1814 | 64 | φ 96 | φ 99 | A1 | 18 | φ14 | - | - | 18 | 179.8 |
| ▲ S1.5D 70A - 1814 | 70 | φ105 | φ108 | A1 | 18 | φ14 | - | - | 18 | 215.9 |
| ▲ S1.5D 72A - 1814 | 72 | φ108 | φ111 | A1 | 18 | φ14 | - | - | 18 | 228.6 |
| ▲ S1.5D 80A - 1816 | 80 | φ120 | φ123 | A1 | 18 | φ16 | - | - | 18 | 281.9 |
| ▲ S1.5D 90A - 1816 | 90 | φ135 | φ138 | A1 | 18 | φ16 | - | - | 18 | 358.2 |
| ▲ S1.5D 100A - 1816 | 100 | φ150 | φ153 | A1 | 18 | φ16 | - | - | 18 | 443.4 |

▲の商品は2017年5月20日をもってカタログ商品(規格品)としての生産を中止とします。米国・EU市場の食品接触用途・規制に適合した青 POM[®] ギヤシリーズをご利用ください。Products with ▲ mark will be terminated with effective 20th May 2017. Alternative products are indicated on separate catalogue of Blue Poly Acetal gears which adapted to relevant regulations for the food industries in the US and EU markets.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1.5D 40A - 1814 | 6.39 | 63.79 | 127.35 | 253.77 | 503.82 | 741.96 | 914.54 |
| S1.5D 45A - 1814 | 7.19 | 71.74 | 143.20 | 285.24 | 564.21 | 828.90 | 1,017.93 |
| S1.5D 48A - 1814 | 7.67 | 76.52 | 152.70 | 304.09 | 600.18 | 880.44 | 1,077.66 |
| S1.5D 50A - 1814 | 7.99 | 79.70 | 159.04 | 316.64 | 624.04 | 914.54 | 1,116.92 |
| S1.5D 56A - 1814 | 8.94 | 89.24 | 178.03 | 354.25 | 695.07 | 1,013.91 | 1,231.98 |
| S1.5D 60A - 1814 | 9.58 | 95.60 | 190.67 | 379.28 | 741.96 | 1,077.66 | 1,306.42 |
| S1.5D 64A - 1814 | 10.22 | 101.95 | 203.31 | 404.28 | 788.49 | 1,140.25 | 1,378.54 |
| S1.5D 70A - 1814 | 11.18 | 111.48 | 222.25 | 441.69 | 857.59 | 1,231.98 | 1,473.90 |
| S1.5D 72A - 1814 | 11.50 | 114.65 | 228.56 | 454.15 | 880.44 | 1,261.97 | 1,504.40 |
| S1.5D 80A - 1816 | 12.78 | 127.35 | 253.77 | 503.82 | 970.77 | 1,378.54 | 1,619.93 |
| S1.5D 90A - 1816 | 14.37 | 143.20 | 285.24 | 564.21 | 1,077.66 | 1,504.40 | - |
| S1.5D 100A - 1816 | 15.97 | 159.04 | 316.64 | 624.04 | 1,181.34 | 1,619.93 | - |

The above numerical values are Lewis formulas as reference only.
動力の換算式は P26 をご参照ください。
Please refer to the conversion formulas of power on page P26.

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ステンレス平歯車

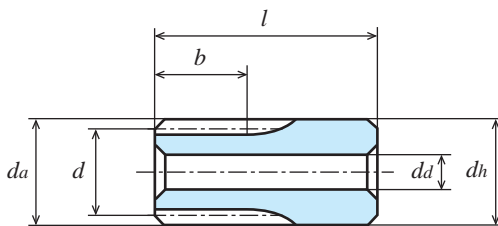
SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

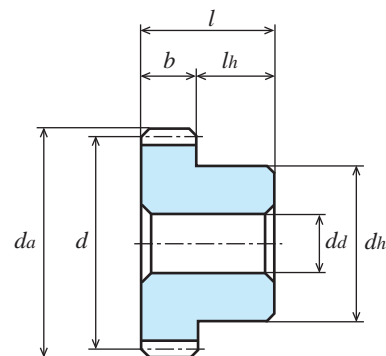
JIS B 1702-1 (ISO) 9 級
 System of accuracy : JIS B 1702-1(ISO) class 9



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



K2形
TYPE K2



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H8)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| S1.5SU 14K - 1208 | 14 | φ21 | φ24 | K2 | 12 | φ 8 | φ24 | 24 | 36 | 104.7 |
| S1.5SU 15B - 1208 | 15 | φ22.5 | φ25.5 | B1 | 12 | φ 8 | φ18 | 10 | 22 | 49.3 |
| S1.5SU 15B - 1608N | 15 | φ22.5 | φ25.5 | B1 | 16 | φ 8 | φ18 | 10 | 26 | 60.3 |
| S1.5SU 16B - 1208 | 16 | φ24 | φ27 | B1 | 12 | φ 8 | φ20 | 10 | 22 | 59.2 |
| S1.5SU 16B - 1608N | 16 | φ24 | φ27 | B1 | 16 | φ 8 | φ20 | 10 | 26 | 72.0 |
| S1.5SU 18B - 1210 | 18 | φ27 | φ30 | B1 | 12 | φ10 | φ22 | 10 | 22 | 70.9 |
| S1.5SU 18B - 1610N | 18 | φ27 | φ30 | B1 | 16 | φ10 | φ22 | 10 | 26 | 86.6 |
| S1.5SU 20B - 1210 | 20 | φ30 | φ33 | B1 | 12 | φ10 | φ25 | 10 | 22 | 92.5 |
| S1.5SU 20B - 1610N | 20 | φ30 | φ33 | B1 | 16 | φ10 | φ25 | 10 | 26 | 112.4 |
| S1.5SU 24B - 1210 | 24 | φ36 | φ39 | B1 | 12 | φ10 | φ30 | 10 | 22 | 139.2 |
| S1.5SU 25B - 1210 | 25 | φ37.5 | φ40.5 | B1 | 12 | φ10 | φ30 | 10 | 22 | 147.5 |
| S1.5SU 25B - 1610N | 25 | φ37.5 | φ40.5 | B1 | 16 | φ10 | φ30 | 10 | 26 | 180.0 |
| S1.5SU 28B - 1210 | 28 | φ42 | φ45 | B1 | 12 | φ10 | φ30 | 10 | 22 | 174.2 |
| S1.5SU 30B - 1210 | 30 | φ45 | φ48 | B1 | 12 | φ10 | φ30 | 10 | 22 | 193.7 |
| S1.5SU 30B - 1610N | 30 | φ45 | φ48 | B1 | 16 | φ10 | φ30 | 10 | 26 | 241.7 |

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1.5SU 14K - 1208 | 5.98 | 59.75 | 119.51 | 239.02 | 478.04 | 684.27 | 816.77 |
| S1.5SU 15B - 1208 | 6.70 | 66.97 | 133.93 | 267.86 | 535.73 | 756.63 | 900.82 |
| S1.5SU 15B - 1608N | 8.93 | 89.29 | 178.58 | 357.15 | 714.30 | 1,008.84 | 1,201.10 |
| S1.5SU 16B - 1208 | 7.43 | 74.32 | 148.63 | 297.27 | 594.06 | 828.66 | 984.12 |
| S1.5SU 16B - 1608N | 9.91 | 99.09 | 198.18 | 396.36 | 792.08 | 1,104.88 | 1,312.16 |
| S1.5SU 18B - 1210 | 8.93 | 89.34 | 178.67 | 357.35 | 700.93 | 970.64 | 1,147.22 |
| S1.5SU 18B - 1610N | 11.91 | 119.12 | 238.23 | 476.46 | 934.57 | 1,294.19 | 1,529.63 |
| S1.5SU 20B - 1210 | 10.49 | 104.90 | 209.79 | 419.58 | 808.06 | 1,111.24 | 1,307.46 |
| S1.5SU 20B - 1610N | 13.99 | 139.86 | 279.72 | 559.44 | 1,077.41 | 1,481.65 | 1,743.28 |
| S1.5SU 24B - 1210 | 13.67 | 136.75 | 273.50 | 546.99 | 1,016.53 | 1,379.79 | 1,609.91 |
| S1.5SU 25B - 1210 | 14.49 | 144.89 | 289.77 | 579.54 | 1,067.67 | 1,444.72 | 1,682.38 |
| S1.5SU 25B - 1610N | 19.32 | 193.18 | 386.36 | 772.72 | 1,423.55 | 1,926.29 | 2,243.17 |
| S1.5SU 28B - 1210 | 16.96 | 169.62 | 339.24 | 678.48 | 1,218.22 | 1,633.80 | 1,934.94 |
| S1.5SU 30B - 1210 | 18.62 | 186.25 | 372.50 | 744.99 | 1,315.37 | 1,754.13 | 2,105.74 |
| S1.5SU 30B - 1610N | 24.83 | 248.33 | 496.66 | 993.32 | 1,753.83 | 2,338.85 | 2,807.65 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

ステンレス平歯車

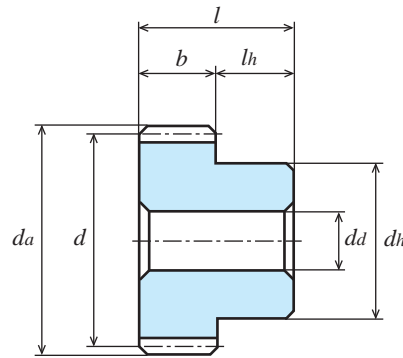
SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯)
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9 級
 System of accuracy : JIS B 1702-1(ISO) class 9



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H8) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|------------------------------|
| S1.5SU 32B - 1010 | 32 | φ 48 | φ 51 | B1 | 10 | φ10 | φ30 | 10 | 20 | 187.1 |
| S1.5SU 36B - 1010 | 36 | φ 54 | φ 57 | B1 | 10 | φ10 | φ30 | 10 | 20 | 225.2 |
| S1.5SU 40B - 1012 | 40 | φ 60 | φ 63 | B1 | 10 | φ12 | φ36 | 10 | 20 | 287.0 |
| S1.5SU 45B - 1012 | 45 | φ 67.5 | φ 70.5 | B1 | 10 | φ12 | φ36 | 10 | 20 | 346.6 |
| S1.5SU 48B - 1012 | 48 | φ 72 | φ 75 | B1 | 10 | φ12 | φ36 | 10 | 20 | 385.7 |
| S1.5SU 50B - 1012 | 50 | φ 75 | φ 78 | B1 | 10 | φ12 | φ42 | 10 | 20 | 442.3 |
| S1.5SU 60B - 1014 | 60 | φ 90 | φ 93 | B1 | 10 | φ14 | φ50 | 10 | 20 | 635.8 |
| S1.5SU 80B - 1016 | 80 | φ120 | φ123 | B1 | 10 | φ16 | φ60 | 10 | 20 | 1,089.0 |
| S1.5SU 90B - 1016 | 90 | φ135 | φ138 | B1 | 10 | φ16 | φ60 | 10 | 20 | 1,327.0 |
| S1.5SU 100B - 1016 | 100 | φ150 | φ153 | B1 | 10 | φ16 | φ60 | 10 | 20 | 1,594.0 |

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|----------|----------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S1.5SU 32B - 1010 | 16.93 | 169.25 | 338.50 | 676.46 | 1,175.77 | 1,561.35 | 1,896.72 |
| S1.5SU 36B - 1010 | 19.77 | 197.67 | 395.34 | 775.44 | 1,329.66 | 1,797.47 | 2,176.88 |
| S1.5SU 40B - 1012 | 22.65 | 226.45 | 452.91 | 872.24 | 1,476.48 | 2,030.22 | 2,451.46 |
| S1.5SU 45B - 1012 | 26.27 | 262.66 | 525.31 | 989.24 | 1,649.19 | 2,314.06 | 2,794.13 |
| S1.5SU 48B - 1012 | 28.46 | 284.63 | 569.25 | 1,057.90 | 1,750.48 | 2,481.86 | 3,002.75 |
| S1.5SU 50B - 1012 | 29.93 | 299.34 | 598.67 | 1,102.91 | 1,832.09 | 2,592.36 | 3,140.56 |
| S1.5SU 60B - 1014 | 37.35 | 373.48 | 746.97 | 1,318.86 | 2,232.26 | 3,152.13 | 3,813.74 |
| S1.5SU 80B - 1016 | 52.39 | 523.90 | 1,008.96 | 1,707.93 | 2,991.84 | 4,234.47 | 5,239.02 |
| S1.5SU 90B - 1016 | 59.91 | 599.07 | 1,128.12 | 1,880.73 | 3,370.67 | 4,792.53 | - |
| S1.5SU 100B - 1016 | 67.51 | 675.07 | 1,243.66 | 2,065.89 | 3,743.17 | 5,400.57 | - |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

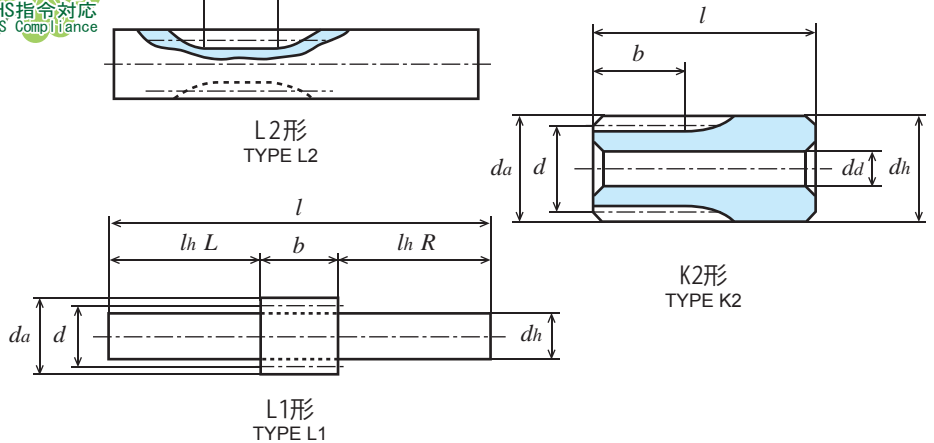
平歯車 SPUR GEARS

モジュール 1.5 圧力角 20° (並歯) 歯数 8 ~ 16
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 8 to Z 16

JIS B 1702-1 (ISO) 8~9 級
 System of accuracy : JIS B 1702-1(ISO) class 8 - 9



New 仕様変更 省スペース・軽量化。
 Specification change Space-saving and weight saving.



S45C 機械構造用炭素鋼 (JIS G 4051) *印を付した商品は転位歯車です。転位係数 x は 0.5 です。
 Material : Carbon Steel (ISO C45) * mark has been profile shifted gears. (Rack shift coefficient $x = 0.5$)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $d_a(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|--------------------------------|-----------|-------------------------|----------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| S1.5S 8L-1809 | 8 | * | $\phi 15.96$ | L1 | 18 | - | $\phi 9(h9)$ | L24 R48 | 90 | 56.2 |
| S1.5S 8L-1816F | 8 | * | $\phi 15.96$ | L2 | 18 | - | $\phi 15.96$ | L24 R48 | 90 | 133.3 |
| S1.5S 10L-1812 | 10 | * | $\phi 19$ | L1 | 18 | - | $\phi 12(h9)$ | L24 R48 | 90 | 94.1 |
| S1.5S 10L-1819F | 10 | * | $\phi 19$ | L2 | 18 | - | $\phi 19$ | L24 R48 | 90 | 190.5 |
| S1.5S 12K-1808 | 12 | $\phi 18$ | $\phi 21$ | K2 | 18 | $\phi 8(H8)$ | $\phi 21$ | 22 | 40 | 80.0 |
| S1.5S 13K-1808 | 13 | $\phi 19.5$ | $\phi 22.5$ | K2 | 18 | $\phi 8(H8)$ | $\phi 22.5$ | 22 | 40 | 95.1 |
| S1.5S 14K-1808 | 14 | $\phi 21$ | $\phi 24$ | K2 | 18 | $\phi 8(H8)$ | $\phi 24$ | 22 | 40 | 111.3 |
| S1.5S 15A-1208 | 15 | $\phi 22.5$ | $\phi 25.5$ | A1 | 12 | $\phi 8$ | - | - | 12 | 32.7 |
| S1.5S 15A-1808 | 15 | $\phi 22.5$ | $\phi 25.5$ | A1 | 18 | $\phi 8$ | - | - | 18 | 49.1 |
| S1.5S 15B-1208 | 15 | $\phi 22.5$ | $\phi 25.5$ | B1 | 12 | $\phi 8$ | $\phi 18$ | 10 | 22 | 48.8 |
| S1.5S 15B-1608N | 15 | $\phi 22.5$ | $\phi 25.5$ | B1 | 16 | $\phi 8(H8)$ | $\phi 17$ | 10 | 26 | 57.5 |
| S1.5S 15B-1808N | 15 | $\phi 22.5$ | $\phi 25.5$ | B1 | 18 | $\phi 8(H8)$ | $\phi 18$ | 10 | 28 | 65.2 |
| S1.5S 16A-1208 | 16 | $\phi 24$ | $\phi 27$ | A1 | 12 | $\phi 8$ | - | - | 12 | 37.9 |
| S1.5S 16A-1608 | 16 | $\phi 24$ | $\phi 27$ | A1 | 16 | $\phi 8$ | - | - | 16 | 50.5 |
| S1.5S 16A-1808 | 16 | $\phi 24$ | $\phi 27$ | A1 | 18 | $\phi 8$ | - | - | 18 | 56.8 |
| S1.5S 16B-1208 | 16 | $\phi 24$ | $\phi 27$ | B1 | 12 | $\phi 8$ | $\phi 20$ | 10 | 22 | 58.6 |
| S1.5S 16B-1608N | 16 | $\phi 24$ | $\phi 27$ | B1 | 16 | $\phi 8(H8)$ | $\phi 18$ | 10 | 26 | 66.6 |
| S1.5S 16B-1808N | 16 | $\phi 24$ | $\phi 27$ | B1 | 18 | $\phi 8(H8)$ | $\phi 20$ | 10 | 28 | 77.6 |

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 8 | 18 | 0.010 | 0.108 | 0.216 | 0.433 | 0.867 | 1.301 | 1.619 | 10.31 |
| 10 | 18 | 0.014 | 0.149 | 0.299 | 0.598 | 1.197 | 1.791 | 2.156 | 14.22 |
| 12 | 18 | 0.013 | 0.137 | 0.275 | 0.550 | 1.100 | 1.618 | 1.942 | 13.08 |
| 13 | 18 | 0.015 | 0.158 | 0.316 | 0.632 | 1.264 | 1.835 | 2.196 | 15.08 |
| 14 | 18 | 0.017 | 0.179 | 0.358 | 0.717 | 1.434 | 2.052 | 2.450 | 17.09 |
| 15 | 12 | 0.013 | 0.133 | 0.267 | 0.535 | 1.071 | 1.513 | 1.801 | 12.70 |
| 15 | 16 | 0.017 | 0.178 | 0.357 | 0.714 | 1.428 | 2.017 | 2.402 | 16.99 |
| 15 | 18 | 0.020 | 0.200 | 0.401 | 0.803 | 1.607 | 2.269 | 2.702 | 19.09 |
| 16 | 12 | 0.014 | 0.148 | 0.297 | 0.594 | 1.188 | 1.657 | 1.968 | 14.13 |
| 16 | 16 | 0.019 | 0.198 | 0.396 | 0.792 | 1.584 | 2.209 | 2.624 | 18.90 |
| 16 | 18 | 0.022 | 0.222 | 0.445 | 0.891 | 1.782 | 2.485 | 2.952 | 21.20 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車 SPUR GEARS

モジュール
MODULE

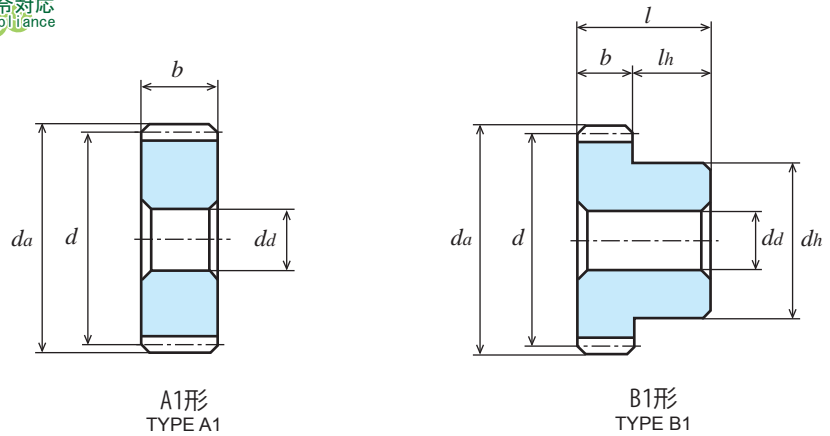
1.5

圧力角 20° (並歯) 歯数 17 ~ 19
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 17 to Z 19

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマイ Key Way b ₂ × t ₂ | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|--|----------------------|
| S1.5S 17B - 1208F | 17 | φ25.5 | φ28.5 | B1 | 12 | φ 8 | φ20 | 10 | 22 | - | 64.1 |
| S1.5S 17B - 1808 | 17 | φ25.5 | φ28.5 | B1 | 18 | φ 8(H8) | φ20 | 10 | 28 | - | 85.8 |
| S1.5S 18A - 1210F | 18 | φ27 | φ30 | A1 | 12 | φ10 | - | - | 12 | - | 46.5 |
| S1.5S 18A - 1610F | 18 | φ27 | φ30 | A1 | 16 | φ10 | - | - | 16 | - | 62.1 |
| S1.5S 18A - 1810F | 18 | φ27 | φ30 | A1 | 18 | φ10 | - | - | 18 | - | 69.8 |
| S1.5S 18B - 1210F | 18 | φ27 | φ30 | B1 | 12 | φ10 | φ22 | 10 | 22 | - | 70.2 |
| S1.5S 18B - 1610 | 18 | φ27 | φ30 | B1 | 16 | φ10 | φ21 | 10 | 26 | - | 83.1 |
| S1.5S 18B - 1810 | 18 | φ27 | φ30 | B1 | 18 | φ10 | φ22 | 10 | 28 | - | 93.5 |
| S1.5S 19A - 1210F | 19 | φ28.5 | φ31.5 | A1 | 12 | φ10 | - | - | 12 | - | 52.7 |
| S1.5S 19A - 1810F | 19 | φ28.5 | φ31.5 | A1 | 18 | φ10 | - | - | 18 | - | 79.0 |
| S1.5S 19B - 1210F | 19 | φ28.5 | φ31.5 | B1 | 12 | φ10 | φ24 | 10 | 22 | - | 82.0 |
| S1.5S 19B - 1810 | 19 | φ28.5 | φ31.5 | B1 | 18 | φ10 | φ24 | 10 | 28 | - | 108.5 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

T (N · m)

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 17 | 12 | 0.016 | 0.164 | 0.327 | 0.654 | 1.295 | 1.800 | 2.133 | 15.66 |
| 17 | 18 | 0.024 | 0.245 | 0.490 | 0.981 | 1.942 | 2.700 | 3.198 | 23.39 |
| 18 | 12 | 0.017 | 0.178 | 0.357 | 0.714 | 1.401 | 1.941 | 2.294 | 16.99 |
| 18 | 16 | 0.023 | 0.238 | 0.476 | 0.952 | 1.869 | 2.588 | 3.059 | 22.72 |
| 18 | 18 | 0.026 | 0.268 | 0.536 | 1.072 | 2.102 | 2.911 | 3.441 | 25.59 |
| 19 | 12 | 0.019 | 0.194 | 0.388 | 0.776 | 1.509 | 2.083 | 2.456 | 18.52 |
| 19 | 18 | 0.029 | 0.291 | 0.582 | 1.165 | 2.264 | 3.125 | 3.685 | 27.78 |

KG 規格は“並幅” (軽荷重用) と“広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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内歯車
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ラック
RACKS

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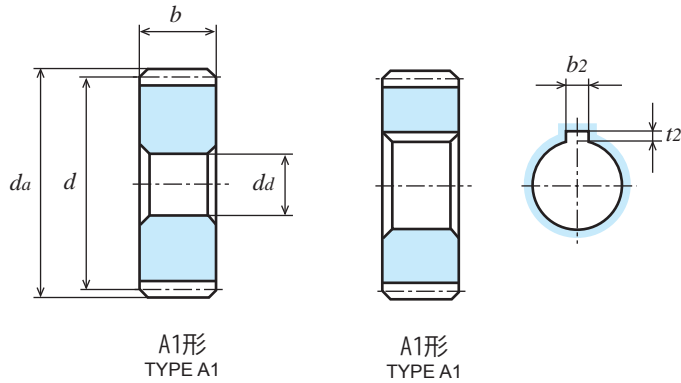
SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 20
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 20

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 20A - 1010F | 20 | φ30 | φ33 | A1 | 10 | φ10 | - | - | 10 | - | - | - | - | 49.3 | |
| S1.5S 20A - 1210F | 20 | φ30 | φ33 | A1 | 12 | φ10 | - | - | 12 | - | - | - | - | 59.2 | |
| S1.5S 20A = 1212 | 20 | φ30 | φ33 | A1 | 12 | φ12 | - | - | 12 | 4 × 1.8 | - | - | - | 55.3 | |
| S1.5S 20A = 1215 | 20 | φ30 | φ33 | A1 | 12 | φ15 | - | - | 12 | 5 × 2.3 | - | - | - | 48.9 | |
| S1.5S 20A - 1610F | 20 | φ30 | φ33 | A1 | 16 | φ10 | - | - | 16 | - | - | - | - | 78.9 | |
| S1.5S 20A - 1810F | 20 | φ30 | φ33 | A1 | 18 | φ10 | - | - | 18 | - | - | - | - | 88.8 | |
| S1.5S 20A = 1812 | 20 | φ30 | φ33 | A1 | 18 | φ12 | - | - | 18 | 4 × 1.8 | - | - | - | 82.9 | |
| S1.5S 20A = 1815 | 20 | φ30 | φ33 | A1 | 18 | φ15 | - | - | 18 | 5 × 2.3 | - | - | - | 73.3 | |
| S1.5S 20B - 1010F | 20 | φ30 | φ33 | B1 | 10 | φ10 | φ24 | 10 | 20 | - | - | - | - | 78.7 | |
| S1.5S 20B - 1210F | 20 | φ30 | φ33 | B1 | 12 | φ10 | φ25 | 10 | 22 | - | - | - | - | 91.6 | |
| S1.5S 20B # 1212 | 20 | φ30 | φ33 | B1 | 12 | φ12 | φ25 | 10 | 22 | 4 × 1.8 | M3 | 5 | - | 84.2 | |
| S1.5S 20B # 1215 | 20 | φ30 | φ33 | B1 | 12 | φ15 | φ25 | 10 | 22 | 5 × 2.3 | M3 | 5 | - | 72.5 | |
| S1.5S 20BF - 1506 | 20 | φ30 | φ33 | B1 | 15 | φ 6(H8) | φ25 | 15 | 30 | - | - | - | - | 113.1 | |
| S1.5S 20B - 1506H | 20 | φ30 | φ33 | B1 | 15 | φ 6(H※) | φ25 | 15 | 30 | - | - | - | - | 113.1 | |
| S1.5S 20B - 1610 | 20 | φ30 | φ33 | B1 | 16 | φ10 | φ24 | 10 | 26 | - | - | - | - | 111.4 | |
| S1.5S 20B - 1810 | 20 | φ30 | φ33 | B1 | 18 | φ10 | φ25 | 10 | 28 | - | - | - | - | 121.2 | |
| S1.5S 20B # 1812 | 20 | φ30 | φ33 | B1 | 18 | φ12 | φ25 | 10 | 28 | 4 × 1.8 | M3 | 5 | - | 111.8 | |
| S1.5S 20B # 1815 | 20 | φ30 | φ33 | B1 | 18 | φ15 | φ25 | 10 | 28 | 5 × 2.3 | M3 | 5 | - | 96.9 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 20 | 10 | - | 0.017 | 0.174 | 0.349 | 0.699 | 1.346 | 1.852 | 2.179 |
| 20 | 12 | - | 0.020 | 0.209 | 0.419 | 0.839 | 1.616 | 2.222 | 2.614 |
| 20 | 15 | - | 0.026 | 0.260 | 0.530 | 1.060 | 2.030 | 2.800 | 3.290 |
| 20 | 15 | ○ | 0.028 | 0.280 | 0.560 | 1.120 | 2.165 | 2.999 | 3.545 |
| 20 | 16 | - | 0.027 | 0.279 | 0.559 | 1.118 | 2.154 | 2.963 | 3.486 |
| 20 | 18 | - | 0.031 | 0.314 | 0.629 | 1.258 | 2.424 | 3.333 | 3.922 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion fomulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.001 | 0.010 | 0.020 | 0.050 | 0.090 | 0.130 | 0.150 |
| 0.056 | 0.116 | 0.239 | 0.477 | 0.673 | 0.803 | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

平歯車

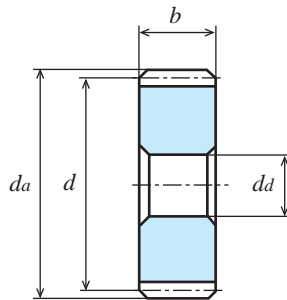
SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 21 ~ 23
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 21 to Z 23

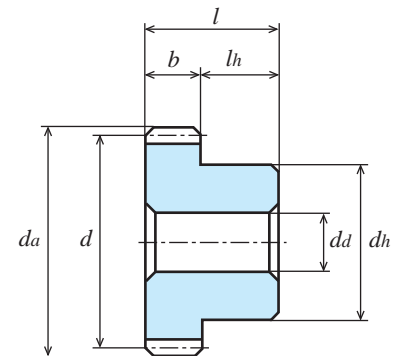
JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



A1形
TYPE A1



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|----------------------|
| S1.5S 21A - 1210F | 21 | φ31.5 | φ34.5 | A1 | 12 | φ10 | - | - | 12 | - | 66.0 |
| S1.5S 21A - 1810F | 21 | φ31.5 | φ34.5 | A1 | 18 | φ10 | - | - | 18 | - | 99.0 |
| S1.5S 21B - 1210F | 21 | φ31.5 | φ34.5 | B1 | 12 | φ10 | φ26 | 10 | 22 | - | 101.5 |
| S1.5S 21B - 1810 | 21 | φ31.5 | φ34.5 | B1 | 18 | φ10 | φ26 | 10 | 28 | - | 134.6 |
| S1.5S 22A - 1210F | 22 | φ33 | φ36 | A1 | 12 | φ10 | - | - | 12 | - | 73.2 |
| S1.5S 22A - 1810F | 22 | φ33 | φ36 | A1 | 18 | φ10 | - | - | 18 | - | 109.8 |
| S1.5S 22B - 1210F | 22 | φ33 | φ36 | B1 | 12 | φ10 | φ26 | 10 | 22 | - | 108.7 |
| S1.5S 22B - 1810 | 22 | φ33 | φ36 | B1 | 18 | φ10 | φ26 | 10 | 28 | - | 145.4 |
| S1.5S 23A - 1210F | 23 | φ34.5 | φ37.5 | A1 | 12 | φ10 | - | - | 12 | - | 80.7 |
| S1.5S 23A - 1810F | 23 | φ34.5 | φ37.5 | A1 | 18 | φ10 | - | - | 18 | - | 121.0 |
| S1.5S 23B - 1210F | 23 | φ34.5 | φ37.5 | B1 | 12 | φ10 | φ26 | 10 | 22 | - | 116.2 |
| S1.5S 23B - 1810 | 23 | φ34.5 | φ37.5 | B1 | 18 | φ10 | φ28 | 10 | 28 | - | 163.3 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

T (N · m)

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 21 | 12 | 0.022 | 0.225 | 0.450 | 0.901 | 1.781 | 2.359 | 2.769 | 100 |
| 21 | 18 | 0.033 | 0.338 | 0.676 | 1.352 | 2.582 | 3.538 | 4.154 | 21.48 |
| 22 | 12 | 0.024 | 0.241 | 0.482 | 0.965 | 1.826 | 2.494 | 2.922 | 32.27 |
| 22 | 18 | 0.036 | 0.362 | 0.724 | 1.448 | 2.739 | 3.742 | 4.384 | 23.01 |
| 23 | 12 | 0.025 | 0.257 | 0.514 | 1.029 | 1.930 | 2.628 | 3.073 | 34.56 |
| 23 | 18 | 0.038 | 0.386 | 0.772 | 1.544 | 2.895 | 3.943 | 4.610 | 24.54 |
| | | | | | | | | | 36.86 |

KG 規格は“並幅” (軽荷重用) と“広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

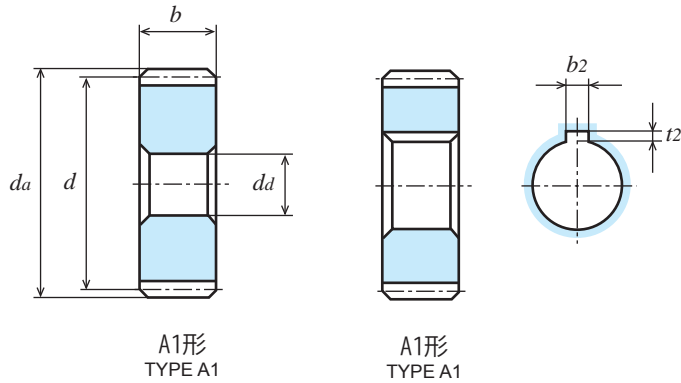
平歯車 SPUR GEARS

モジュール 1.5 圧力角 20° (並歯) 歯数 24
MODULE 1.5 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 24

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H7)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キミぞ Key Way <i>b2 × t2</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>bw</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|----------------------------------|-----------------|-----------|---------------------------------------|--|-----------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S1.5S 24A - 1010F | 24 | φ36 | φ39 | A1 | 10 | φ10 | - | - | 10 | - | - | - | - | - | 73.7 |
| S1.5S 24A - 1210F | 24 | φ36 | φ39 | A1 | 12 | φ10 | - | - | 12 | - | - | - | - | - | 88.5 |
| S1.5S 24A = 1212 | 24 | φ36 | φ39 | A1 | 12 | φ12 | - | - | 12 | 4 × 1.8 | - | - | - | - | 84.6 |
| S1.5S 24A = 1215 | 24 | φ36 | φ39 | A1 | 12 | φ15 | - | - | 12 | 5 × 2.3 | - | - | - | - | 78.2 |
| S1.5S 24A - 1610F | 24 | φ36 | φ39 | A1 | 16 | φ10 | - | - | 16 | - | - | - | - | - | 118.0 |
| S1.5S 24A - 1812F | 24 | φ36 | φ39 | A1 | 18 | φ12 | - | - | 18 | - | - | - | - | - | 127.8 |
| S1.5S 24A = 1815 | 24 | φ36 | φ39 | A1 | 18 | φ15 | - | - | 18 | 5 × 2.3 | - | - | - | - | 117.2 |
| S1.5S 24A = 1816 | 24 | φ36 | φ39 | A1 | 18 | φ16 | - | - | 18 | 5 × 2.3 | - | - | - | - | 113.8 |
| S1.5S 24B - 1010F | 24 | φ36 | φ39 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | - | - | 123.1 |
| S1.5S 24B - 1210F | 24 | φ36 | φ39 | B1 | 12 | φ10 | φ30 | 10 | 22 | - | - | - | - | - | 137.8 |
| S1.5S 24B # 1212 | 24 | φ36 | φ39 | B1 | 12 | φ12 | φ30 | 10 | 22 | 4 × 1.8 | M3 | 5 | - | - | 130.4 |
| S1.5S 24B # 1215 | 24 | φ36 | φ39 | B1 | 12 | φ15 | φ30 | 10 | 22 | 5 × 2.3 | M4 | 5 | - | - | 118.5 |
| S1.5S 24B - 1612 | 24 | φ36 | φ39 | B1 | 16 | φ12 | φ30 | 10 | 26 | - | - | - | - | - | 160.4 |
| S1.5S 24B - 1812 | 24 | φ36 | φ39 | B1 | 18 | φ12 | φ30 | 10 | 28 | - | - | - | - | - | 174.6 |
| S1.5S 24B # 1815 | 24 | φ36 | φ39 | B1 | 18 | φ15 | φ30 | 10 | 28 | 5 × 2.3 | M4 | 5 | - | - | 157.6 |
| S1.5S 24B # 1816 | 24 | φ36 | φ39 | B1 | 18 | φ16 | φ30 | 10 | 28 | 5 × 2.3 | M4 | 5 | - | - | 152.3 |

[=] (イコール) にはキマ材が付いております。 [=] : Gear with key way / with key
[#] (シャープ) にはキマ材とセットスクリューが付いております。 [#] : Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 24 | 10 | 0.022 | 0.227 | 0.455 | 0.911 | 1.694 | 2.299 | 2.683 | 100 |
| 24 | 12 | 0.027 | 0.273 | 0.546 | 1.093 | 2.033 | 2.759 | 3.219 | 21.67 |
| 24 | 16 | 0.036 | 0.364 | 0.729 | 1.458 | 2.710 | 3.679 | 4.293 | 26.07 |
| 24 | 18 | 0.041 | 0.410 | 0.820 | 1.640 | 3.049 | 4.139 | 4.829 | 34.76 |
| | | | | | | | | | 39.15 |

The above numerical values are equivalent to JGMA formulas as reference only.
動力の換算式は P26 をご参照ください。 Please refer to the conversion formulas of power on page P26.

平歯車

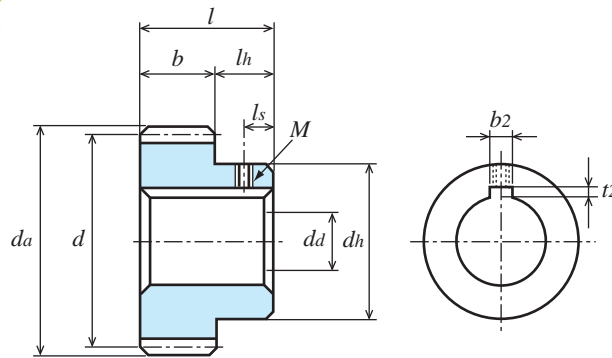
SPUR GEARS

モジュール 1.5 圧力角 20° (並歯) 歯数 25
 MODULE 1.5 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 25

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 25A - 1010F | 25 | φ37.5 | φ40.5 | A1 | 10 | φ10 | - | - | 10 | - | - | - | - | 80.5 | |
| S1.5S 25A - 1210F | 25 | φ37.5 | φ40.5 | A1 | 12 | φ10 | - | - | 12 | - | - | - | - | 96.6 | |
| S1.5S 25A = 1212 | 25 | φ37.5 | φ40.5 | A1 | 12 | φ12 | - | - | 12 | 4 × 1.8 | - | - | - | 92.7 | |
| S1.5S 25A = 1215 | 25 | φ37.5 | φ40.5 | A1 | 12 | φ15 | - | - | 12 | 5 × 2.3 | - | - | - | 86.3 | |
| S1.5S 25A - 1612F | 25 | φ37.5 | φ40.5 | A1 | 16 | φ12 | - | - | 16 | - | - | - | - | 124.5 | |
| S1.5S 25A - 1812F | 25 | φ37.5 | φ40.5 | A1 | 18 | φ12 | - | - | 18 | - | - | - | - | 140.1 | |
| S1.5S 25A = 1815 | 25 | φ37.5 | φ40.5 | A1 | 18 | φ15 | - | - | 18 | 5 × 2.3 | - | - | - | 129.5 | |
| S1.5S 25A = 1816 | 25 | φ37.5 | φ40.5 | A1 | 18 | φ16 | - | - | 18 | 5 × 2.3 | - | - | - | 126.0 | |
| S1.5S 25B - 1010F | 25 | φ37.5 | φ40.5 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | - | 129.9 | |
| S1.5S 25B - 1210 | 25 | φ37.5 | φ40.5 | B1 | 12 | φ10 | φ30 | 10 | 22 | - | - | - | - | 146.1 | |
| S1.5S 25B # 1212 | 25 | φ37.5 | φ40.5 | B1 | 12 | φ12 | φ30 | 10 | 22 | 4 × 1.8 | M3 | 5 | - | 138.5 | |
| S1.5S 25B # 1215 | 25 | φ37.5 | φ40.5 | B1 | 12 | φ15 | φ30 | 10 | 22 | 5 × 2.3 | M4 | 5 | - | 126.7 | |
| S1.5S 25BF - 1508 | 25 | φ37.5 | φ40.5 | B1 | 15 | φ 8(H8) | φ30 | 15 | 30 | - | - | - | - | 200.0 | |
| S1.5S 25B - 1508H | 25 | φ37.5 | φ40.5 | B1 | 15 | φ 8(H※) | φ30 | 15 | 30 | - | - | - | - | 200.0 | |
| S1.5S 25B - 1612 | 25 | φ37.5 | φ40.5 | B1 | 16 | φ12 | φ30 | 10 | 26 | - | - | - | - | 171.2 | |
| S1.5S 25B - 1812 | 25 | φ37.5 | φ40.5 | B1 | 18 | φ12 | φ32 | 10 | 28 | - | - | - | - | 194.5 | |
| S1.5S 25B # 1815 | 25 | φ37.5 | φ40.5 | B1 | 18 | φ15 | φ32 | 10 | 28 | 5 × 2.3 | M4 | 5 | - | 177.4 | |
| S1.5S 25B # 1816 | 25 | φ37.5 | φ40.5 | B1 | 18 | φ16 | φ32 | 10 | 28 | 5 × 2.3 | M4 | 5 | - | 172.1 | |
| S1.5S 25B # 1818 | 25 | φ37.5 | φ40.5 | B1 | 18 | φ18 | φ32 | 10 | 28 | 6 × 2.8 | M4 | 5 | - | 159.3 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。[#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.
 追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 25 | 10 | - | 0.024 | 0.241 | 0.482 | 0.965 | 1.779 | 2.407 | 2.803 |
| 25 | 12 | - | 0.028 | 0.289 | 0.579 | 1.159 | 2.135 | 2.889 | 3.364 |
| 25 | 15 | - | 0.036 | 0.360 | 0.730 | 1.450 | 2.680 | 3.620 | 4.220 |
| 25 | 15 | ○ | 0.039 | 0.385 | 0.771 | 1.541 | 2.860 | 3.903 | 4.568 |
| 25 | 16 | - | 0.038 | 0.386 | 0.772 | 1.545 | 2.847 | 3.852 | 4.486 |
| 25 | 18 | - | 0.043 | 0.434 | 0.869 | 1.738 | 3.203 | 4.334 | 4.047 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.002 | 0.020 | 0.040 | 0.070 | 0.140 | 0.190 | 0.230 |
| 0.008 | 0.090 | 0.185 | 0.382 | 0.731 | 1.015 | 1.200 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

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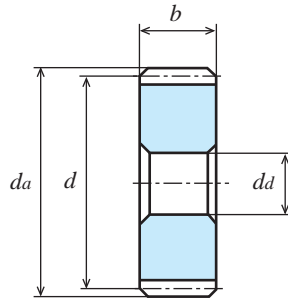
平歯車 SPUR GEARS

モジュール 1.5 圧力角 20° (並歯) 歯数 26 27
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 26 to Z 27

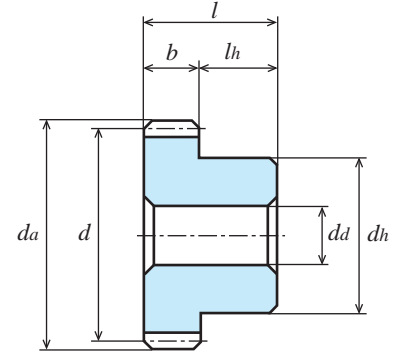
JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化。
Specification change Space-saving and weight saving.



A1形
TYPE A1



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|----------------------|
| S1.5S 26A - 1210F | 26 | φ39 | φ42 | A1 | 12 | φ10 | - | - | 12 | - | 105.1 |
| S1.5S 26A - 1812F | 26 | φ39 | φ42 | A1 | 18 | φ12 | - | - | 18 | - | 152.8 |
| S1.5S 26B - 1210F | 26 | φ39 | φ42 | B1 | 12 | φ10 | φ32 | 10 | 22 | - | 162.1 |
| S1.5S 26B - 1812 | 26 | φ39 | φ42 | B1 | 18 | φ12 | φ32 | 10 | 28 | - | 207.2 |
| S1.5S 27A - 1210F | 27 | φ40.5 | φ43.5 | A1 | 12 | φ10 | - | - | 12 | - | 114.0 |
| S1.5S 27A - 1812F | 27 | φ40.5 | φ43.5 | A1 | 18 | φ12 | - | - | 18 | - | 166.0 |
| S1.5S 27B - 1210F | 27 | φ40.5 | φ43.5 | B1 | 12 | φ10 | φ32 | 10 | 22 | - | 170.9 |
| S1.5S 27B - 1812 | 27 | φ40.5 | φ43.5 | B1 | 18 | φ12 | φ36 | 10 | 28 | - | 237.2 |

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 26 | 12 | 0.030 | 0.306 | 0.612 | 1.224 | 2.236 | 3.017 | 3.524 | 29.22 |
| 26 | 18 | 0.045 | 0.459 | 0.918 | 1.836 | 3.355 | 4.526 | 5.286 | 43.83 |
| 27 | 12 | 0.032 | 0.322 | 0.645 | 1.290 | 2.337 | 3.143 | 3.697 | 30.75 |
| 27 | 18 | 0.048 | 0.483 | 0.967 | 1.935 | 3.505 | 4.715 | 5.545 | 46.12 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

1.5

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

歯数 28 29

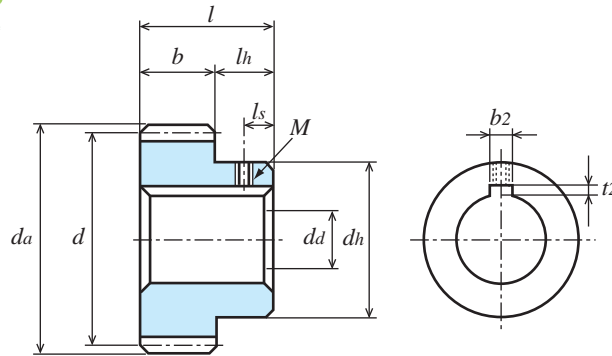
Z 28 to Z 29

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 28A - 1012F | 28 | φ42 | φ45 | A1 | 10 | φ12 | - | - | 10 | - | - | - | - | 99.9 | |
| S1.5S 28A - 1210F | 28 | φ42 | φ45 | A1 | 12 | φ10 | - | - | 12 | - | - | - | - | 123.1 | |
| S1.5S 28A = 1212 | 28 | φ42 | φ45 | A1 | 12 | φ12 | - | - | 12 | 4 × 1.8 | - | - | - | 119.2 | |
| S1.5S 28A = 1215 | 28 | φ42 | φ45 | A1 | 12 | φ15 | - | - | 12 | 5 × 2.3 | - | - | - | 112.8 | |
| S1.5S 28A - 1612F | 28 | φ42 | φ45 | A1 | 16 | φ12 | - | - | 16 | - | - | - | - | 159.8 | |
| S1.5S 28A - 1812F | 28 | φ42 | φ45 | A1 | 18 | φ12 | - | - | 18 | - | - | - | - | 179.8 | |
| S1.5S 28A = 1815 | 28 | φ42 | φ45 | A1 | 18 | φ15 | - | - | 18 | 5 × 2.3 | - | - | - | 169.2 | |
| S1.5S 28A = 1820 | 28 | φ42 | φ45 | A1 | 18 | φ20 | - | - | 18 | 6 × 2.8 | - | - | - | 149.0 | |
| S1.5S 28B - 1010F | 28 | φ42 | φ45 | B1 | 10 | φ10 | φ36 | 10 | 20 | - | - | - | - | 176.3 | |
| S1.5S 28B - 1210 | 28 | φ42 | φ45 | B1 | 12 | φ10 | φ30 | 10 | 22 | - | - | - | - | 172.5 | |
| S1.5S 28B # 1212 | 28 | φ42 | φ45 | B1 | 12 | φ12 | φ30 | 10 | 22 | 4 × 1.8 | M3 | 5 | - | 165.0 | |
| S1.5S 28B # 1215 | 28 | φ42 | φ45 | B1 | 12 | φ15 | φ30 | 10 | 22 | 5 × 2.3 | M3 | 5 | - | 154.1 | |
| S1.5S 28B - 1612 | 28 | φ42 | φ45 | B1 | 16 | φ12 | φ36 | 10 | 26 | - | - | - | - | 231.0 | |
| S1.5S 28B - 1812 | 28 | φ42 | φ45 | B1 | 18 | φ12 | φ36 | 10 | 28 | - | - | - | - | 251.0 | |
| S1.5S 28B # 1815 | 28 | φ42 | φ45 | B1 | 18 | φ15 | φ36 | 10 | 28 | 5 × 2.3 | M4 | 5 | - | 233.8 | |
| S1.5S 28B # 1818 | 28 | φ42 | φ45 | B1 | 18 | φ18 | φ36 | 10 | 28 | 6 × 2.8 | M5 | 5 | - | 215.4 | |
| S1.5S 28B # 1820 | 28 | φ42 | φ45 | B1 | 18 | φ20 | φ36 | 10 | 28 | 6 × 2.8 | M5 | 5 | - | 202.4 | |
| S1.5S 29A - 1210F | 29 | φ43.5 | φ46.5 | A1 | 12 | φ10 | - | - | 12 | - | - | - | - | 132.6 | |
| S1.5S 29A - 1812F | 29 | φ43.5 | φ46.5 | A1 | 18 | φ12 | - | - | 18 | - | - | - | - | 194.0 | |
| S1.5S 29B - 1210F | 29 | φ43.5 | φ46.5 | B1 | 12 | φ10 | φ38 | 10 | 22 | - | - | - | - | 215.5 | |
| S1.5S 29B - 1812 | 29 | φ43.5 | φ46.5 | B1 | 18 | φ12 | φ38 | 10 | 28 | - | - | - | - | 274.3 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 28 | 10 | 0.028 | 0.282 | 0.565 | 1.130 | 2.030 | 2.722 | 3.224 | 100 |
| 28 | 12 | 0.033 | 0.339 | 0.678 | 1.356 | 2.436 | 3.267 | 3.869 | 26.73 |
| 28 | 16 | 0.045 | 0.452 | 0.904 | 1.809 | 3.248 | 4.356 | 5.159 | 32.37 |
| 28 | 18 | 0.050 | 0.508 | 1.017 | 2.035 | 3.654 | 4.901 | 5.804 | 43.16 |
| 29 | 12 | 0.035 | 0.355 | 0.711 | 1.423 | 2.534 | 3.389 | 4.042 | 48.51 |
| 29 | 18 | 0.053 | 0.533 | 1.067 | 2.135 | 3.802 | 5.084 | 6.063 | 33.90 |
| | | | | | | | | | 50.89 |

KG 規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

目次

インフォメーション

ギヤボックス

ノーバッキングギヤ

歯研削歯車

平歯車

内歯車

歯ラック

ラック

メカニカルギヤ

ワームとワームギヤ

かさ歯車

スプロケット

技術資料

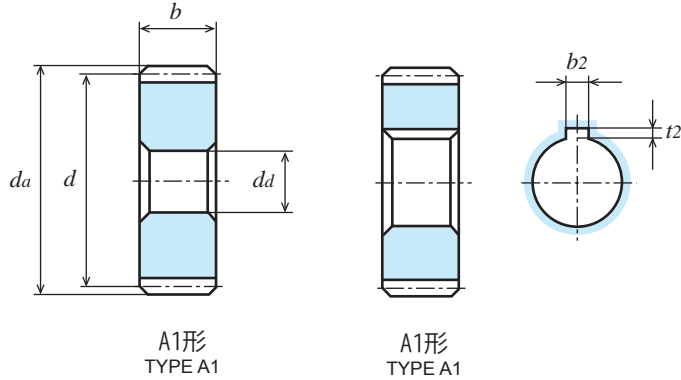
平歯車 SPUR GEARS

モジュール 1.5 圧力角 20° (並歯) 歯数 30
MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 30

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 30A - 1012F | 30 | φ45 | φ48 | A1 | 10 | φ12 | - | - | 10 | - | - | - | - | - | 116.0 |
| S1.5S 30A - 1210F | 30 | φ45 | φ48 | A1 | 12 | φ10 | - | - | 12 | - | - | - | - | - | 142.4 |
| S1.5S 30A = 1212 | 30 | φ45 | φ48 | A1 | 12 | φ12 | - | - | 12 | 4 × 1.8 | - | - | - | - | 138.5 |
| S1.5S 30A = 1215 | 30 | φ45 | φ48 | A1 | 12 | φ15 | - | - | 12 | 5 × 2.3 | - | - | - | - | 132.1 |
| S1.5S 30A - 1614F | 30 | φ45 | φ48 | A1 | 16 | φ14 | - | - | 16 | - | - | - | - | - | 180.4 |
| S1.5S 30A - 1814F | 30 | φ45 | φ48 | A1 | 18 | φ14 | - | - | 18 | - | - | - | - | - | 203.0 |
| S1.5S 30A = 1815 | 30 | φ45 | φ48 | A1 | 18 | φ15 | - | - | 18 | 5 × 2.3 | - | - | - | - | 198.1 |
| S1.5S 30A = 1818 | 30 | φ45 | φ48 | A1 | 18 | φ18 | - | - | 18 | 6 × 2.8 | - | - | - | - | 186.4 |
| S1.5S 30A = 1820 | 30 | φ45 | φ48 | A1 | 18 | φ20 | - | - | 18 | 6 × 2.8 | - | - | - | - | 178.0 |
| S1.5S 30B - 1010F | 30 | φ45 | φ48 | B1 | 10 | φ10 | φ38 | 10 | 20 | - | - | - | - | - | 201.5 |
| S1.5S 30B - 1210 | 30 | φ45 | φ48 | B1 | 12 | φ10 | φ30 | 10 | 22 | - | - | - | - | - | 191.9 |
| S1.5S 30B # 1212 | 30 | φ45 | φ48 | B1 | 12 | φ12 | φ30 | 10 | 22 | 4 × 1.8 | M3 | 5 | - | - | 184.3 |
| S1.5S 30B # 1215 | 30 | φ45 | φ48 | B1 | 12 | φ15 | φ30 | 10 | 22 | 5 × 2.3 | M4 | 5 | - | - | 172.5 |
| S1.5S 30BF - 1508 | 30 | φ45 | φ48 | B1 | 15 | φ 8(H8) | φ38 | 15 | 30 | - | - | - | - | - | 307.3 |
| S1.5S 30B - 1508H | 30 | φ45 | φ48 | B1 | 15 | φ 8(H※) | φ38 | 15 | 30 | - | - | - | - | - | 307.3 |
| S1.5S 30B - 1612 | 30 | φ45 | φ48 | B1 | 16 | φ12 | φ38 | 10 | 26 | - | - | - | - | - | 265.9 |
| S1.5S 30B - 1812 | 30 | φ45 | φ48 | B1 | 18 | φ12 | φ40 | 10 | 28 | - | - | - | - | - | 298.7 |
| S1.5S 30B # 1815 | 30 | φ45 | φ48 | B1 | 18 | φ15 | φ40 | 10 | 28 | 5 × 2.3 | M4 | 5 | - | - | 281.4 |
| S1.5S 30B # 1818 | 30 | φ45 | φ48 | B1 | 18 | φ18 | φ40 | 10 | 28 | 6 × 2.8 | M5 | 5 | - | - | 262.9 |
| S1.5S 30B # 1820 | 30 | φ45 | φ48 | B1 | 18 | φ20 | φ40 | 10 | 28 | 6 × 2.8 | M5 | 5 | - | - | 249.9 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。[#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.
※

歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 30 | 10 | - | 0.031 | 0.310 | 0.620 | 1.241 | 2.192 | 2.923 | 3.509 |
| 30 | 12 | - | 0.037 | 0.372 | 0.744 | 1.489 | 2.630 | 3.508 | 4.211 |
| 30 | 15 | - | 0.047 | 0.470 | 0.930 | 1.860 | 3.290 | 4.390 | 5.270 |
| 30 | 15 | ○ | 0.049 | 0.494 | 0.988 | 1.976 | 3.527 | 4.747 | 5.714 |
| 30 | 16 | - | 0.049 | 0.496 | 0.993 | 1.986 | 3.507 | 4.677 | 5.615 |
| 30 | 18 | - | 0.055 | 0.558 | 1.117 | 2.234 | 3.946 | 5.262 | 6.317 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.003 | 0.030 | 0.050 | 0.110 | 0.200 | 0.270 | 0.330 |
| 0.012 | 0.132 | 0.272 | 0.560 | 1.030 | 1.411 | 1.715 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

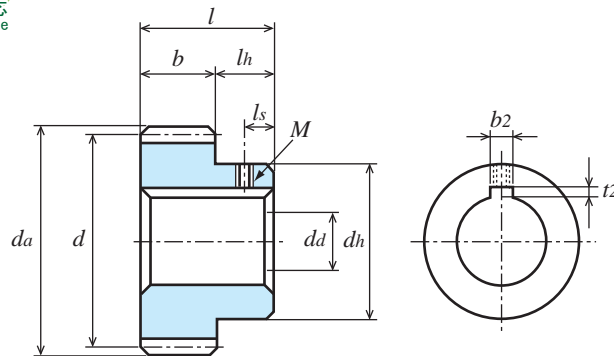
平歯車 SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 32
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z32

JIS B 1702-1 (ISO) 8級
 System of accuracy: JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマイぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 32A - 1010F | 32 | φ48 | φ51 | A1 | 10 | φ10 | - | - | 10 | - | - | - | - | 135.9 | |
| S1.5S 32A = 1012 | 32 | φ48 | φ51 | A1 | 10 | φ12 | - | - | 10 | 4 × 1.8 | - | - | - | 132.6 | |
| S1.5S 32A = 1015 | 32 | φ48 | φ51 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | - | 127.3 | |
| S1.5S 32A - 1614F | 32 | φ48 | φ51 | A1 | 16 | φ14 | - | - | 16 | - | - | - | - | 207.9 | |
| S1.5S 32A = 1615 | 32 | φ48 | φ51 | A1 | 16 | φ15 | - | - | 16 | 5 × 2.3 | - | - | - | 203.6 | |
| S1.5S 32A = 1618 | 32 | φ48 | φ51 | A1 | 16 | φ18 | - | - | 16 | 6 × 2.8 | - | - | - | 193.2 | |
| S1.5S 32A = 1620 | 32 | φ48 | φ51 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | 185.7 | |
| S1.5S 32B - 1010 | 32 | φ48 | φ51 | B1 | 10 | φ10 | φ30 | 10 | 20 | - | - | - | - | 185.3 | |
| S1.5S 32B # 1012 | 32 | φ48 | φ51 | B1 | 10 | φ12 | φ30 | 10 | 20 | 4 × 1.8 | M3 | 5 | - | 178.4 | |
| S1.5S 32B # 1015 | 32 | φ48 | φ51 | B1 | 10 | φ15 | φ30 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | 167.7 | |
| S1.5S 32B - 1612 | 32 | φ48 | φ51 | B1 | 16 | φ12 | φ40 | 10 | 26 | - | - | - | - | 303.0 | |
| S1.5S 32B # 1615 | 32 | φ48 | φ51 | B1 | 16 | φ15 | φ40 | 10 | 26 | 5 × 2.3 | M4 | 5 | - | 286.9 | |
| S1.5S 32B # 1618 | 32 | φ48 | φ51 | B1 | 16 | φ18 | φ40 | 10 | 26 | 6 × 2.8 | M5 | 5 | - | 269.7 | |
| S1.5S 32B # 1620 | 32 | φ48 | φ51 | B1 | 16 | φ20 | φ40 | 10 | 26 | 6 × 2.8 | M5 | 5 | - | 257.6 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 32 | 10 | 0.033 | 0.338 | 0.677 | 1.352 | 2.351 | 3.122 | 3.793 | 32.27 |
| 32 | 16 | 0.054 | 0.541 | 1.083 | 2.164 | 3.762 | 4.996 | 6.069 | 51.66 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

目次 CONTENTS

インフォメーション INFORMATION

ギヤボックス GEAR BOXES

ノーバッキングバックラッシュギヤ NO BACKLASH SPUR GEARS

歯研平歯車 GROUND SPUR GEARS

平歯車 SPUR GEARS

内歯車 INTERNAL GEARS

歯研ラック GROUND RACKS

ラック RACKS

へリカル・スクリューギヤ HELICAL GEARS AND SCREW GEARS

ワーム・ワームホイール WORMS AND WORM WHEELS

かさ歯車 BEVEL GEARS

スプロケット SPROCKETS

技術資料 REFERENCE DATA

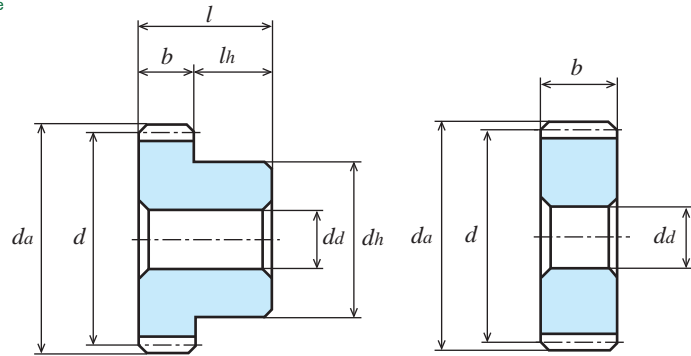
平歯車 SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 34 35
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 34 to Z 35

JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化。
 Specification change Space-saving and weight saving.



R1形

A1形

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H7)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キミぞ Key Way <i>b₂ × t₂</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|--|-----------------------------|
| S1.5S 34A - 1012F | 34 | φ51 | φ54 | A1 | 10 | φ12 | - | - | 10 | - | 151.5 |
| S1.5S 34A - 1614F | 34 | φ51 | φ54 | A1 | 16 | φ14 | - | - | 16 | - | 237.2 |
| S1.5S 34B - 1010F | 34 | φ51 | φ54 | B1 | 10 | φ10 | φ44 | 10 | 20 | - | 267.4 |
| S1.5S 34B - 1612 | 34 | φ51 | φ54 | B1 | 16 | φ12 | φ44 | 10 | 26 | - | 353.1 |
| S1.5S 35A - 1012F | 35 | φ52.5 | φ55.5 | A1 | 10 | φ12 | - | - | 10 | - | 161.1 |
| S1.5S 35A - 1614F | 35 | φ52.5 | φ55.5 | A1 | 16 | φ14 | - | - | 16 | - | 252.6 |
| S1.5S 35B - 1010F | 35 | φ52.5 | φ55.5 | B1 | 10 | φ10 | φ44 | 10 | 20 | - | 277.0 |
| S1.5S 35B - 1612 | 35 | φ52.5 | φ55.5 | B1 | 16 | φ12 | φ44 | 10 | 26 | - | 368.4 |

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 34 | 10 | 0.036 | 0.366 | 0.733 | 1.452 | 2.507 | 3.359 | 4.074 | 34.95 |
| 34 | 16 | 0.058 | 0.586 | 1.173 | 2.323 | 4.011 | 5.375 | 6.519 | 55.96 |
| 35 | 10 | 0.038 | 0.381 | 0.762 | 1.501 | 2.583 | 3.477 | 4.214 | 36.38 |
| 35 | 16 | 0.060 | 0.609 | 1.219 | 2.402 | 4.133 | 5.563 | 6.743 | 58.15 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

1.5

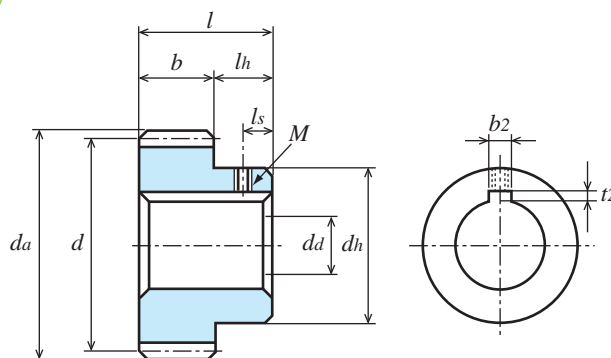
圧力角 20° (並歯) 歯数 36 38

20° PRESSURE ANGLE FULL DEPTH TOOTH Z36 to Z38

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 36A - 1012F | 36 | φ54 | φ57 | A1 | 10 | φ12 | - | - | 10 | - | - | - | - | 170.9 | |
| S1.5S 36A = 1015 | 36 | φ54 | φ57 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | - | 165.0 | |
| S1.5S 36A = 1016 | 36 | φ54 | φ57 | A1 | 10 | φ16 | - | - | 10 | 5 × 2.3 | - | - | - | 163.1 | |
| S1.5S 36A - 1614F | 36 | φ54 | φ57 | A1 | 16 | φ14 | - | - | 16 | - | - | - | - | 268.3 | |
| S1.5S 36A = 1615 | 36 | φ54 | φ57 | A1 | 16 | φ15 | - | - | 16 | 5 × 2.3 | - | - | - | 264.0 | |
| S1.5S 36A = 1618 | 36 | φ54 | φ57 | A1 | 16 | φ18 | - | - | 16 | 6 × 2.8 | - | - | - | 253.6 | |
| S1.5S 36A = 1620 | 36 | φ54 | φ57 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | 246.1 | |
| S1.5S 36B - 1010 | 36 | φ54 | φ57 | B1 | 10 | φ10 | φ32 | 10 | 20 | - | - | - | - | 230.7 | |
| S1.5S 36B # 1012 | 36 | φ54 | φ57 | B1 | 10 | φ12 | φ32 | 10 | 20 | 4 × 1.8 | M3 | 5 | - | 223.8 | |
| S1.5S 36B # 1015 | 36 | φ54 | φ57 | B1 | 10 | φ15 | φ32 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | 213.0 | |
| S1.5S 36B # 1016 | 36 | φ54 | φ57 | B1 | 10 | φ16 | φ32 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | 209.2 | |
| S1.5S 36B - 1612 | 36 | φ54 | φ57 | B1 | 16 | φ12 | φ40 | 10 | 26 | - | - | - | - | 363.5 | |
| S1.5S 36B # 1615 | 36 | φ54 | φ57 | B1 | 16 | φ15 | φ40 | 10 | 26 | 5 × 2.3 | M4 | 5 | - | 347.3 | |
| S1.5S 36B # 1618 | 36 | φ54 | φ57 | B1 | 16 | φ18 | φ40 | 10 | 26 | 6 × 2.8 | M5 | 5 | - | 330.1 | |
| S1.5S 36B # 1620 | 36 | φ54 | φ57 | B1 | 16 | φ20 | φ40 | 10 | 26 | 6 × 2.8 | M5 | 5 | - | 318.0 | |
| S1.5S 38A - 1012F | 38 | φ57 | φ60 | A1 | 10 | φ12 | - | - | 10 | - | - | - | - | 191.4 | |
| S1.5S 38A - 1614F | 38 | φ57 | φ60 | A1 | 16 | φ14 | - | - | 16 | - | - | - | - | 301.2 | |
| S1.5S 38B - 1012F | 38 | φ57 | φ60 | B1 | 10 | φ12 | φ50 | 10 | 20 | - | - | - | - | 336.7 | |
| S1.5S 38B - 1612 | 38 | φ57 | φ60 | B1 | 16 | φ12 | φ50 | 10 | 26 | - | - | - | - | 451.8 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 36 | 10 | 0.039 | 0.395 | 0.790 | 1.550 | 2.659 | 3.594 | 4.353 | 100 |
| 36 | 16 | 0.063 | 0.632 | 1.265 | 2.481 | 4.254 | 5.751 | 6.966 | 60.35 |
| 38 | 10 | 0.042 | 0.424 | 0.848 | 1.648 | 2.807 | 3.828 | 4.629 | 40.49 |
| 38 | 16 | 0.067 | 0.678 | 1.356 | 2.637 | 4.492 | 6.125 | 7.407 | 64.74 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion fomulas of power on page P26.

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平歯車

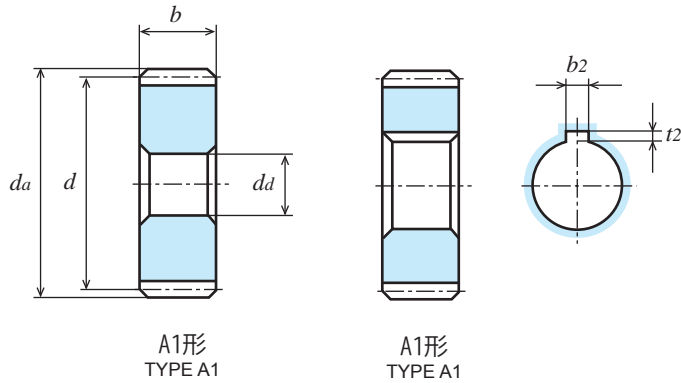
SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 40
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 40

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 40A - 1012F | 40 | φ60 | φ63 | A1 | 10 | φ12 | - | - | 10 | - | - | - | - | - | 213.1 |
| S1.5S 40A = 1015 | 40 | φ60 | φ63 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | - | - | 207.2 |
| S1.5S 40A = 1016 | 40 | φ60 | φ63 | A1 | 10 | φ16 | - | - | 10 | 5 × 2.3 | - | - | - | - | 205.3 |
| S1.5S 40A = 1018 | 40 | φ60 | φ63 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | - | 200.7 |
| S1.5S 40A - 1614F | 40 | φ60 | φ63 | A1 | 16 | φ14 | - | - | 16 | - | - | - | - | - | 335.8 |
| S1.5S 40A = 1615 | 40 | φ60 | φ63 | A1 | 16 | φ15 | - | - | 16 | 5 × 2.3 | - | - | - | - | 331.5 |
| S1.5S 40A = 1618 | 40 | φ60 | φ63 | A1 | 16 | φ18 | - | - | 16 | 6 × 2.8 | - | - | - | - | 321.1 |
| S1.5S 40A = 1620 | 40 | φ60 | φ63 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | - | 313.6 |
| S1.5S 40B - 1012 | 40 | φ60 | φ63 | B1 | 10 | φ12 | φ36 | 10 | 20 | - | - | - | - | - | 284.3 |
| S1.5S 40B # 1015 | 40 | φ60 | φ63 | B1 | 10 | φ15 | φ36 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | - | 271.8 |
| S1.5S 40B # 1016 | 40 | φ60 | φ63 | B1 | 10 | φ16 | φ36 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | - | 268.0 |
| S1.5S 40B # 1018 | 40 | φ60 | φ63 | B1 | 10 | φ18 | φ36 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | - | 258.6 |
| S1.5S 40BF - 1508 | 40 | φ60 | φ63 | B1 | 15 | φ 8(H8) | φ50 | 15 | 30 | - | - | - | - | - | 550.2 |
| S1.5S 40B - 1508H | 40 | φ60 | φ63 | B1 | 15 | φ 8(H※) | φ50 | 15 | 30 | - | - | - | - | - | 550.2 |
| S1.5S 40B - 1612 | 40 | φ60 | φ63 | B1 | 16 | φ12 | φ40 | 10 | 26 | - | - | - | - | - | 431.0 |
| S1.5S 40B # 1615 | 40 | φ60 | φ63 | B1 | 16 | φ15 | φ40 | 10 | 26 | 5 × 2.3 | M4 | 5 | - | - | 414.8 |
| S1.5S 40B # 1618 | 40 | φ60 | φ63 | B1 | 16 | φ18 | φ40 | 10 | 26 | 6 × 2.8 | M5 | 5 | - | - | 397.6 |
| S1.5S 40B # 1620 | 40 | φ60 | φ63 | B1 | 16 | φ20 | φ40 | 10 | 26 | 6 × 2.8 | M5 | 5 | - | - | 385.6 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 40 | 10 | - | 0.045 | 0.452 | 0.905 | 1.744 | 2.952 | 4.060 | 4.902 |
| 40 | 15 | - | 0.068 | 0.680 | 1.360 | 2.610 | 4.420 | 6.080 | 7.340 |
| 40 | 15 | ○ | 0.072 | 0.719 | 1.437 | 2.777 | 4.766 | 6.594 | 7.982 |
| 40 | 16 | - | 0.072 | 0.724 | 1.449 | 2.791 | 4.724 | 6.496 | 7.844 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.005 | 0.050 | 0.100 | 0.190 | 0.340 | 0.480 | 0.590 |
| 0.022 | 0.241 | 0.496 | 0.988 | 1.748 | 2.462 | 3.009 |
| - | - | - | - | - | - | - |

平歯車

SPUR GEARS

モジュール
MODULE

1.5

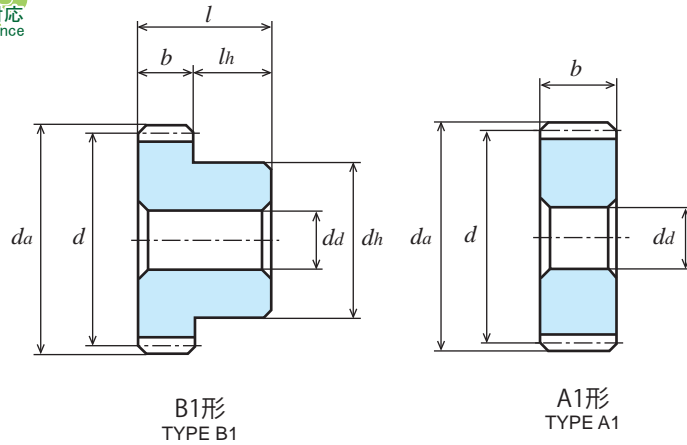
圧力角 20° (並歯) 歯数 42 ~ 46
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 42 to Z 46

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|----------------------|
| S1.5S 42A - 1012F | 42 | φ63 | φ66 | A1 | 10 | φ12 | - | - | 10 | - | 235.8 |
| S1.5S 42A - 1612F | 42 | φ63 | φ66 | A1 | 16 | φ12 | - | - | 16 | - | 377.3 |
| S1.5S 42B - 1012F | 42 | φ63 | φ66 | B1 | 10 | φ12 | φ50 | 10 | 20 | - | 381.1 |
| S1.5S 42B - 1612 | 42 | φ63 | φ66 | B1 | 16 | φ12 | φ50 | 10 | 26 | - | 522.9 |
| S1.5S 44A - 1012F | 44 | φ66 | φ69 | A1 | 10 | φ12 | - | - | 10 | - | 259.7 |
| S1.5S 44A - 1612F | 44 | φ66 | φ69 | A1 | 16 | φ12 | - | - | 16 | - | 415.5 |
| S1.5S 44B - 1012F | 44 | φ66 | φ69 | B1 | 10 | φ12 | φ50 | 10 | 20 | - | 404.9 |
| S1.5S 44B - 1612 | 44 | φ66 | φ69 | B1 | 16 | φ12 | φ50 | 10 | 26 | - | 561.1 |
| S1.5S 45A - 1012F | 45 | φ67.5 | φ70.5 | A1 | 10 | φ12 | - | - | 10 | - | 272.0 |
| S1.5S 45A - 1612F | 45 | φ67.5 | φ70.5 | A1 | 16 | φ12 | - | - | 16 | - | 435.3 |
| S1.5S 45B - 1012F | 45 | φ67.5 | φ70.5 | B1 | 10 | φ12 | φ50 | 10 | 20 | - | 417.3 |
| S1.5S 45B - 1612 | 45 | φ67.5 | φ70.5 | B1 | 16 | φ12 | φ50 | 10 | 26 | - | 580.9 |
| S1.5S 46A - 1012F | 46 | φ69 | φ72 | A1 | 10 | φ12 | - | - | 10 | - | 284.7 |
| S1.5S 46A - 1612F | 46 | φ69 | φ72 | A1 | 16 | φ12 | - | - | 16 | - | 455.4 |
| S1.5S 46B - 1012F | 46 | φ69 | φ72 | B1 | 10 | φ12 | φ50 | 10 | 20 | - | 429.9 |
| S1.5S 46B - 1612 | 46 | φ69 | φ72 | B1 | 16 | φ12 | φ50 | 10 | 26 | - | 601.1 |

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 42 | 10 | 0.048 | 0.481 | 0.963 | 1.839 | 3.094 | 4.290 | 5.173 | 45.93 |
| 42 | 16 | 0.077 | 0.771 | 1.542 | 2.943 | 4.951 | 6.864 | 8.276 | 73.62 |
| 44 | 10 | 0.051 | 0.510 | 1.021 | 1.932 | 3.230 | 4.515 | 5.448 | 48.70 |
| 44 | 16 | 0.080 | 0.820 | 1.630 | 3.090 | 5.170 | 7.220 | 8.720 | 78.30 |
| 45 | 10 | 0.052 | 0.525 | 1.050 | 1.978 | 3.298 | 4.628 | 5.588 | 50.13 |
| 45 | 16 | 0.080 | 0.840 | 1.680 | 3.170 | 5.280 | 7.410 | 8.940 | 80.21 |
| 46 | 10 | 0.053 | 0.539 | 1.079 | 2.024 | 3.365 | 4.740 | 5.727 | 51.47 |
| 46 | 16 | 0.090 | 0.860 | 1.730 | 3.240 | 5.380 | 7.580 | 9.160 | 82.12 |

KG 規格は“並幅” (軽荷重用) と“広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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インフォメーション

ギヤボックス

ノーバッキングギヤ

歯研削歯車

平歯車

内歯車

歯研削歯車

ラック

らせん歯車

ワームとワームホイール

かさ歯車

スプロケット

技術仕様

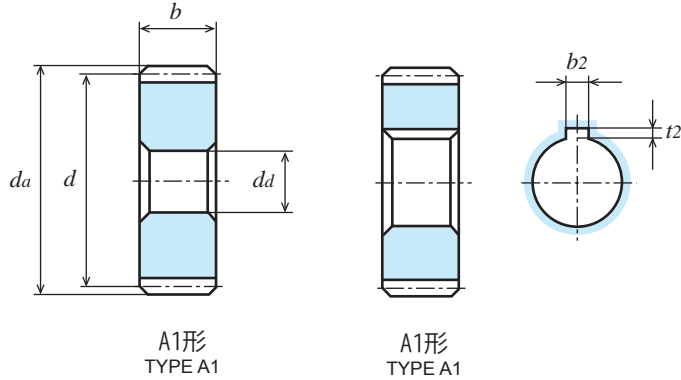
平歯車 SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 48
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 48

JIS B 1702-1 (ISO) 8級
 System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H7)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キーマイ Key Way <i>b2 × t2</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>bw</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------------|-----------------|-----------|---------------------------------------|--|-----------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S1.5S 48A - 1014F | 48 | φ72 | φ75 | A1 | 10 | φ14 | - | - | 10 | - | - | - | - | 307.5 | |
| S1.5S 48A = 1015 | 48 | φ72 | φ75 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | - | 304.8 | |
| S1.5S 48A = 1016 | 48 | φ72 | φ75 | A1 | 10 | φ16 | - | - | 10 | 5 × 2.3 | - | - | - | 302.9 | |
| S1.5S 48A = 1018 | 48 | φ72 | φ75 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | 298.3 | |
| S1.5S 48A - 1616F | 48 | φ72 | φ75 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 486.1 | |
| S1.5S 48A = 1620 | 48 | φ72 | φ75 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | 469.8 | |
| S1.5S 48B - 1012 | 48 | φ72 | φ75 | B1 | 10 | φ12 | φ36 | 10 | 20 | - | - | - | - | 382.0 | |
| S1.5S 48B # 1015 | 48 | φ72 | φ75 | B1 | 10 | φ15 | φ36 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | 369.5 | |
| S1.5S 48B # 1016 | 48 | φ72 | φ75 | B1 | 10 | φ16 | φ36 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | 365.8 | |
| S1.5S 48B # 1018 | 48 | φ72 | φ75 | B1 | 10 | φ18 | φ36 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 356.4 | |
| S1.5S 48B - 1612 | 48 | φ72 | φ75 | B1 | 16 | φ12 | φ40 | 10 | 26 | - | - | - | - | 587.3 | |
| S1.5S 48B # 1615 | 48 | φ72 | φ75 | B1 | 16 | φ15 | φ40 | 10 | 26 | 5 × 2.3 | M4 | 5 | - | 571.1 | |
| S1.5S 48B # 1620 | 48 | φ72 | φ75 | B1 | 16 | φ20 | φ40 | 10 | 26 | 6 × 2.8 | M5 | 5 | - | 541.9 | |

[=] (イコール) にはキー材が付いております。[#] : Gear with key way / with key
 [#] (シャープ) にはキー材とセットスクリューが付いております。[#] : Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 48 | 10 | 0.05 | 0.56 | 1.13 | 2.11 | 3.50 | 4.96 | 6.00 | 100 |
| 48 | 16 | 0.09 | 0.91 | 1.82 | 3.39 | 5.60 | 7.94 | 9.61 | 86.90 |

The above numerical values are equivalent to JGMA formulas as reference only.
 動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

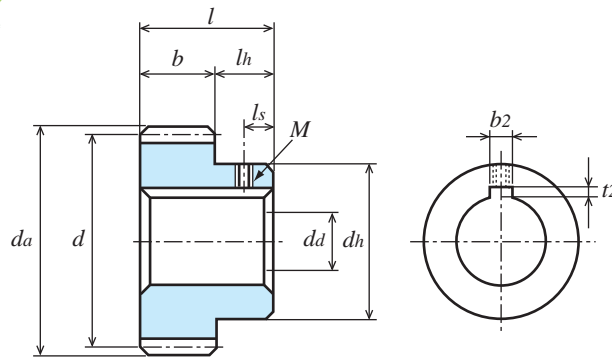
SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 50
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 50

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 50A - 1014F | 50 | φ75 | φ78 | A1 | 10 | φ14 | - | - | 10 | - | - | - | - | 334.7 | |
| S1.5S 50A = 1015 | 50 | φ75 | φ78 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | - | 332.0 | |
| S1.5S 50A = 1018 | 50 | φ75 | φ78 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | 325.5 | |
| S1.5S 50A = 1020 | 50 | φ75 | φ78 | A1 | 10 | φ20 | - | - | 10 | 6 × 2.8 | - | - | - | 320.8 | |
| S1.5S 50A - 1616F | 50 | φ75 | φ78 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 529.6 | |
| S1.5S 50A = 1620 | 50 | φ75 | φ78 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | 513.3 | |
| S1.5S 50A = 1625 | 50 | φ75 | φ78 | A1 | 16 | φ25 | - | - | 16 | 8 × 3.3 | - | - | - | 489.9 | |
| S1.5S 50B - 1012 | 50 | φ75 | φ78 | B1 | 10 | φ12 | φ40 | 10 | 20 | - | - | - | - | 428.0 | |
| S1.5S 50B # 1015 | 50 | φ75 | φ78 | B1 | 10 | φ15 | φ40 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | 415.3 | |
| S1.5S 50B # 1018 | 50 | φ75 | φ78 | B1 | 10 | φ18 | φ40 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 402.1 | |
| S1.5S 50B # 1020 | 50 | φ75 | φ78 | B1 | 10 | φ20 | φ40 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 392.8 | |
| ● S1.5S 50BF - 1510 | 50 | φ75 | φ78 | B1 | 15 | φ10(H8) | φ60 | 15 | 30 | - | - | - | - | 832.2 | |
| ● S1.5S 50B - 1510H | 50 | φ75 | φ78 | B1 | 15 | φ10(H※) | φ60 | 15 | 30 | - | - | - | - | 832.2 | |
| S1.5S 50B - 1615 | 50 | φ75 | φ78 | B1 | 16 | φ15 | φ50 | 10 | 26 | - | - | - | - | 673.4 | |
| S1.5S 50B # 1620 | 50 | φ75 | φ78 | B1 | 16 | φ20 | φ50 | 10 | 26 | 6 × 2.8 | M5 | 5 | - | 640.3 | |
| S1.5S 50B # 1625 | 50 | φ75 | φ78 | B1 | 16 | φ25 | φ50 | 10 | 26 | 8 × 3.3 | M6 | 5 | - | 602.1 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 50 | 10 | - | 0.059 | 0.59 | 1.19 | 2.20 | 3.66 | 5.18 | 6.28 |
| 50 | 15 | - | 0.090 | 0.890 | 1.790 | 3.290 | 5.470 | 7.740 | 9.380 |
| 50 | 15 | ○ | 0.095 | 0.948 | 1.896 | 3.518 | 5.929 | 8.424 | 10.429 |
| 50 | 16 | - | 0.096 | 0.96 | 1.92 | 3.53 | 5.86 | 8.30 | 10.05 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.008 | 0.080 | 0.160 | 0.300 | 0.520 | 0.760 | 0.950 |
| 0.035 | 0.384 | 0.792 | 1.515 | 2.631 | 3.805 | 4.757 |
| - | - | - | - | - | - | - |

平歯車

SPUR GEARS

モジュール
MODULE

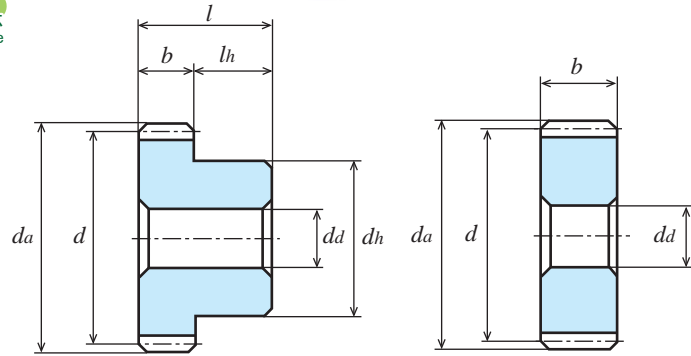
1.5

圧力角 20° (並歯) 歯数 52 ~ 55
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 52 to Z 55

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化。
Specification change Space-saving and weight saving.



B1形
TYPE B1

A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $da(H7)$ | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way $b_2 \times t_2$ | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|-------------------------------|-----------|-------------------------|---------------------------------|------------------------------|--------------------------------|-----------------------------|------------------------------------|------------------------|
| S1.5S 52A - 1014F | 52 | $\phi 78$ | $\phi 81$ | A1 | 10 | $\phi 14$ | - | - | 10 | - | 363.0 |
| S1.5S 52A - 1616F | 52 | $\phi 78$ | $\phi 81$ | A1 | 16 | $\phi 16$ | - | - | 16 | - | 574.9 |
| S1.5S 52B - 1014F | 52 | $\phi 78$ | $\phi 81$ | B1 | 10 | $\phi 14$ | $\phi 50$ | 10 | 20 | - | 505.1 |
| S1.5S 52B - 1616 | 52 | $\phi 78$ | $\phi 81$ | B1 | 16 | $\phi 16$ | $\phi 60$ | 10 | 26 | - | 781.6 |
| S1.5S 54A - 1014F | 54 | $\phi 81$ | $\phi 84$ | A1 | 10 | $\phi 14$ | - | - | 10 | - | 392.4 |
| S1.5S 54A - 1616F | 54 | $\phi 81$ | $\phi 84$ | A1 | 16 | $\phi 16$ | - | - | 16 | - | 622.0 |
| S1.5S 54B - 1014F | 54 | $\phi 81$ | $\phi 84$ | B1 | 10 | $\phi 14$ | $\phi 50$ | 10 | 20 | - | 534.5 |
| S1.5S 54B - 1616 | 54 | $\phi 81$ | $\phi 84$ | B1 | 16 | $\phi 16$ | $\phi 60$ | 10 | 26 | - | 828.7 |
| S1.5S 55A - 1014F | 55 | $\phi 82.5$ | $\phi 85.5$ | A1 | 10 | $\phi 14$ | - | - | 10 | - | 407.5 |
| S1.5S 55A - 1616F | 55 | $\phi 82.5$ | $\phi 85.5$ | A1 | 16 | $\phi 16$ | - | - | 16 | - | 646.2 |
| S1.5S 55B - 1014F | 55 | $\phi 82.5$ | $\phi 85.5$ | B1 | 10 | $\phi 14$ | $\phi 50$ | 10 | 20 | - | 549.6 |
| S1.5S 55B - 1616 | 55 | $\phi 82.5$ | $\phi 85.5$ | B1 | 16 | $\phi 16$ | $\phi 60$ | 10 | 26 | - | 852.9 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 52 | 10 | 0.062 | 0.62 | 1.25 | 2.29 | 3.82 | 5.40 | 6.55 | 59.20 |
| 52 | 16 | 0.101 | 1.01 | 2.01 | 3.67 | 6.12 | 8.65 | 10.49 | 96.45 |
| 54 | 10 | 0.065 | 0.65 | 1.31 | 2.38 | 3.98 | 5.62 | 6.82 | 62.07 |
| 54 | 16 | 0.105 | 1.05 | 2.10 | 3.81 | 6.38 | 9.00 | 10.92 | 100.27 |
| 55 | 10 | 0.067 | 0.67 | 1.34 | 2.42 | 4.06 | 5.73 | 6.96 | 63.98 |
| 55 | 16 | 0.108 | 1.08 | 2.15 | 3.88 | 6.51 | 9.18 | 11.14 | 103.13 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

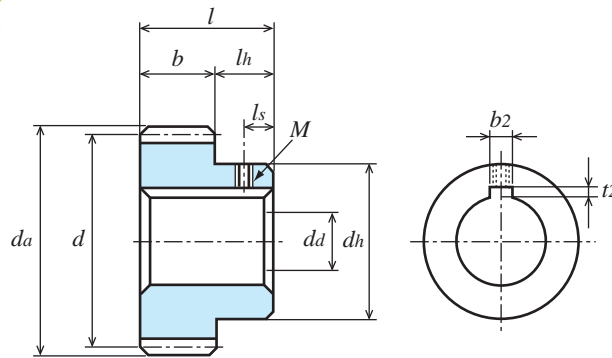
平歯車 SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 56 58
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 56 to Z 58

JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web b _w | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|--------------------------------|---|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 56A - 1014F | 56 | φ84 | φ87 | A1 | 10 | φ14 | - | - | 10 | - | - | - | - | - | 422.9 |
| S1.5S 56A = 1015 | 56 | φ84 | φ87 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | - | - | 420.3 |
| S1.5S 56A = 1018 | 56 | φ84 | φ87 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | - | 413.7 |
| S1.5S 56A - 1616F | 56 | φ84 | φ87 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | - | 670.8 |
| S1.5S 56A = 1620 | 56 | φ84 | φ87 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | - | 654.5 |
| S1.5S 56B - 1014 | 56 | φ84 | φ87 | B1 | 10 | φ14 | φ40 | 10 | 20 | - | - | - | - | - | 509.8 |
| S1.5S 56B # 1015 | 56 | φ84 | φ87 | B1 | 10 | φ15 | φ40 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | - | 503.6 |
| S1.5S 56B - 1616 | 56 | φ84 | φ87 | B1 | 16 | φ16 | φ50 | 10 | 26 | - | - | - | - | - | 809.7 |
| S1.5S 56B # 1620 | 56 | φ84 | φ87 | B1 | 16 | φ20 | φ50 | 10 | 26 | 6 × 2.8 | M5 | 5 | - | - | 781.6 |
| S1.5S 58A - 1014F | 58 | φ87 | φ90 | A1 | 10 | φ14 | - | - | 10 | - | - | - | - | - | 454.6 |
| S1.5S 58A - 1616F | 58 | φ87 | φ90 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | - | 721.4 |
| S1.5S 58B - 1014F | 58 | φ87 | φ90 | B1 | 10 | φ14 | φ50 | 10 | 20 | - | - | - | - | - | 596.6 |
| S1.5S 58B - 1616 | 58 | φ87 | φ90 | B1 | 16 | φ16 | φ60 | 10 | 26 | - | - | - | - | - | 928.2 |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 56 | 10 | 0.068 | 0.68 | 1.37 | 2.46 | 4.14 | 5.85 | 7.09 | 100 |
| 56 | 16 | 0.110 | 1.10 | 2.20 | 3.95 | 6.64 | 9.37 | 11.35 | 105.04 |
| 58 | 10 | 0.071 | 0.71 | 1.43 | 2.55 | 4.30 | 6.07 | 7.36 | 67.80 |
| 58 | 16 | 0.115 | 1.15 | 2.29 | 4.09 | 6.89 | 9.73 | 11.78 | 109.82 |

KG 規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

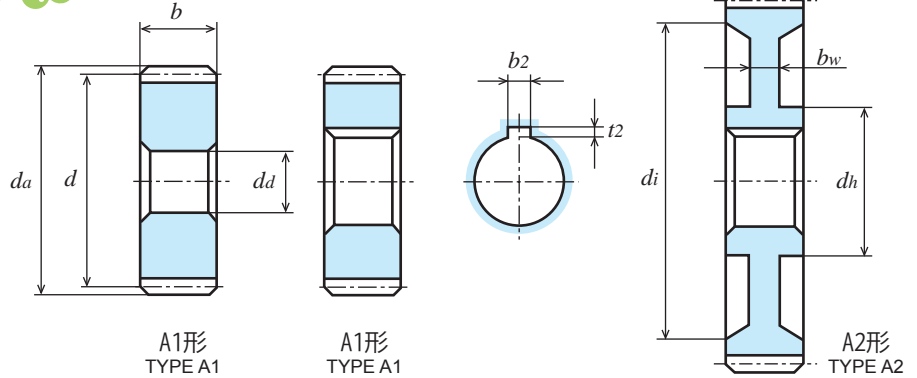
平歯車 SPUR GEARS

モジュール 1.5 圧力角 20° (並歯) 歯数 60
MODULE 1.5 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 60

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|----------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 60A - 1014F | 60 | φ90 | φ93 | A1 | 10 | φ14 | - | - | 10 | - | - | - | - | 487.3 | |
| S1.5S 60A = 1015 | 60 | φ90 | φ93 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | - | 484.6 | |
| S1.5S 60A = 1018 | 60 | φ90 | φ93 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | 478.1 | |
| S1.5S 60A = 1020 | 60 | φ90 | φ93 | A1 | 10 | φ20 | - | - | 10 | 6 × 2.8 | - | - | - | 473.4 | |
| S1.5S 60A - 1616F | 60 | φ90 | φ93 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 773.8 | |
| S1.5S 60A = 1620 | 60 | φ90 | φ93 | A2 | 16 | φ20 | φ40 | - | 16 | 6 × 2.8 | - | - | φ76 | 8 | 568.5 |
| S1.5S 60A = 1625 | 60 | φ90 | φ93 | A2 | 16 | φ25 | φ50 | - | 16 | 8 × 3.3 | - | - | φ76 | 8 | 589.4 |
| S1.5S 60B - 1014 | 60 | φ90 | φ93 | B1 | 10 | φ14 | φ40 | 10 | 20 | - | - | - | - | 572.2 | |
| S1.5S 60B # 1015 | 60 | φ90 | φ93 | B1 | 10 | φ15 | φ40 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | 568.0 | |
| S1.5S 60B # 1018 | 60 | φ90 | φ93 | B1 | 10 | φ18 | φ40 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 554.8 | |
| S1.5S 60B # 1020 | 60 | φ90 | φ93 | B1 | 10 | φ20 | φ40 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 545.5 | |
| ● S1.5S 60BF - 1510 | 60 | φ90 | φ93 | B1 | 15 | φ10(H8) | φ65 | 15 | 30 | - | - | - | - | 1,118.4 | |
| ● S1.5S 60B - 1510H | 60 | φ90 | φ93 | B1 | 15 | φ10(H※) | φ65 | 15 | 30 | - | - | - | - | 1,118.4 | |
| S1.5S 60B - 1616 | 60 | φ90 | φ93 | B1 | 16 | φ16 | φ50 | 10 | 26 | - | - | - | - | 912.7 | |
| S1.5S 60B # 1620 | 60 | φ90 | φ93 | B3 | 16 | φ20 | φ50 | 10 | 26 | 6 × 2.8 | M5 | 5 | φ76 | 8 | 739.6 |
| S1.5S 60B # 1625 | 60 | φ90 | φ93 | B3 | 16 | φ25 | φ50 | 10 | 26 | 8 × 3.3 | M6 | 5 | φ76 | 8 | 701.4 |

● の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 60 | 10 | - | 0.074 | 0.74 | 1.49 | 2.63 | 4.46 | 6.30 | 7.62 |
| 60 | 15 | - | 0.110 | 1.110 | 2.230 | 3.930 | 6.660 | 9.400 | 11.380 |
| 60 | 15 | ○ | 0.118 | 1.181 | 2.363 | 4.217 | 7.227 | 10.396 | 12.995 |
| 60 | 16 | - | 0.120 | 1.20 | 2.39 | 4.22 | 7.14 | 10.09 | 12.20 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.011 | 0.120 | 0.230 | 0.420 | 0.750 | 1.120 | 1.400 |
| 0.051 | 0.563 | 1.160 | 2.134 | 3.771 | 5.522 | 6.970 |
| - | - | - | - | - | - | - |

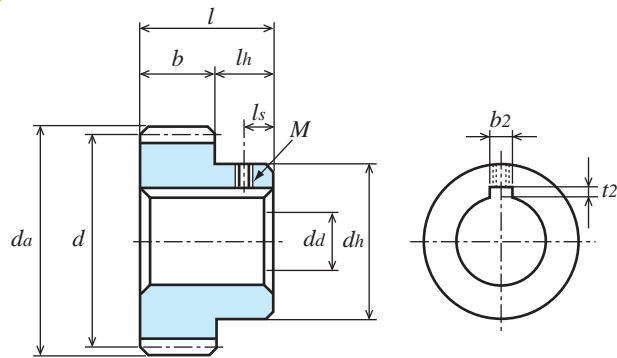
平歯車 SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 64 ~ 68
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 64 to Z 68

JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 64A - 1014F | 64 | φ 96 | φ 99 | A1 | 10 | φ14 | - | - | 10 | - | - | - | - | 0.56 | |
| S1.5S 64A = 1015 | 64 | φ 96 | φ 99 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | - | 0.55 | |
| S1.5S 64A = 1018 | 64 | φ 96 | φ 99 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | 0.55 | |
| S1.5S 64A - 1616F | 64 | φ 96 | φ 99 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 0.88 | |
| S1.5S 64A = 1620 | 64 | φ 96 | φ 99 | A2 | 16 | φ20 | φ40 | - | 16 | 6 × 2.8 | - | - | φ82 | 8 | 0.63 |
| S1.5S 64B - 1014 | 64 | φ 96 | φ 99 | B1 | 10 | φ14 | φ40 | 10 | 20 | - | - | - | - | 0.64 | |
| S1.5S 64B # 1015 | 64 | φ 96 | φ 99 | B1 | 10 | φ15 | φ40 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | 0.64 | |
| S1.5S 64B - 1616 | 64 | φ 96 | φ 99 | B1 | 16 | φ16 | φ50 | 10 | 26 | - | - | - | - | 1.02 | |
| S1.5S 64B # 1620 | 64 | φ 96 | φ 99 | B3 | 16 | φ20 | φ50 | 10 | 26 | 6 × 2.8 | M5 | 5 | φ82 | 8 | 0.80 |
| S1.5S 68A - 1014F | 68 | φ 102 | φ 105 | A1 | 10 | φ14 | - | - | 10 | - | - | - | - | 0.63 | |
| S1.5S 68A - 1616F | 68 | φ 102 | φ 105 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 1.00 | |
| S1.5S 68B - 1014F | 68 | φ 102 | φ 105 | B1 | 10 | φ14 | φ50 | 10 | 20 | - | - | - | - | 0.77 | |
| S1.5S 68B - 1616 | 68 | φ 102 | φ 105 | B1 | 16 | φ16 | φ60 | 10 | 26 | - | - | - | - | 1.14 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key
 【#】(シャープ)にはキー材とセットスクリーが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 100 |
|---------|---------|---|------|------|------|------|-------|-------|--------|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 64 | 10 | 0.080 | 0.80 | 1.61 | 2.80 | 4.77 | 6.74 | 8.15 | 76.39 |
| 64 | 16 | 0.129 | 1.29 | 2.58 | 4.48 | 7.64 | 10.80 | 13.04 | 123.19 |
| 68 | 10 | 0.087 | 0.87 | 1.72 | 2.96 | 5.08 | 7.19 | 8.67 | 83.08 |
| 68 | 16 | 0.139 | 1.39 | 2.75 | 4.74 | 8.14 | 11.50 | 13.87 | 132.74 |

KG 規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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 BEVEL GEARS
 スプロケット
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 技術資料
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平歯車

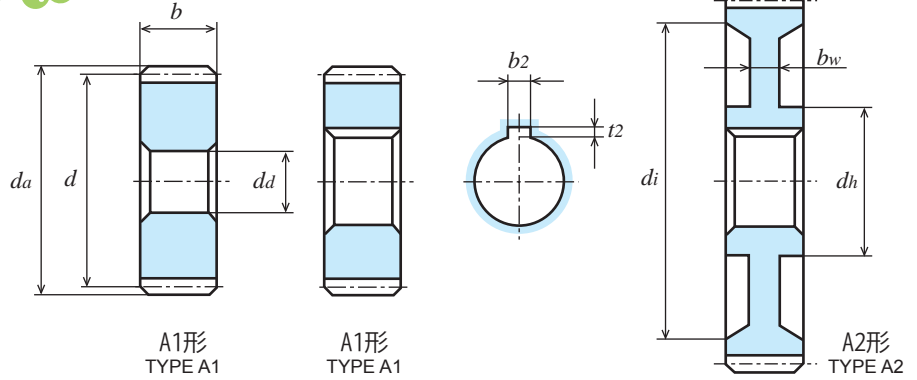
SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 70
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 70

JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 70A - 1014F | 70 | φ105 | φ108 | A1 | 10 | φ14 | - | - | 10 | - | - | - | - | 0.67 | |
| S1.5S 70A = 1015 | 70 | φ105 | φ108 | A1 | 10 | φ15 | - | - | 10 | 5 × 2.3 | - | - | - | 0.67 | |
| S1.5S 70A = 1018 | 70 | φ105 | φ108 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | 0.66 | |
| S1.5S 70A - 1616F | 70 | φ105 | φ108 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 1.06 | |
| S1.5S 70A = 1620 | 70 | φ105 | φ108 | A2 | 16 | φ20 | φ40 | - | 16 | 6 × 2.8 | - | - | φ91 | 8 | 0.74 |
| S1.5S 70B - 1014 | 70 | φ105 | φ108 | B1 | 10 | φ14 | φ40 | 10 | 20 | - | - | - | - | 0.75 | |
| S1.5S 70B # 1015 | 70 | φ105 | φ108 | B1 | 10 | φ15 | φ40 | 10 | 20 | 5 × 2.3 | M4 | 5 | - | 0.75 | |
| S1.5S 70BF - 1510 | 70 | φ105 | φ108 | B1 | 15 | φ10(H8) | φ75 | 15 | 30 | - | - | - | - | 1.52 | |
| S1.5S 70B - 1510H | 70 | φ105 | φ108 | B1 | 15 | φ10(H※) | φ75 | 15 | 30 | - | - | - | - | 1.52 | |
| S1.5S 70B - 1616 | 70 | φ105 | φ108 | B1 | 16 | φ16 | φ50 | 10 | 26 | - | - | - | - | 1.20 | |
| S1.5S 70B # 1620 | 70 | φ105 | φ108 | B3 | 16 | φ20 | φ50 | 10 | 26 | 6 × 2.8 | M5 | 5 | φ91 | 8 | 0.94 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=] : Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#] : Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 70 | 10 | - | 0.089 | 0.90 | 1.77 | 3.04 | 5.24 | 7.41 | 8.97 |
| 70 | 15 | - | 0.130 | 0.140 | 2.630 | 4.530 | 7.810 | 11.040 | 13.370 |
| 70 | 15 | ○ | 0.142 | 1.417 | 2.796 | 4.871 | 8.483 | 12.469 | 15.587 |
| 70 | 16 | - | 0.143 | 1.43 | 2.83 | 4.86 | 8.38 | 11.85 | 14.35 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.016 | 0.160 | 0.320 | 0.570 | 1.030 | 1.550 | 1.930 |
| 0.070 | 0.777 | 1.581 | 2.839 | 5.097 | 7.627 | 9.627 |
| - | - | - | - | - | - | - |

平歯車

SPUR GEARS

モジュール
MODULE

1.5

圧力角 20° (並歯) 歯数 72 75

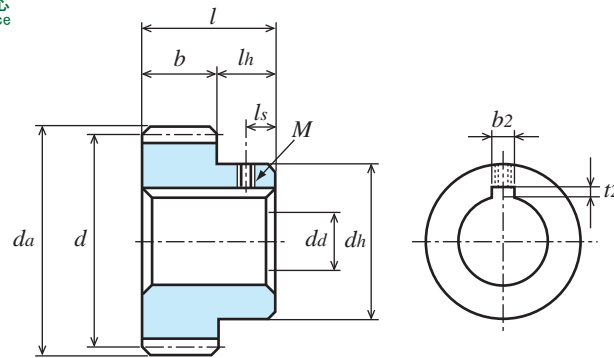
20° PRESSURE ANGLE FULL DEPTH TOOTH Z72 to Z75

JIS B 1702-1 (ISO) 8級
System of accuracy: JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマゾ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 72A - 1016F | 72 | φ108 | φ111 | A1 | 10 | φ16 | - | - | 10 | - | - | - | - | 0.70 | |
| S1.5S 72A = 1018 | 72 | φ108 | φ111 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | 0.70 | |
| S1.5S 72A = 1020 | 72 | φ108 | φ111 | A1 | 10 | φ20 | - | - | 10 | 6 × 2.8 | - | - | - | 0.69 | |
| S1.5S 72A - 1618F | 72 | φ108 | φ111 | A1 | 16 | φ18 | - | - | 16 | - | - | - | - | 1.12 | |
| S1.5S 72A = 1620 | 72 | φ108 | φ111 | A2 | 16 | φ20 | φ40 | - | 16 | 6 × 2.8 | - | - | φ94 | 8 | 0.77 |
| S1.5S 72A = 1625 | 72 | φ108 | φ111 | A2 | 16 | φ25 | φ50 | - | 16 | 8 × 3.3 | - | - | φ94 | 8 | 0.79 |
| S1.5S 72B - 1016 | 72 | φ108 | φ111 | B1 | 10 | φ16 | φ40 | 10 | 20 | - | - | - | - | 0.79 | |
| S1.5S 72B # 1018 | 72 | φ108 | φ111 | B1 | 10 | φ18 | φ40 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 0.77 | |
| S1.5S 72B - 1618 | 72 | φ108 | φ111 | B1 | 16 | φ18 | φ50 | 10 | 26 | - | - | - | - | 1.25 | |
| S1.5S 72B # 1620 | 72 | φ108 | φ111 | B3 | 16 | φ20 | φ50 | 10 | 26 | 6 × 2.8 | M5 | 5 | φ94 | 8 | 0.94 |
| S1.5S 75A - 1016F | 75 | φ112.5 | φ115.5 | A1 | 10 | φ16 | - | - | 10 | - | - | - | - | 0.76 | |
| S1.5S 75A - 1618F | 75 | φ112.5 | φ115.5 | A1 | 16 | φ18 | - | - | 16 | - | - | - | - | 1.22 | |
| S1.5S 75B - 1016F | 75 | φ112.5 | φ115.5 | B1 | 10 | φ16 | φ50 | 10 | 20 | - | - | - | - | 0.90 | |
| S1.5S 75B - 1618 | 75 | φ112.5 | φ115.5 | B1 | 16 | φ18 | φ60 | 10 | 26 | - | - | - | - | 1.42 | |

【=】 (イコール) にはキー材が付いております。 [=]: Gear with key way / with key

【#】 (シャープ) にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 72 | 10 | 0.092 | 0.93 | 1.82 | 3.12 | 5.39 | 7.62 | 9.27 | 100 |
| 72 | 16 | 0.148 | 1.48 | 2.91 | 4.99 | 8.62 | 12.19 | 14.83 | 100 |
| 75 | 10 | 0.097 | 0.97 | 1.89 | 3.23 | 5.61 | 7.94 | 9.72 | 100 |
| 75 | 16 | 0.156 | 1.56 | 3.03 | 5.17 | 8.98 | 12.71 | 15.56 | 100 |

KG 規格は“並幅” (軽荷重用) と“広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

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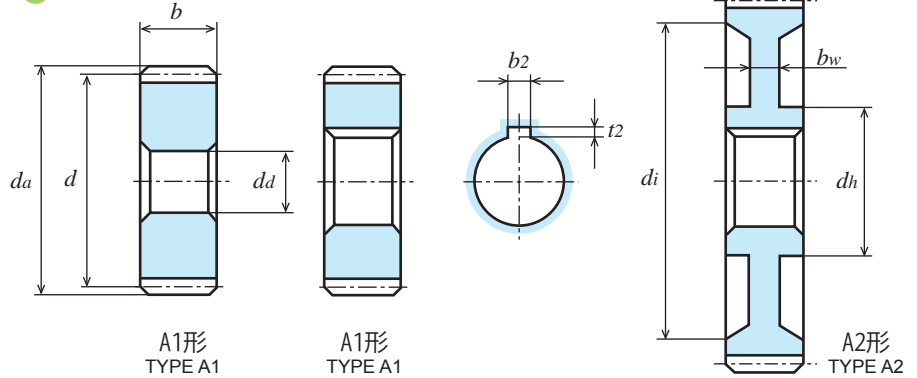
平歯車 SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 80
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 80

JIS B 1702-1 (ISO) 8級
 System of accuracy: JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 80A - 1016F | 80 | φ120 | φ123 | A1 | 10 | φ16 | - | - | 10 | - | - | - | - | 0.87 | |
| S1.5S 80A = 1018 | 80 | φ120 | φ123 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | 0.87 | |
| S1.5S 80A = 1020 | 80 | φ120 | φ123 | A1 | 10 | φ20 | - | - | 10 | 6 × 2.8 | - | - | - | 0.86 | |
| S1.5S 80A - 1618F | 80 | φ120 | φ123 | A1 | 16 | φ18 | - | - | 16 | - | - | - | - | 1.39 | |
| S1.5S 80A = 1620 | 80 | φ120 | φ123 | A2 | 16 | φ20 | φ40 | - | 16 | 6 × 2.8 | - | - | φ106 | 8 | 0.93 |
| S1.5S 80A = 1625 | 80 | φ120 | φ123 | A2 | 16 | φ25 | φ50 | - | 16 | 8 × 3.3 | - | - | φ106 | 8 | 0.95 |
| S1.5S 80B - 1016 | 80 | φ120 | φ123 | B1 | 10 | φ16 | φ40 | 10 | 20 | - | - | - | - | 0.96 | |
| S1.5S 80B # 1018 | 80 | φ120 | φ123 | B1 | 10 | φ18 | φ40 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 0.94 | |
| S1.5S 80B # 1020 | 80 | φ120 | φ123 | B1 | 10 | φ20 | φ40 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 0.93 | |
| S1.5S 80BF - 1510 | 80 | φ120 | φ123 | B1 | 15 | φ10(H8) | φ85 | 15 | 30 | - | - | - | - | 2.0 | |
| S1.5S 80B - 1510H | 80 | φ120 | φ123 | B1 | 15 | φ10(H※) | φ85 | 15 | 30 | - | - | - | - | 2.0 | |
| S1.5S 80B - 1618 | 80 | φ120 | φ123 | B1 | 16 | φ18 | φ50 | 10 | 26 | - | - | - | - | 1.52 | |
| S1.5S 80B # 1620 | 80 | φ120 | φ123 | B3 | 16 | φ20 | φ50 | 10 | 26 | 6 × 2.8 | M5 | 5 | φ106 | 8 | 1.10 |
| S1.5S 80B # 1625 | 80 | φ120 | φ123 | B3 | 16 | φ25 | φ50 | 10 | 26 | 8 × 3.3 | M6 | 5 | φ106 | 8 | 1.06 |

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【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

※

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|------|------|------|------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 80 | 10 | - | 0.10 | 1.05 | 2.02 | 3.42 | 5.98 | 8.47 | 10.48 |
| 80 | 15 | - | 0.16 | 1.56 | 3.01 | 5.09 | 8.91 | 12.61 | 15.60 |
| 80 | 15 | ○ | 0.165 | 1.65 | 3.20 | 5.49 | 9.71 | 14.56 | 18.20 |
| 80 | 16 | - | 0.17 | 1.68 | 3.23 | 5.47 | 9.57 | 13.55 | 16.76 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.021 | 0.210 | 0.420 | 0.730 | 1.360 | 2.040 | 2.610 |
| 0.093 | 1.028 | 2.048 | 3.623 | 6.607 | 10.089 | 12.735 |
| - | - | - | - | - | - | - |

平歯車

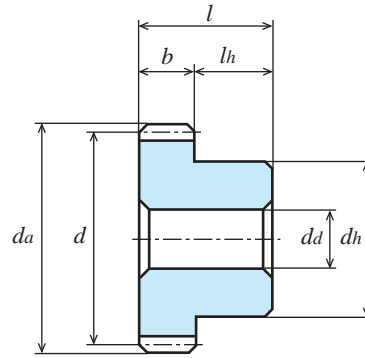
SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 84 90
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 84 to Z 90

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマみぞ Key Way b ₂ × t ₂ | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|--------------------------------|---------------------------------|-----------------------|
| S1.5S 84A - 1016F | 84 | φ126 | φ129 | A1 | 10 | φ16 | - | - | 10 | - | - | - | 0.96 |
| S1.5S 84A - 1622F | 84 | φ126 | φ129 | A1 | 16 | φ22 | - | - | 16 | - | - | - | 1.52 |
| S1.5S 84B - 1016F | 84 | φ126 | φ129 | B1 | 10 | φ16 | φ60 | 10 | 20 | - | - | - | 1.17 |
| S1.5S 84B - 1618 | 84 | φ126 | φ129 | B1 | 16 | φ18 | φ70 | 10 | 26 | - | - | - | 1.82 |
| S1.5S 90A - 1016F | 90 | φ135 | φ138 | A1 | 10 | φ16 | - | - | 10 | - | - | - | 1.11 |
| S1.5S 90A - 1622F | 90 | φ135 | φ138 | A1 | 16 | φ22 | - | - | 16 | - | - | - | 1.75 |
| S1.5S 90B - 1016F | 90 | φ135 | φ138 | B1 | 10 | φ16 | φ60 | 10 | 20 | - | - | - | 1.31 |
| ● S1.5S 90BF - 1512 | 90 | φ135 | φ138 | B1 | 15 | φ12 | φ95 | 15 | 30 | - | - | - | 2.49 |
| ● S1.5S 90B - 1512H | 90 | φ135 | φ138 | B1 | 15 | φ12(H※) | φ95 | 15 | 30 | - | - | - | 2.49 |
| S1.5S 90B - 1618 | 90 | φ135 | φ138 | B1 | 16 | φ18 | φ70 | 10 | 26 | - | - | - | 2.05 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキーマ材が付いております。 [=]: Gear with key way / with key.
 【#】(シャープ)にはキーマ材とセットスクリューが付いております。

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.
 ※

歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.
 追加工の際は、追加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|--------|--------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 90 | 10 | - | 0.12 | 1.20 | 2.26 | 3.76 | 6.74 | 9.59 | - |
| 90 | 15 | - | 0.180 | 1.780 | 3.360 | 5.600 | 10.030 | 14.270 | - |
| 90 | 15 | ○ | 0.189 | 1.891 | 3.579 | 6.054 | 11.091 | 16.636 | - |
| 90 | 16 | - | 0.19 | 1.92 | 3.61 | 6.02 | 10.79 | 15.34 | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|--------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.027 | 0.270 | 0.520 | 0.900 | 1.750 | 2.640 | - |
| 0.119 | 1.316 | 2.568 | 4.477 | 8.456 | 12.912 | - |
| - | - | - | - | - | - | - |

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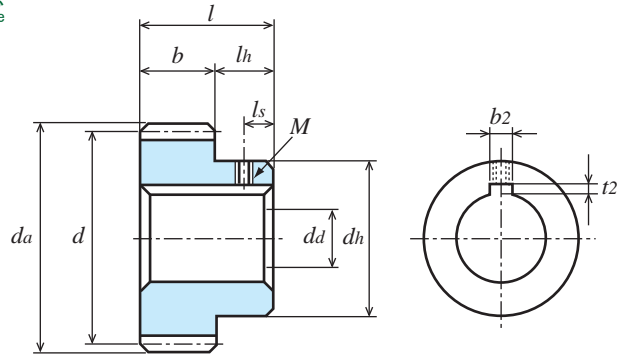
平歯車 SPUR GEARS

モジュール **1.5** 圧力角 20° (並歯) 歯数 100
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 100

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|---------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S1.5S 100A - 1016F | 100 | φ150 | φ153 | A1 | 10 | φ16 | - | - | 10 | - | - | - | - | 1.37 | |
| S1.5S 100A = 1018 | 100 | φ150 | φ153 | A1 | 10 | φ18 | - | - | 10 | 6 × 2.8 | - | - | - | 1.37 | |
| S1.5S 100A = 1020 | 100 | φ150 | φ153 | A1 | 10 | φ20 | - | - | 10 | 6 × 2.8 | - | - | - | 1.36 | |
| S1.5S 100A - 1618F | 100 | φ150 | φ153 | A1 | 16 | φ18 | - | - | 16 | - | - | - | - | 2.19 | |
| S1.5S 100A = 1620 | 100 | φ150 | φ153 | A2 | 16 | φ20 | φ 40 | - | 16 | 6 × 2.8 | - | - | φ136 | 8 | 1.38 |
| S1.5S 100A = 1625 | 100 | φ150 | φ153 | A2 | 16 | φ25 | φ 50 | - | 16 | 8 × 3.3 | - | - | φ136 | 8 | 1.40 |
| S1.5S 100B - 1016 | 100 | φ150 | φ153 | B1 | 10 | φ16 | φ 40 | 10 | 20 | - | - | - | - | 1.46 | |
| S1.5S 100B # 1018 | 100 | φ150 | φ153 | B1 | 10 | φ18 | φ 40 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 1.44 | |
| S1.5S 100B # 1020 | 100 | φ150 | φ153 | B1 | 10 | φ20 | φ 40 | 10 | 20 | 6 × 2.8 | M5 | 5 | - | 1.43 | |
| S1.5S 100BF - 1515 | 100 | φ150 | φ153 | B1 | 15 | φ15 | φ105 | 15 | 30 | - | - | - | - | 3.05 | |
| S1.5S 100B - 1515H | 100 | φ150 | φ153 | B1 | 15 | φ15(H※) | φ105 | 15 | 30 | - | - | - | - | 3.05 | |
| S1.5S 100B - 1618 | 100 | φ150 | φ153 | B1 | 16 | φ18 | φ 50 | 10 | 26 | - | - | - | - | 2.32 | |
| S1.5S 100B # 1620 | 100 | φ150 | φ153 | B3 | 16 | φ20 | φ 50 | 10 | 26 | 6 × 2.8 | M5 | 5 | φ136 | 8 | 1.55 |
| S1.5S 100B # 1625 | 100 | φ150 | φ153 | B3 | 16 | φ25 | φ 50 | 10 | 26 | 8 × 3.3 | M6 | 5 | φ136 | 8 | 1.51 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|--------|--------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 100 | 10 | - | 0.14 | 1.35 | 2.49 | 4.13 | 7.49 | 10.80 | - |
| 100 | 15 | - | 0.200 | 2.010 | 3.700 | 6.150 | 11.140 | 16.070 | - |
| 100 | 15 | ○ | 0.213 | 2.129 | 3.951 | 6.659 | 12.492 | 18.738 | - |
| 100 | 16 | - | 0.22 | 2.16 | 3.98 | 6.61 | 11.98 | 17.28 | - |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。 Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|--------|--------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.034 | 0.340 | 0.640 | 1.110 | 2.180 | 3.340 | - |
| 0.148 | 1.641 | 3.139 | 5.453 | 10.545 | 16.101 | - |
| - | - | - | - | - | - | - |

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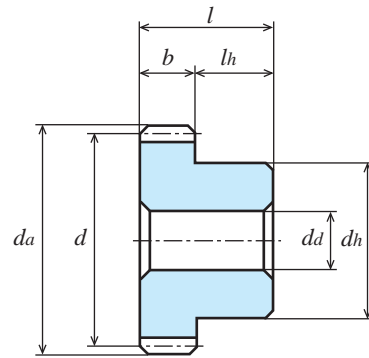
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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



New 仕様変更 省スペース・軽量化。
Specification change Space-saving and weight saving.



B1形
TYPE B1

ポリアセタール (黒色)
Material : Poly Acetal (Black)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter d_d | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|--------------------------------|-----------|-------------------------|------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| ▲ S2D 14B - 2010N | 14 | φ28 | φ32 | B1 | 20 | φ10 | φ22 | 10 | 30 | 19.4 |
| ▲ S2D 15B - 2010N | 15 | φ30 | φ34 | B1 | 20 | φ10 | φ24 | 10 | 30 | 23.0 |
| ▲ S2D 16B - 2012N | 16 | φ32 | φ36 | B1 | 20 | φ12 | φ26 | 10 | 30 | 25.4 |
| ▲ S2D 18B - 2012N | 18 | φ36 | φ40 | B1 | 20 | φ12 | φ30 | 10 | 30 | 33.9 |
| ▲ S2D 20B - 2012N | 20 | φ40 | φ44 | B1 | 20 | φ12 | φ30 | 10 | 30 | 40.6 |
| ▲ S2D 24B - 2014N | 24 | φ48 | φ52 | B1 | 20 | φ14 | φ40 | 10 | 30 | 62.2 |
| ▲ S2D 25B - 2014N | 25 | φ50 | φ54 | B1 | 20 | φ14 | φ40 | 10 | 30 | 66.6 |
| ▲ S2D 28B - 2014N | 28 | φ56 | φ60 | B1 | 20 | φ14 | φ45 | 10 | 30 | 85.4 |
| ▲ S2D 30B - 2018N | 30 | φ60 | φ64 | B1 | 20 | φ18 | φ45 | 10 | 30 | 91.4 |
| ▲ S2D 32B - 2018N | 32 | φ64 | φ68 | B1 | 20 | φ18 | φ45 | 10 | 30 | 102.4 |
| ▲ S2D 35B - 2018N | 35 | φ70 | φ74 | B1 | 20 | φ18 | φ50 | 10 | 30 | 125.5 |
| ▲ S2D 36B - 2018N | 36 | φ72 | φ76 | B1 | 20 | φ18 | φ50 | 10 | 30 | 131.7 |

▲の商品は2017年5月20日をもってカタログ商品(規格品)としての生産を中止とします。米国・EU市場の食品接触用途・規制に適合した青 POM® ギヤシリーズをご利用ください。Products with ▲ mark will be terminated with effective 20th May 2017. Alternative products are indicated on separate catalogue of Blue Poly Acetal gears which adapted to relevant regulations for the food industries in the US and EU markets.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|--------|--------|--------|--------|--------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S2D 14B - 2010N | 2.48 | 24.83 | 49.61 | 99.05 | 197.44 | 295.16 | 368.01 |
| S2D 15B - 2010N | 2.66 | 26.60 | 53.15 | 106.10 | 211.44 | 316.01 | 393.94 |
| S2D 16B - 2012N | 2.84 | 28.37 | 56.68 | 113.15 | 225.43 | 336.84 | 419.77 |
| S2D 18B - 2012N | 3.19 | 31.91 | 63.75 | 127.23 | 253.36 | 378.39 | 470.09 |
| S2D 20B - 2012N | 3.55 | 35.45 | 70.82 | 141.30 | 281.24 | 419.77 | 519.94 |
| S2D 24B - 2014N | 4.26 | 42.53 | 84.94 | 169.40 | 336.84 | 500.06 | 618.19 |
| S2D 25B - 2014N | 4.44 | 44.30 | 88.47 | 176.41 | 350.70 | 519.94 | 642.45 |
| S2D 28B - 2014N | 4.97 | 49.61 | 99.05 | 197.44 | 392.21 | 579.12 | 714.53 |
| S2D 30B - 2018N | 5.32 | 53.15 | 106.10 | 211.44 | 419.77 | 618.19 | 761.98 |
| S2D 32B - 2018N | 5.68 | 56.68 | 113.15 | 225.43 | 446.67 | 656.95 | 808.83 |
| S2D 35B - 2018N | 6.21 | 61.99 | 123.71 | 246.38 | 486.76 | 714.53 | 875.88 |
| S2D 36B - 2018N | 6.39 | 63.75 | 127.23 | 253.36 | 500.06 | 733.57 | 897.89 |

The above numerical values are Lewis formulas as reference only.

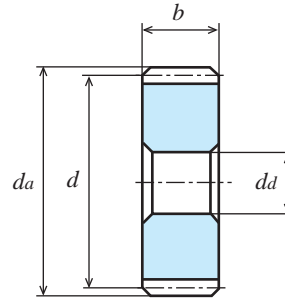
動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

JIS B 1702-1 (ISO) 9~10 級
System of accuracy: JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



A1形
TYPE A1

ポリアセタール (黒色)

Material: Poly Acetal (Black)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|----------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| ▲ S2D 40A - 2018 | 40 | φ 80 | φ 84 | A1 | 20 | φ18 | - | - | 20 | 134.6 |
| ▲ S2D 45A - 2018 | 45 | φ 90 | φ 94 | A1 | 20 | φ18 | - | - | 20 | 172.2 |
| ▲ S2D 48A - 2018 | 48 | φ 96 | φ100 | A1 | 20 | φ18 | - | - | 20 | 196.9 |
| ▲ S2D 50A - 2018 | 50 | φ100 | φ104 | A1 | 20 | φ18 | - | - | 20 | 214.3 |
| ▲ S2D 56A - 2018 | 56 | φ112 | φ116 | A1 | 20 | φ18 | - | - | 20 | 270.7 |
| ▲ S2D 60A - 2018 | 60 | φ120 | φ124 | A1 | 20 | φ18 | - | - | 20 | 311.8 |
| ▲ S2D 64A - 2018 | 64 | φ128 | φ132 | A1 | 20 | φ18 | - | - | 20 | 355.7 |
| ▲ S2D 70A - 2018 | 70 | φ140 | φ144 | A1 | 20 | φ18 | - | - | 20 | 426.9 |
| ▲ S2D 72A - 2018 | 72 | φ144 | φ148 | A1 | 20 | φ18 | - | - | 20 | 452.1 |
| ▲ S2D 80A - 2018 | 80 | φ160 | φ164 | A1 | 20 | φ18 | - | - | 20 | 559.8 |
| ▲ S2D 90A - 2018 | 90 | φ180 | φ184 | A1 | 20 | φ18 | - | - | 20 | 710.4 |
| ▲ S2D 100A - 2018 | 100 | φ200 | φ204 | A1 | 20 | φ18 | - | - | 20 | 878.8 |

▲の商品は2017年5月20日をもってカタログ商品(規格品)としての生産を中止とします。米国・EU市場の食品接触用途・規制に適合した青 POM® ギヤシリーズをご利用ください。Products with ▲ mark will be terminated with effective 20th May 2017. Alternative products are indicated on separate catalogue of Blue Poly Acetal gears which adapted to relevant regulations for the food industries in the US and EU markets.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S2D 40A - 2018 | 7.10 | 70.82 | 141.30 | 281.24 | 552.90 | 808.83 | 984.27 |
| S2D 45A - 2018 | 7.98 | 79.65 | 158.87 | 316.01 | 618.19 | 897.89 | 1,088.49 |
| S2D 48A - 2018 | 8.52 | 84.94 | 169.40 | 336.84 | 656.95 | 950.04 | 1,148.58 |
| S2D 50A - 2018 | 8.87 | 88.47 | 176.41 | 350.70 | 682.63 | 984.27 | 1,184.49 |
| S2D 56A - 2018 | 9.94 | 99.05 | 197.44 | 392.21 | 758.83 | 1,084.40 | 1,286.48 |
| S2D 60A - 2018 | 10.64 | 106.10 | 211.44 | 419.77 | 808.83 | 1,148.58 | 1,349.70 |
| S2D 64A - 2018 | 11.35 | 113.15 | 225.43 | 446.67 | 856.66 | 1,205.57 | - |
| S2D 70A - 2018 | 12.42 | 123.71 | 246.38 | 486.76 | 926.98 | 1,286.48 | - |
| S2D 72A - 2018 | 12.77 | 127.23 | 253.36 | 500.06 | 950.04 | 1,312.23 | - |
| S2D 80A - 2018 | 14.19 | 141.30 | 281.24 | 552.90 | 1,040.38 | - | - |
| S2D 90A - 2018 | 15.96 | 158.87 | 316.01 | 618.19 | 1,148.58 | - | - |
| S2D 100A - 2018 | 17.74 | 176.41 | 350.70 | 682.63 | 1,242.21 | - | - |

The above numerical values are Lewis formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

ステンレス平歯車

SPUR GEARS

モジュール
MODULE

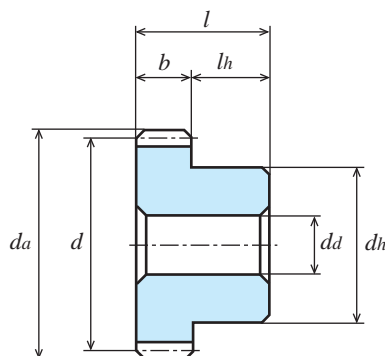
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圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9級
System of accuracy : JIS B 1702-1(ISO) class 9



New 仕様変更 省スペース・軽量化。
Specification change Space-saving and weight saving.



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H8) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|------------------------------|
| S2SU 14B - 1410N | 14 | φ28 | φ32 | B1 | 14 | φ10 | φ20 | 10 | 24 | 78.3 |
| S2SU 15B - 1410N | 15 | φ30 | φ34 | B1 | 14 | φ10 | φ22 | 10 | 24 | 93.7 |
| S2SU 18B - 1412N | 18 | φ36 | φ40 | B1 | 14 | φ12 | φ28 | 10 | 24 | 14.0 |
| S2SU 20B - 1412N | 20 | φ40 | φ44 | B1 | 14 | φ12 | φ30 | 10 | 24 | 174.0 |
| S2SU 24B - 1414N | 24 | φ48 | φ52 | B1 | 14 | φ14 | φ36 | 10 | 24 | 252.3 |
| S2SU 25B - 1414N | 25 | φ50 | φ54 | B1 | 14 | φ14 | φ36 | 10 | 24 | 269.4 |
| S2SU 30B - 1414N | 30 | φ60 | φ64 | B1 | 14 | φ14 | φ40 | 10 | 24 | 384.3 |
| S2SU 32B - 1214N | 32 | φ64 | φ68 | B1 | 12 | φ14 | φ45 | 10 | 22 | 405.4 |
| S2SU 35B - 1214N | 35 | φ70 | φ74 | B1 | 12 | φ14 | φ45 | 10 | 22 | 465.5 |
| S2SU 36B - 1214N | 36 | φ72 | φ76 | B1 | 12 | φ14 | φ45 | 10 | 22 | 486.7 |
| S2SU 40B - 1214N | 40 | φ80 | φ84 | B1 | 12 | φ14 | φ50 | 10 | 22 | 607.2 |
| S2SU 45B - 1214N | 45 | φ90 | φ94 | B1 | 12 | φ14 | φ60 | 10 | 22 | 802.7 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S2SU 14B - 1410N | 0.012 | 0.124 | 0.248 | 0.496 | 0.966 | 1.335 | 1.576 |
| S2SU 15B - 1410N | 0.014 | 0.139 | 0.278 | 0.556 | 1.070 | 1.471 | 1.731 |
| S2SU 18B - 1412N | 0.019 | 0.185 | 0.371 | 0.741 | 1.377 | 1.870 | 2.181 |
| S2SU 20B - 1412N | 0.022 | 0.218 | 0.435 | 0.870 | 1.580 | 2.128 | 2.497 |
| S2SU 24B - 1414N | 0.028 | 0.284 | 0.567 | 1.134 | 1.970 | 2.616 | 3.178 |
| S2SU 25B - 1414N | 0.030 | 0.301 | 0.601 | 1.194 | 2.065 | 2.759 | 3.348 |
| S2SU 30B - 1414N | 0.039 | 0.386 | 0.773 | 1.488 | 2.519 | 3.463 | 4.182 |
| S2SU 32B - 1214N | 0.036 | 0.361 | 0.722 | 1.374 | 2.307 | 3.207 | 3.866 |
| S2SU 35B - 1214N | 0.041 | 0.406 | 0.813 | 1.520 | 2.521 | 3.560 | 4.304 |
| S2SU 36B - 1214N | 0.042 | 0.422 | 0.843 | 1.567 | 2.593 | 3.677 | 4.449 |
| S2SU 40B - 1214N | 0.048 | 0.483 | 0.966 | 1.754 | 2.933 | 4.138 | 5.023 |
| S2SU 45B - 1214N | 0.056 | 0.560 | 1.121 | 1.979 | 3.349 | 4.729 | 5.722 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

ステンレス平歯車

SPUR GEARS

モジュール
MODULE

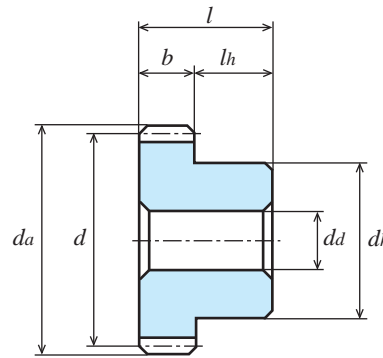
2

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9 級
System of accuracy : JIS B 1702-1(ISO) class 9



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

SUS304 ステンレス鋼棒 (JIS G 4303)

Material : Stainless Steel SUS304 (JIS G 4303)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H8) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| S2SU 48B - 1215N | 48 | φ 96 | φ100 | B1 | 12 | φ15 | φ60 | 10 | 22 | 0.88 |
| S2SU 50B - 1215N | 50 | φ100 | φ104 | B1 | 12 | φ15 | φ60 | 10 | 22 | 0.94 |
| S2SU 55B - 1215N | 55 | φ110 | φ114 | B1 | 12 | φ15 | φ60 | 10 | 22 | 1.10 |
| S2SU 60B - 1215N | 60 | φ120 | φ124 | B1 | 12 | φ15 | φ60 | 10 | 22 | 1.27 |
| S2SU 64B - 1215N | 64 | φ128 | φ132 | B1 | 12 | φ15 | φ60 | 10 | 22 | 1.42 |
| S2SU 72B - 1216N | 72 | φ144 | φ148 | B1 | 12 | φ16 | φ60 | 10 | 22 | 1.74 |
| S2SU 80B - 1216N | 80 | φ160 | φ164 | B1 | 12 | φ16 | φ60 | 10 | 22 | 2.10 |
| S2SU 90B - 1216N | 90 | φ180 | φ184 | B1 | 12 | φ16 | φ60 | 10 | 22 | 2.61 |
| S2SU 100B - 1216N | 100 | φ200 | φ204 | B1 | 12 | φ16 | φ60 | 10 | 22 | 3.18 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|------|------|------|-------|-------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S2SU 48B - 1215N | 0.060 | 0.61 | 1.21 | 2.11 | 3.60 | 5.08 | 6.13 |
| S2SU 50B - 1215N | 0.063 | 0.64 | 1.27 | 2.19 | 3.76 | 5.31 | 6.41 |
| S2SU 55B - 1215N | 0.071 | 0.72 | 1.40 | 2.40 | 4.16 | 5.88 | 7.17 |
| S2SU 60B - 1215N | 0.079 | 0.80 | 1.53 | 2.60 | 4.55 | 6.44 | 7.97 |
| S2SU 64B - 1215N | 0.086 | 0.86 | 1.64 | 2.75 | 4.88 | 6.88 | - |
| S2SU 72B - 1216N | 0.098 | 0.99 | 1.84 | 3.04 | 5.51 | 7.91 | - |
| S2SU 80B - 1216N | 0.112 | 1.12 | 2.03 | 3.39 | 6.14 | - | - |
| S2SU 90B - 1216N | 0.128 | 1.28 | 2.26 | 3.82 | 6.89 | - | - |
| S2SU 100B - 1216N | 0.143 | 1.43 | 2.47 | 4.24 | 7.68 | - | - |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

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平歯車 SPUR GEARS

モジュール
MODULE

2

圧力角 20° (並歯) 歯数 8 ~ 14

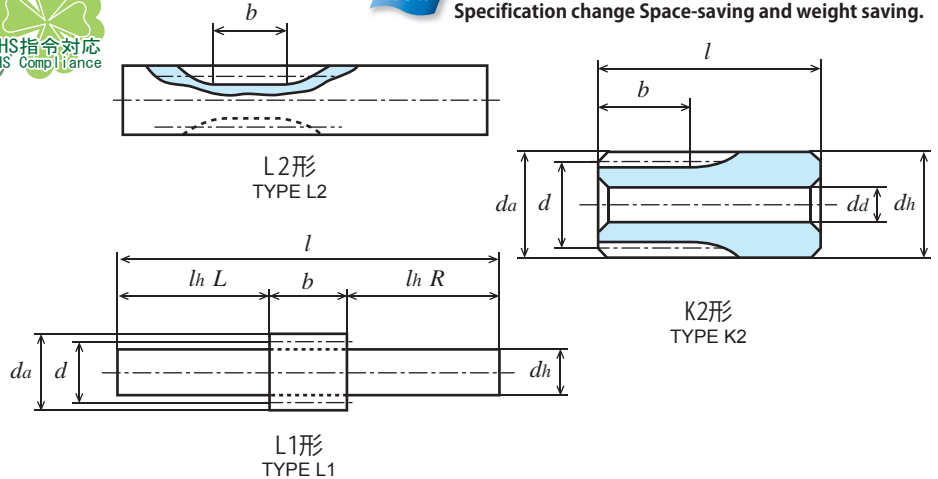
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 8 to Z 14

JIS B 1702-1 (ISO) 8~9 級
System of accuracy : JIS B 1702-1(ISO) class 8-9



仕様変更 省スペース・軽量化。

Specification change Space-saving and weight saving.



S45C 機械構造用炭素鋼 (JIS G 4051) *印を付した商品は転位歯車です。転位係数 x は 0.5 です。
Material : Carbon Steel (ISO C45) * mark has been profile shifted gears. (Rack shift coefficient $x = 0.5$)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $d_a(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|--------------------------------|-----------|-------------------------|----------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| S2S 8L - 2212 | 8 | * | $\phi 21.28$ | L1 | 22 | - | $\phi 12(h9)$ | L32 R64 | 118 | 129.2 |
| S2S 8L - 2221F | 8 | * | $\phi 21.28$ | L2 | 22 | - | $\phi 21.28$ | L32 R64 | 118 | 312.0 |
| S2S 10L - 2216 | 10 | * | $\phi 25.33$ | L1 | 22 | - | $\phi 16(h9)$ | L32 R64 | 118 | 217.2 |
| S2S 10L - 2225F | 10 | * | $\phi 25.33$ | L2 | 22 | - | $\phi 25.33$ | L32 R64 | 118 | 445.4 |
| S2S 12K - 2210 | 12 | $\phi 24$ | $\phi 28$ | K2 | 22 | $\phi 10(H8)$ | $\phi 28$ | 28 | 50 | 182.6 |
| S2S 13K - 2210F | 13 | $\phi 26$ | $\phi 30$ | K2 | 22 | $\phi 10(H8)$ | $\phi 30$ | 28 | 50 | 216.2 |
| S2S 14A - 1410 | 14 | $\phi 28$ | $\phi 32$ | A1 | 14 | $\phi 10$ | - | - | 14 | 59.0 |
| S2S 14A - 2010 | 14 | $\phi 28$ | $\phi 32$ | A1 | 20 | $\phi 10$ | - | - | 20 | 84.3 |
| S2S 14A - 2210 | 14 | $\phi 28$ | $\phi 32$ | A1 | 22 | $\phi 10$ | - | - | 22 | 92.8 |
| S2S 14B - 1410N | 14 | $\phi 28$ | $\phi 32$ | B1 | 14 | $\phi 10$ | $\phi 22$ | 10 | 24 | 82.8 |
| S2S 14B - 2010N | 14 | $\phi 28$ | $\phi 32$ | B1 | 20 | $\phi 10(H8)$ | $\phi 22$ | 10 | 30 | 108.1 |
| S2S 14B - 2210N | 14 | $\phi 28$ | $\phi 32$ | B1 | 22 | $\phi 10(H8)$ | $\phi 22$ | 10 | 32 | 116.5 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 8 | 22 | 0.023 | 0.235 | 0.471 | 0.942 | 1.885 | 2.785 | 3.345 | 100 |
| 10 | 22 | 0.032 | 0.325 | 0.650 | 1.300 | 2.600 | 3.702 | 4.414 | 22.44 |
| 12 | 22 | 0.029 | 0.298 | 0.597 | 1.195 | 2.388 | 3.331 | 3.956 | 31.03 |
| 13 | 22 | 0.034 | 0.343 | 0.687 | 1.374 | 2.712 | 3.764 | 4.456 | 28.45 |
| 14 | 14 | 0.024 | 0.247 | 0.495 | 0.991 | 1.932 | 2.670 | 3.151 | 32.75 |
| 14 | 20 | 0.035 | 0.354 | 0.708 | 1.416 | 2.761 | 3.814 | 4.501 | 23.58 |
| 14 | 22 | 0.038 | 0.389 | 0.779 | 1.558 | 3.037 | 4.196 | 4.951 | 33.80 |
| | | | | | | | | | 37.14 |

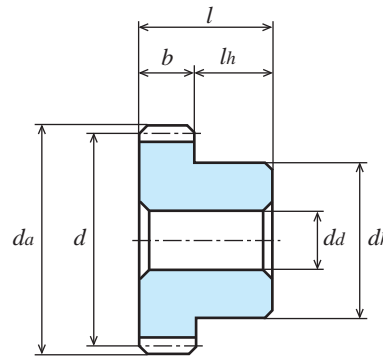
The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

JIS B 1702-1 (ISO) 8級
System of accuracy: JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|----------------------|
| S2S 15A - 1410 | 15 | φ30 | φ34 | A1 | 14 | φ10 | - | - | 14 | - | 69.5 |
| S2S 15A - 2010 | 15 | φ30 | φ34 | A1 | 20 | φ10 | - | - | 20 | - | 98.7 |
| S2S 15A - 2210 | 15 | φ30 | φ34 | A1 | 22 | φ10 | - | - | 22 | - | 108.5 |
| S2S 15B - 1410N | 15 | φ30 | φ34 | B1 | 14 | φ10 | φ24 | 10 | 24 | - | 98.5 |
| S2S 15B - 2010N | 15 | φ30 | φ34 | B1 | 20 | φ10(H8) | φ24 | 10 | 30 | - | 128.1 |
| S2S 15B - 2210N | 15 | φ30 | φ34 | B1 | 22 | φ10(H8) | φ24 | 10 | 32 | - | 138.0 |
| S2S 16A - 1412 | 16 | φ32 | φ36 | A1 | 14 | φ12 | - | - | 14 | - | 76.0 |
| S2S 16A - 2012 | 16 | φ32 | φ36 | A1 | 20 | φ12 | - | - | 20 | - | 108.5 |
| S2S 16A - 2212 | 16 | φ32 | φ36 | A1 | 22 | φ12 | - | - | 22 | - | 119.4 |
| S2S 16B - 1412N | 16 | φ32 | φ36 | B1 | 14 | φ12 | φ26 | 10 | 24 | - | 108.8 |
| S2S 16B - 2012N | 16 | φ32 | φ36 | B1 | 20 | φ12 | φ26 | 10 | 30 | - | 141.4 |
| S2S 16B - 2212N | 16 | φ32 | φ36 | B1 | 22 | φ12 | φ26 | 10 | 32 | - | 152.3 |
| S2S 17B - 1412 | 17 | φ34 | φ38 | B1 | 14 | φ12 | φ28 | 10 | 24 | - | 126.9 |
| S2S 17B - 2212 | 17 | φ34 | φ38 | B1 | 22 | φ12 | φ28 | 10 | 32 | - | 176.8 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 15 | 14 | 0.027 | 0.277 | 0.555 | 1.111 | 2.139 | 2.942 | 3.462 | 100 |
| 15 | 20 | 0.039 | 0.396 | 0.793 | 1.587 | 3.056 | 4.203 | 4.946 | 100 |
| 15 | 22 | 0.043 | 0.436 | 0.873 | 1.746 | 3.362 | 4.624 | 5.440 | 100 |
| 16 | 14 | 0.030 | 0.308 | 0.616 | 1.233 | 2.346 | 3.212 | 3.768 | 100 |
| 16 | 20 | 0.044 | 0.440 | 0.880 | 1.761 | 3.352 | 4.589 | 5.383 | 100 |
| 16 | 22 | 0.048 | 0.484 | 0.968 | 1.937 | 3.687 | 5.047 | 5.922 | 100 |
| 17 | 14 | 0.034 | 0.339 | 0.678 | 1.357 | 2.551 | 3.478 | 4.069 | 100 |
| 17 | 22 | 0.053 | 0.533 | 1.066 | 2.132 | 4.009 | 5.465 | 6.393 | 100 |

T (N · m)

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車 SPUR GEARS

モジュール
MODULE

2

圧力角 20° (並歯) 歯数 18 19

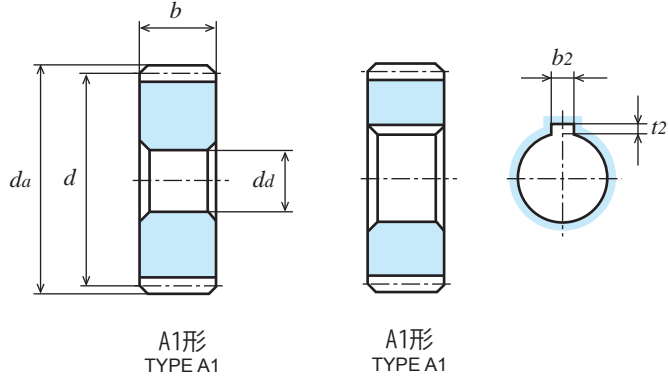
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 18 to Z 19

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



仕様変更 省スペース・軽量化、締結加工不要。

Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キミぞ Key Way <i>b2 × t2</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>bw</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|----------------------------------|-----------------|-----------|---------------------------------------|--|------------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S2S 18A - 1212F | 18 | φ36 | φ40 | A1 | 12 | φ12 | - | - | 12 | - | - | - | - | - | 85.2 |
| S2S 18A - 1412F | 18 | φ36 | φ40 | A1 | 14 | φ12 | - | - | 14 | - | - | - | - | - | 99.4 |
| S2S 18A = 1415 | 18 | φ36 | φ40 | A1 | 14 | φ15 | - | - | 14 | 5 × 2.3 | - | - | - | - | 93.7 |
| S2S 18A - 2012F | 18 | φ36 | φ40 | A1 | 20 | φ12 | - | - | 20 | - | - | - | - | - | 142.1 |
| S2S 18A - 2212F | 18 | φ36 | φ40 | A1 | 22 | φ12 | - | - | 22 | - | - | - | - | - | 156.3 |
| S2S 18A = 2215 | 18 | φ36 | φ40 | A1 | 22 | φ15 | - | - | 22 | 5 × 2.3 | - | - | - | - | 143.3 |
| S2S 18B - 1212 | 18 | φ36 | φ40 | B1 | 12 | φ12 | φ29 | 10 | 22 | - | - | - | - | - | 128.3 |
| S2S 18B - 1412 | 18 | φ36 | φ40 | B1 | 14 | φ12 | φ30 | 10 | 24 | - | - | - | - | - | 146.1 |
| S2S 18B # 1415 | 18 | φ36 | φ40 | B1 | 14 | φ15 | φ30 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | - | 131.6 |
| S2S 18B - 2012N | 18 | φ36 | φ40 | B1 | 20 | φ12 | φ30 | 10 | 30 | - | - | - | - | - | 188.8 |
| S2S 18B - 2212 | 18 | φ36 | φ40 | B1 | 22 | φ12 | φ30 | 10 | 32 | - | - | - | - | - | 203.0 |
| S2S 18B # 2215 | 18 | φ36 | φ40 | B1 | 22 | φ15 | φ30 | 10 | 32 | 5 × 2.3 | M4 | 5 | - | - | 183.7 |
| S2S 19B - 1412 | 19 | φ38 | φ42 | B1 | 14 | φ12 | φ32 | 10 | 24 | - | - | - | - | - | 166.6 |
| S2S 19B - 2212 | 19 | φ38 | φ42 | B1 | 22 | φ12 | φ32 | 10 | 32 | - | - | - | - | - | 230.7 |

【=】 (イコール) にはキー材が付いております。 [=] : Gear with key way / with key

【#】 (シャープ) にはキー材とセットスクリューが付いております。 [#] : Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|-------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 18 | 12 | 0.031 | 0.317 | 0.635 | 1.270 | 2.361 | 3.205 | 3.739 | 100 |
| 18 | 14 | 0.037 | 0.370 | 0.741 | 1.482 | 2.754 | 3.739 | 4.362 | 30.27 |
| 18 | 20 | 0.052 | 0.529 | 1.058 | 2.117 | 3.935 | 5.341 | 6.232 | 35.33 |
| 18 | 22 | 0.058 | 0.582 | 1.164 | 2.329 | 4.328 | 5.875 | 6.855 | 50.51 |
| 19 | 14 | 0.040 | 0.403 | 0.806 | 1.611 | 2.960 | 4.001 | 4.656 | 55.57 |
| 19 | 22 | 0.063 | 0.633 | 1.266 | 2.532 | 4.651 | 6.287 | 7.317 | 38.48 |
| | | | | | | | | | 60.44 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion fomulas of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

2

圧力角 20° (並歯) 歯数 20

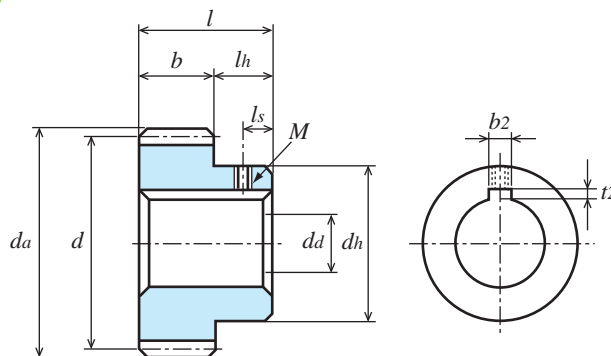
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 20

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマイぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 20A - 1212F | 20 | φ40 | φ44 | A1 | 12 | φ12 | - | - | 12 | - | - | - | - | 107.7 | |
| S2S 20A - 1412F | 20 | φ40 | φ44 | A1 | 14 | φ12 | - | - | 14 | - | - | - | - | 125.7 | |
| S2S 20A = 1415 | 20 | φ40 | φ44 | A1 | 14 | φ15 | - | - | 14 | 5 × 2.3 | - | - | - | 117.4 | |
| S2S 20A = 1416 | 20 | φ40 | φ44 | A1 | 14 | φ16 | - | - | 14 | 5 × 2.3 | - | - | - | 114.7 | |
| S2S 20A - 2012F | 20 | φ40 | φ44 | A1 | 20 | φ12 | - | - | 20 | - | - | - | - | 179.5 | |
| S2S 20A - 2212F | 20 | φ40 | φ44 | A1 | 22 | φ12 | - | - | 22 | - | - | - | - | 197.5 | |
| S2S 20A = 2215 | 20 | φ40 | φ44 | A1 | 22 | φ15 | - | - | 22 | 5 × 2.3 | - | - | - | 184.5 | |
| S2S 20A = 2220 | 20 | φ40 | φ44 | A1 | 22 | φ20 | - | - | 22 | 6 × 2.8 | - | - | - | 159.9 | |
| S2S 20B - 1212 | 20 | φ40 | φ44 | B1 | 12 | φ12 | φ33 | 10 | 22 | - | - | - | - | 162.1 | |
| S2S 20B - 1412 | 20 | φ40 | φ44 | B1 | 14 | φ12 | φ32 | 10 | 24 | - | - | - | - | 180.0 | |
| S2S 20B # 1415 | 20 | φ40 | φ44 | B1 | 14 | φ15 | φ32 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | 165.4 | |
| S2S 20B # 1416 | 20 | φ40 | φ44 | B1 | 14 | φ16 | φ32 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | 160.8 | |
| ● S2S 20BF - 2008 | 20 | φ40 | φ44 | B1 | 20 | φ 8(H8) | φ34 | 20 | 40 | - | - | - | - | 321.1 | |
| ● S2S 20B - 2008H | 20 | φ40 | φ44 | B1 | 20 | φ 8(H※) | φ34 | 20 | 40 | - | - | - | - | 321.1 | |
| S2S 20B - 2012N | 20 | φ40 | φ44 | B1 | 20 | φ12 | φ34 | 10 | 30 | - | - | - | - | 242.1 | |
| S2S 20B - 2212 | 20 | φ40 | φ44 | B1 | 22 | φ12 | φ34 | 10 | 32 | - | - | - | - | 260.1 | |
| S2S 20B # 2215 | 20 | φ40 | φ44 | B1 | 22 | φ15 | φ34 | 10 | 32 | 5 × 2.3 | M4 | 5 | - | 240.6 | |
| S2S 20B # 2220 | 20 | φ40 | φ44 | B1 | 22 | φ20 | φ34 | 10 | 32 | 6 × 2.8 | M4 | 5 | - | 204.9 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 20 | 12 | - | 0.037 | 0.372 | 0.745 | 1.491 | 2.709 | 3.647 | 4.280 |
| 20 | 14 | - | 0.043 | 0.435 | 0.870 | 1.740 | 3.160 | 4.255 | 4.993 |
| 20 | 20 | - | 0.063 | 0.630 | 1.250 | 2.500 | 4.550 | 6.120 | 7.190 |
| 20 | 20 | ○ | 0.066 | 0.664 | 1.328 | 2.655 | 4.863 | 6.603 | 7.784 |
| 20 | 22 | - | 0.068 | 0.683 | 1.367 | 2.735 | 4.966 | 6.687 | 7.846 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.003 | 0.030 | 0.060 | 0.110 | 0.210 | 0.290 | 0.340 |
| 0.012 | 0.137 | 0.283 | 0.583 | 1.101 | 1.522 | 1.812 |
| - | - | - | - | - | - | - |

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平歯車 SPUR GEARS

モジュール
MODULE

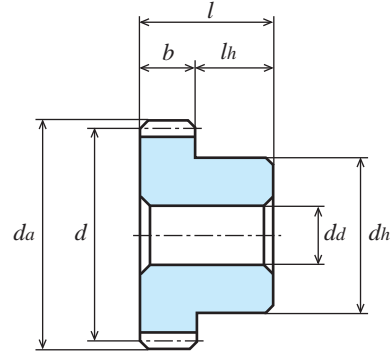
2

圧力角 20° (並歯) 歯数 21 ~ 23
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 21 to Z 23

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化。
Specification change Space-saving and weight saving.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H7)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キーマみぞ Key Way <i>b₂ × t₂</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|--|-----------------------------|
| S2S 21B - 1412 | 21 | φ42 | φ46 | B1 | 14 | φ12 | φ36 | 10 | 24 | - | 211.0 |
| S2S 21B - 2212 | 21 | φ42 | φ46 | B1 | 22 | φ12 | φ36 | 10 | 32 | - | 290.9 |
| S2S 22B - 1412 | 22 | φ44 | φ48 | B1 | 14 | φ12 | φ38 | 10 | 24 | - | 235.0 |
| S2S 22B - 2212 | 22 | φ44 | φ48 | B1 | 22 | φ12 | φ38 | 10 | 32 | - | 323.4 |
| S2S 23B - 1412 | 23 | φ46 | φ50 | B1 | 14 | φ12 | φ40 | 10 | 24 | - | 260.2 |
| S2S 23B - 2212 | 23 | φ46 | φ50 | B1 | 22 | φ12 | φ40 | 10 | 32 | - | 357.5 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 21 | 14 | 0.046 | 0.47 | 0.94 | 1.87 | 3.36 | 4.50 | 5.33 | 44.88 |
| 21 | 22 | 0.073 | 0.73 | 1.47 | 2.94 | 5.28 | 7.08 | 8.38 | 69.71 |
| 22 | 14 | 0.050 | 0.50 | 1.00 | 2.00 | 3.56 | 4.75 | 5.68 | 47.74 |
| 22 | 22 | 0.078 | 0.79 | 1.57 | 3.15 | 5.59 | 7.47 | 8.92 | 75.44 |
| 23 | 14 | 0.053 | 0.53 | 1.07 | 2.13 | 3.75 | 4.99 | 6.02 | 50.61 |
| 23 | 22 | 0.083 | 0.84 | 1.68 | 3.36 | 5.89 | 7.84 | 9.46 | 80.21 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

2

圧力角 20° (並歯) 歯数 24

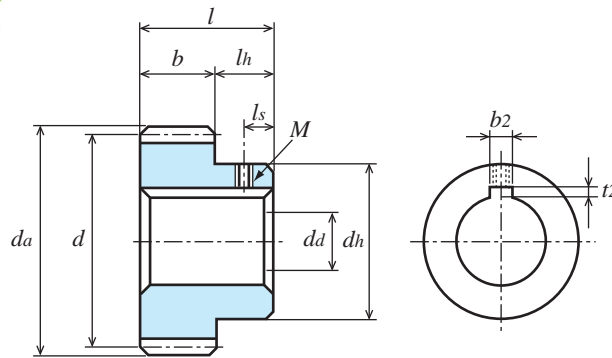
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 24

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キ み ぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web b _w | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|----|--------------------------------|---|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 24A - 1214F | 24 | φ48 | φ52 | A1 | 12 | φ14 | - | - | 12 | - | - | - | - | 156.0 | |
| S2S 24A - 1412F | 24 | φ48 | φ52 | A1 | 14 | φ12 | - | - | 14 | - | - | - | - | 186.4 | |
| S2S 24A = 1415 | 24 | φ48 | φ52 | A1 | 14 | φ15 | - | - | 14 | 5 × 2.3 | - | - | - | 178.2 | |
| S2S 24A = 1416 | 24 | φ48 | φ52 | A1 | 14 | φ16 | - | - | 14 | 5 × 2.3 | - | - | - | 175.5 | |
| S2S 24A - 2014F | 24 | φ48 | φ52 | A1 | 20 | φ14 | - | - | 20 | - | - | - | - | 259.9 | |
| S2S 24A - 2214F | 24 | φ48 | φ52 | A1 | 22 | φ14 | - | - | 22 | - | - | - | - | 285.9 | |
| S2S 24A = 2215 | 24 | φ48 | φ52 | A1 | 22 | φ15 | - | - | 22 | 5 × 2.3 | - | - | - | 280.0 | |
| S2S 24A = 2220 | 24 | φ48 | φ52 | A1 | 22 | φ20 | - | - | 22 | 6 × 2.8 | - | - | - | 255.4 | |
| S2S 24B - 1214 | 24 | φ48 | φ52 | B1 | 12 | φ14 | φ40 | 10 | 22 | - | - | - | - | 207.1 | |
| S2S 24B - 1414 | 24 | φ48 | φ52 | B1 | 14 | φ14 | φ32 | 10 | 24 | - | - | - | - | 233.2 | |
| S2S 24B # 1415 | 24 | φ48 | φ52 | B1 | 14 | φ15 | φ32 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | 226.2 | |
| S2S 24B # 1416 | 24 | φ48 | φ52 | B1 | 14 | φ16 | φ32 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | 221.6 | |
| S2S 24B - 2014N | 24 | φ48 | φ52 | B1 | 20 | φ14 | φ42 | 10 | 30 | - | - | - | - | 356.8 | |
| S2S 24B - 2214 | 24 | φ48 | φ52 | B1 | 22 | φ14 | φ40 | 10 | 32 | - | - | - | - | 372.7 | |
| S2S 24B # 2215 | 24 | φ48 | φ52 | B1 | 22 | φ15 | φ40 | 10 | 32 | 5 × 2.3 | M4 | 5 | - | 363.3 | |
| S2S 24B # 2220 | 24 | φ48 | φ52 | B1 | 22 | φ20 | φ40 | 10 | 32 | 6 × 2.8 | M5 | 5 | - | 327.3 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 24 | 12 | 0.048 | 0.49 | 0.97 | 1.94 | 3.377 | 4.49 | 5.45 | 100 |
| 24 | 14 | 0.056 | 0.57 | 1.14 | 2.27 | 3.940 | 5.23 | 6.36 | 100 |
| 24 | 20 | 0.081 | 0.81 | 1.62 | 3.24 | 5.63 | 7.48 | 9.08 | 100 |
| 24 | 22 | 0.089 | 0.89 | 1.78 | 3.56 | 6.19 | 8.22 | 9.99 | 100 |

KG 規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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ノーバッキングギヤ

歯研削歯車

平歯車

内歯車

歯研削ラック

ラック

ハブ・スクリューギヤ

ワーム・ワームギヤ

かさ歯車

スプロケット

技術資料

平歯車

SPUR GEARS

モジュール
MODULE

2

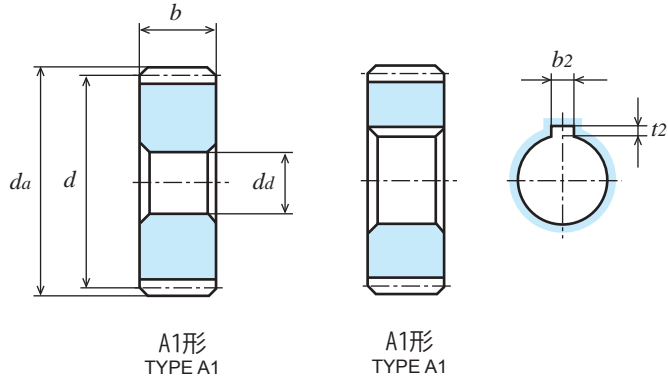
圧力角 20° (並歯) 歯数 25 ~ 26

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 25 to Z 26

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 25A - 1214F | 25 | φ50 | φ54 | A1 | 12 | φ14 | - | - | 12 | - | - | - | - | 170.5 | |
| S2S 25A - 1414F | 25 | φ50 | φ54 | A1 | 14 | φ14 | - | - | 14 | - | - | - | - | 198.9 | |
| S2S 25A = 1415 | 25 | φ50 | φ54 | A1 | 14 | φ15 | - | - | 14 | 5 × 2.3 | - | - | - | 195.1 | |
| S2S 25A = 1416 | 25 | φ50 | φ54 | A1 | 14 | φ16 | - | - | 14 | 5 × 2.3 | - | - | - | 192.4 | |
| S2S 25A - 2014F | 25 | φ50 | φ54 | A1 | 20 | φ14 | - | - | 20 | - | - | - | - | 284.1 | |
| S2S 25A - 2214F | 25 | φ50 | φ54 | A1 | 22 | φ14 | - | - | 22 | - | - | - | - | 312.5 | |
| S2S 25A = 2215 | 25 | φ50 | φ54 | A1 | 22 | φ15 | - | - | 22 | 5 × 2.3 | - | - | - | 306.6 | |
| S2S 25A = 2220 | 25 | φ50 | φ54 | A1 | 22 | φ20 | - | - | 22 | 6 × 2.8 | - | - | - | 281.9 | |
| S2S 25B - 1214 | 25 | φ50 | φ54 | B1 | 12 | φ14 | φ42 | 10 | 22 | - | - | - | - | 221.7 | |
| S2S 25B - 1414 | 25 | φ50 | φ54 | B1 | 14 | φ14 | φ32 | 10 | 24 | - | - | - | - | 250.1 | |
| S2S 25B # 1415 | 25 | φ50 | φ54 | B1 | 14 | φ15 | φ32 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | 243.1 | |
| S2S 25B # 1416 | 25 | φ50 | φ54 | B1 | 14 | φ16 | φ32 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | 238.6 | |
| S2S 25BF - 2008 | 25 | φ50 | φ54 | B1 | 20 | φ 8(H8) | φ40 | 20 | 40 | - | - | - | - | 486.2 | |
| S2S 25B - 2008H | 25 | φ50 | φ54 | B1 | 20 | φ 8(H※) | φ40 | 20 | 40 | - | - | - | - | 486.2 | |
| S2S 25B - 2014N | 25 | φ50 | φ54 | B1 | 20 | φ14 | φ44 | 10 | 30 | - | - | - | - | 391.6 | |
| S2S 25B - 2214 | 25 | φ50 | φ54 | B1 | 22 | φ14 | φ40 | 10 | 32 | - | - | - | - | 399.3 | |
| S2S 25B # 2215 | 25 | φ50 | φ54 | B1 | 22 | φ15 | φ40 | 10 | 32 | 5 × 2.3 | M4 | 5 | - | 389.9 | |
| S2S 25B # 2220 | 25 | φ50 | φ54 | B1 | 22 | φ20 | φ40 | 10 | 32 | 6 × 2.8 | M5 | 5 | - | 353.9 | |
| S2S 26B - 1414 | 26 | φ52 | φ56 | B1 | 14 | φ14 | φ46 | 10 | 24 | - | - | - | - | 335.1 | |
| S2S 26B - 2214 | 26 | φ52 | φ56 | B1 | 22 | φ14 | φ46 | 10 | 32 | - | - | - | - | 458.9 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|-------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 25 | 12 | | 0.051 | 0.52 | 1.03 | 2.05 | 3.54 | 4.73 | 5.74 |
| 25 | 14 | | 0.060 | 0.60 | 1.20 | 2.39 | 4.13 | 5.52 | 6.70 |
| 25 | 20 | - | 0.086 | 0.860 | 1.720 | 3.420 | 5.920 | 7.910 | 9.600 |
| 25 | 20 | ○ | 0.091 | 0.913 | 1.827 | 3.630 | 6.359 | 8.569 | 10.420 |
| 25 | 22 | | 0.094 | 0.94 | 1.89 | 3.75 | 6.49 | 8.67 | 10.52 |
| 26 | 14 | | 0.063 | 0.63 | 1.27 | 2.51 | 4.32 | 5.80 | 7.03 |
| 26 | 22 | | 0.100 | 1.00 | 2.00 | 3.94 | 6.78 | 9.12 | 11.05 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

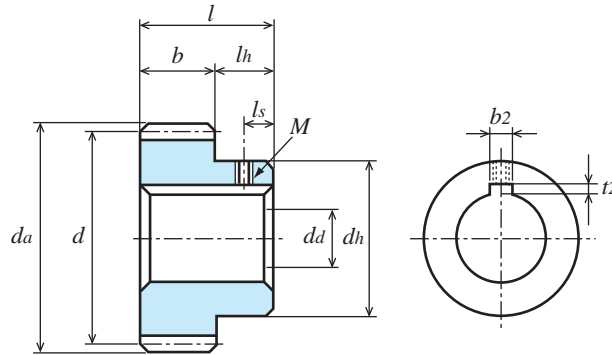
| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.004 | 0.040 | 0.090 | 0.180 | 0.320 | 0.440 | 0.550 |
| 0.020 | 0.219 | 0.451 | 0.925 | 1.670 | 2.291 | 2.813 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 28A - 1214F | 28 | φ56 | φ60 | A1 | 12 | φ14 | - | - | 12 | - | - | - | - | - | 217.5 |
| S2S 28A - 1414F | 28 | φ56 | φ60 | A1 | 14 | φ14 | - | - | 14 | - | - | - | - | - | 253.8 |
| S2S 28A = 1415 | 28 | φ56 | φ60 | A1 | 14 | φ15 | - | - | 14 | 5 × 2.3 | - | - | - | - | 250.0 |
| S2S 28A = 1416 | 28 | φ56 | φ60 | A1 | 14 | φ16 | - | - | 14 | 5 × 2.3 | - | - | - | - | 247.3 |
| S2S 28A = 1420 | 28 | φ56 | φ60 | A1 | 14 | φ20 | - | - | 14 | 6 × 2.8 | - | - | - | - | 234.3 |
| S2S 28A - 2016F | 28 | φ56 | φ60 | A1 | 20 | φ16 | - | - | 20 | - | - | - | - | - | 355.1 |
| S2S 28A - 2216F | 28 | φ56 | φ60 | A1 | 22 | φ16 | - | - | 22 | - | - | - | - | - | 390.6 |
| S2S 28A = 2220 | 28 | φ56 | φ60 | A1 | 22 | φ20 | - | - | 22 | 6 × 2.8 | - | - | - | - | 368.2 |
| S2S 28A = 2225 | 28 | φ56 | φ60 | A1 | 22 | φ25 | - | - | 22 | 8 × 3.3 | - | - | - | - | 336.0 |
| S2S 28B - 1214 | 28 | φ56 | φ60 | B1 | 12 | φ14 | φ48 | 10 | 22 | - | - | - | - | - | 304.3 |
| S2S 28B - 1414 | 28 | φ56 | φ60 | B1 | 14 | φ14 | φ40 | 10 | 24 | - | - | - | - | - | 340.6 |
| S2S 28B # 1415 | 28 | φ56 | φ60 | B1 | 14 | φ15 | φ40 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | - | 333.3 |
| S2S 28B # 1416 | 28 | φ56 | φ60 | B1 | 14 | φ16 | φ40 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | - | 328.7 |
| S2S 28B # 1420 | 28 | φ56 | φ60 | B1 | 14 | φ20 | φ40 | 10 | 24 | 6 × 2.8 | M5 | 5 | - | - | 306.3 |
| S2S 28B - 2016N | 28 | φ56 | φ60 | B1 | 20 | φ16 | φ50 | 10 | 30 | - | - | - | - | - | 493.8 |
| S2S 28B - 2216 | 28 | φ56 | φ60 | B1 | 22 | φ16 | φ50 | 10 | 32 | - | - | - | - | - | 529.3 |
| S2S 28B # 2220 | 28 | φ56 | φ60 | B1 | 22 | φ20 | φ50 | 10 | 32 | 6 × 2.8 | M5 | 5 | - | - | 495.1 |
| S2S 28B # 2225 | 28 | φ56 | φ60 | B1 | 22 | φ25 | φ50 | 10 | 32 | 8 × 3.3 | M6 | 5 | - | - | 448.2 |
| S2S 29B - 1414 | 29 | φ58 | φ62 | B1 | 14 | φ14 | φ52 | 10 | 24 | - | - | - | - | - | 428.4 |
| S2S 29B - 2216 | 29 | φ58 | φ62 | B1 | 22 | φ16 | φ52 | 10 | 32 | - | - | - | - | - | 572.9 |

[=] (イコール) にはキー材が付いております。 [=] : Gear with key way / with key

[#] (シャープ) にはキー材とセットスクリューが付いております。 [#] : Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 28 | 12 | 0.060 | 0.60 | 1.21 | 2.35 | 4.01 | 5.46 | 6.60 | 100 |
| 28 | 14 | 0.070 | 0.70 | 1.41 | 2.74 | 4.68 | 6.37 | 7.70 | 57.29 |
| 28 | 20 | 0.101 | 1.01 | 2.01 | 3.92 | 6.69 | 9.10 | 11.01 | 66.84 |
| 28 | 22 | 0.111 | 1.11 | 2.21 | 4.31 | 7.36 | 10.01 | 12.11 | 96.45 |
| 29 | 14 | 0.073 | 0.74 | 1.48 | 2.86 | 4.86 | 6.65 | 8.04 | 106.00 |
| 29 | 22 | 0.116 | 1.16 | 2.32 | 4.50 | 7.64 | 10.45 | 12.63 | 70.66 |
| | | | | | | | | | 110.77 |

KG 規格は“並幅” (軽荷重用) と“広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。 Please refer to the conversion fomulas of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

2

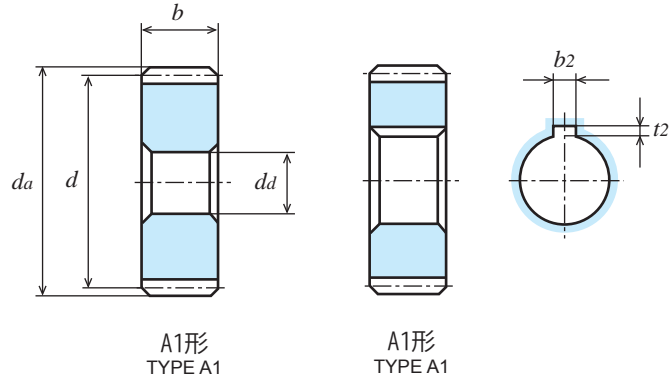
圧力角 20° (並歯) 歯数 30

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 30

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 30A - 1216F | 30 | φ60 | φ64 | A1 | 12 | φ16 | - | - | 12 | - | - | - | - | 247.4 | |
| S2S 30A - 1414F | 30 | φ60 | φ64 | A1 | 14 | φ14 | - | - | 14 | - | - | - | - | 293.8 | |
| S2S 30A = 1415 | 30 | φ60 | φ64 | A1 | 14 | φ15 | - | - | 14 | 5 × 2.3 | - | - | - | 290.1 | |
| S2S 30A = 1418 | 30 | φ60 | φ64 | A1 | 14 | φ18 | - | - | 14 | 6 × 2.8 | - | - | - | 280.9 | |
| S2S 30A = 1420 | 30 | φ60 | φ64 | A1 | 14 | φ20 | - | - | 14 | 6 × 2.8 | - | - | - | 274.4 | |
| S2S 30A - 2016F | 30 | φ60 | φ64 | A1 | 20 | φ16 | - | - | 20 | - | - | - | - | 412.3 | |
| S2S 30A = 2020 | 30 | φ60 | φ64 | A1 | 20 | φ20 | - | - | 20 | 6 × 2.8 | - | - | - | 391.9 | |
| S2S 30A - 2216F | 30 | φ60 | φ64 | A1 | 22 | φ16 | - | - | 22 | - | - | - | - | 453.6 | |
| S2S 30A = 2220 | 30 | φ60 | φ64 | A1 | 22 | φ20 | - | - | 22 | 6 × 2.8 | - | - | - | 431.1 | |
| S2S 30A = 2225 | 30 | φ60 | φ64 | A1 | 22 | φ25 | - | - | 22 | 8 × 3.3 | - | - | - | 399.0 | |
| S2S 30B - 1214 | 30 | φ60 | φ64 | B1 | 12 | φ14 | φ52 | 10 | 22 | - | - | - | - | 338.6 | |
| S2S 30B - 1414 | 30 | φ60 | φ64 | B1 | 14 | φ14 | φ40 | 10 | 24 | - | - | - | - | 380.6 | |
| S2S 30B # 1415 | 30 | φ60 | φ64 | B1 | 14 | φ15 | φ40 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | 373.3 | |
| S2S 30B # 1416 | 30 | φ60 | φ64 | B1 | 14 | φ16 | φ40 | 10 | 24 | 5 × 2.3 | M4 | 5 | - | 368.8 | |
| S2S 30B # 1418 | 30 | φ60 | φ64 | B1 | 14 | φ18 | φ40 | 10 | 24 | 6 × 2.8 | M5 | 5 | - | 357.5 | |
| S2S 30B # 1420 | 30 | φ60 | φ64 | B1 | 14 | φ20 | φ40 | 10 | 24 | 6 × 2.8 | M5 | 5 | - | 346.3 | |
| S2S 30BF - 2010 | 30 | φ60 | φ64 | B1 | 20 | φ10(H8) | φ50 | 20 | 40 | - | - | - | - | 723.5 | |
| S2S 30BF - 2010H | 30 | φ60 | φ64 | B1 | 20 | φ10(H※) | φ50 | 20 | 40 | - | - | - | - | 723.5 | |
| S2S 30B - 2018N | 30 | φ60 | φ64 | B1 | 20 | φ18 | φ54 | 10 | 30 | - | - | - | - | 564.1 | |
| S2S 30B - 2216 | 30 | φ60 | φ64 | B1 | 22 | φ16 | φ50 | 10 | 32 | - | - | - | - | 592.3 | |
| S2S 30B # 2220 | 30 | φ60 | φ64 | B1 | 22 | φ20 | φ50 | 10 | 32 | 6 × 2.8 | M5 | 5 | - | 558.1 | |
| S2S 30B # 2225 | 30 | φ60 | φ64 | B1 | 22 | φ25 | φ50 | 10 | 32 | 8 × 3.3 | M6 | 5 | - | 511.1 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 30 | 12 | - | 0.066 | 0.66 | 1.32 | 2.55 | 4.32 | 5.94 | 7.17 |
| 30 | 14 | - | 0.077 | 0.77 | 1.55 | 2.98 | 5.04 | 6.93 | 8.36 |
| 30 | 20 | - | 0.110 | 1.100 | 2.210 | 4.260 | 7.200 | 9.900 | 11.960 |
| 30 | 20 | ○ | 0.117 | 1.171 | 2.342 | 4.527 | 7.767 | 10.748 | 13.008 |
| 30 | 22 | - | 0.121 | 1.21 | 2.43 | 4.68 | 7.92 | 10.88 | 13.14 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.007 | 0.070 | 0.130 | 0.260 | 0.450 | 0.640 | 0.790 |
| 0.029 | 0.321 | 0.661 | 1.318 | 2.331 | 3.283 | 4.013 |
| - | - | - | - | - | - | - |

平歯車

SPUR GEARS

モジュール
MODULE

2

圧力角 20° (並歯) 歯数 32 ~ 35

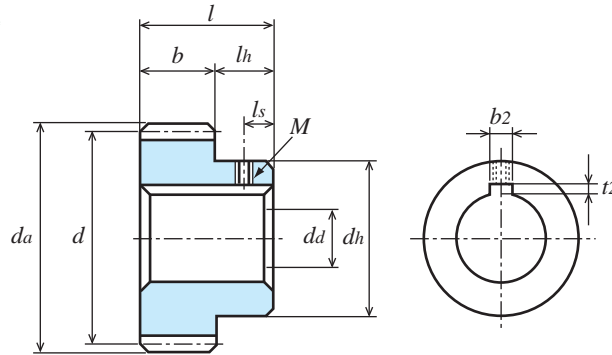
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 32 to Z 35

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 32A - 1214F | 32 | φ64 | φ68 | A1 | 12 | φ14 | - | - | 12 | - | - | - | - | 288.5 | |
| S2S 32A = 1215 | 32 | φ64 | φ68 | A1 | 12 | φ15 | - | - | 12 | 5 × 2.3 | - | - | - | 285.3 | |
| S2S 32A = 1218 | 32 | φ64 | φ68 | A1 | 12 | φ18 | - | - | 12 | 6 × 2.8 | - | - | - | 277.5 | |
| S2S 32A = 1220 | 32 | φ64 | φ68 | A1 | 12 | φ20 | - | - | 12 | 6 × 2.8 | - | - | - | 271.9 | |
| S2S 32A - 2016F | 32 | φ64 | φ68 | A1 | 20 | φ16 | - | - | 20 | - | - | - | - | 473.5 | |
| S2S 32A = 2020 | 32 | φ64 | φ68 | A1 | 20 | φ20 | - | - | 20 | 6 × 2.8 | - | - | - | 453.1 | |
| S2S 32A = 2025 | 32 | φ64 | φ68 | A1 | 20 | φ25 | - | - | 20 | 8 × 3.3 | - | - | - | 423.9 | |
| S2S 32B - 1214 | 32 | φ64 | φ68 | B1 | 12 | φ14 | φ40 | 10 | 22 | - | - | - | - | 375.3 | |
| S2S 32B # 1215 | 32 | φ64 | φ68 | B1 | 12 | φ15 | φ40 | 10 | 22 | 5 × 2.3 | M4 | 5 | - | 368.6 | |
| S2S 32B # 1220 | 32 | φ64 | φ68 | B1 | 12 | φ20 | φ40 | 10 | 22 | 6 × 2.8 | M5 | 5 | - | 343.8 | |
| S2S 32B - 2016 | 32 | φ64 | φ68 | B1 | 20 | φ16 | φ50 | 10 | 30 | - | - | - | - | 621.2 | |
| S2S 32B # 2020 | 32 | φ64 | φ68 | B1 | 20 | φ20 | φ50 | 10 | 30 | 6 × 2.8 | M5 | 5 | - | 580.1 | |
| S2S 32B # 2025 | 32 | φ64 | φ68 | B1 | 20 | φ25 | φ50 | 10 | 30 | 8 × 3.3 | M6 | 5 | - | 536.0 | |
| S2S 34B - 1214 | 34 | φ68 | φ72 | B1 | 12 | φ14 | φ60 | 10 | 22 | - | - | - | - | 537.8 | |
| S2S 34B - 2016 | 34 | φ68 | φ72 | B1 | 20 | φ16 | φ60 | 10 | 30 | - | - | - | - | 745.3 | |
| S2S 35A - 1216F | 35 | φ70 | φ74 | A1 | 12 | φ16 | - | - | 12 | - | - | - | - | 343.6 | |
| S2S 35A - 2020F | 35 | φ70 | φ74 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | 554.9 | |
| S2S 35B - 1214 | 35 | φ70 | φ74 | B1 | 12 | φ14 | φ60 | 10 | 22 | - | - | - | - | 558.3 | |
| S2S 35B - 2016 | 35 | φ70 | φ74 | B1 | 20 | φ16 | φ60 | 10 | 30 | - | - | - | - | 779.3 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 32 | 12 | 0.072 | 0.72 | 1.44 | 2.75 | 4.61 | 6.41 | 7.73 | 100 |
| 32 | 20 | 0.120 | 1.20 | 2.41 | 4.58 | 7.69 | 10.69 | 12.89 | 100 |
| 34 | 12 | 0.078 | 0.78 | 1.57 | 2.94 | 4.90 | 6.89 | 8.32 | 100 |
| 34 | 20 | 0.130 | 1.30 | 2.61 | 4.90 | 8.17 | 11.48 | 13.86 | 100 |
| 35 | 12 | 0.081 | 0.81 | 1.63 | 3.04 | 5.04 | 7.12 | 8.61 | 100 |
| 35 | 20 | 0.135 | 1.35 | 2.71 | 5.07 | 8.40 | 11.87 | 14.35 | 100 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion fomulas of power on page P26.

目次

インフォメーション

ギヤボックス

ノーバッキングギヤ

歯研研歯車

SPUR GEARS

内歯車

歯ラック

ラック

ハニカムギヤ

ワームとワームギヤ

かさ歯車

スプロケット

技術仕様書

平歯車 SPUR GEARS

モジュール
MODULE

2

圧力角 20° (並歯) 歯数 36 38

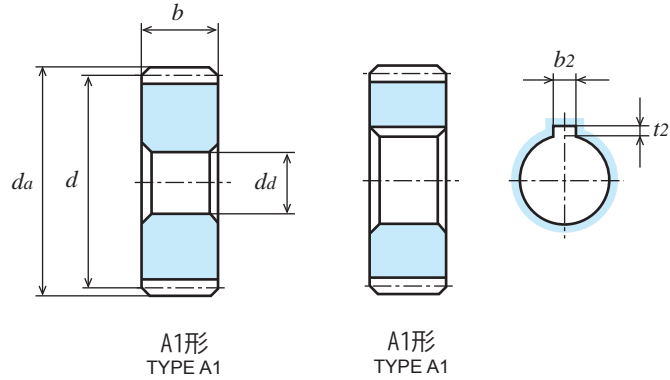
20° PRESSURE ANGLE FULL DEPTH TOOTH Z36 to Z38

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



仕様変更 省スペース・軽量化、締結加工不要。

Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H7)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キミぞ Key Way <i>b2 × t2</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>bw</i> | 重量 Weight <i>W(kg)</i> |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|----------------------------------|-----------------|-----------|---------------------------------------|--|------------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S2S 36A - 1216F | 36 | φ72 | φ76 | A1 | 12 | φ16 | - | - | 12 | - | - | - | - | - | 0.36 |
| S2S 36A = 1220 | 36 | φ72 | φ76 | A1 | 12 | φ20 | - | - | 12 | 6 × 2.8 | - | - | - | - | 0.35 |
| S2S 36A - 2016F | 36 | φ72 | φ76 | A1 | 20 | φ16 | - | - | 20 | - | - | - | - | - | 0.61 |
| S2S 36A = 2020 | 36 | φ72 | φ76 | A1 | 20 | φ20 | - | - | 20 | 6 × 2.8 | - | - | - | - | 0.59 |
| S2S 36A = 2025 | 36 | φ72 | φ76 | A1 | 20 | φ25 | - | - | 20 | 8 × 3.3 | - | - | - | - | 0.56 |
| S2S 36B - 1214 | 36 | φ72 | φ76 | B1 | 12 | φ14 | φ40 | 10 | 22 | - | - | - | - | - | 0.46 |
| S2S 36B # 1215 | 36 | φ72 | φ76 | B1 | 12 | φ15 | φ40 | 10 | 22 | 5 × 2.3 | M4 | 5 | - | - | 0.45 |
| S2S 36B # 1216 | 36 | φ72 | φ76 | B1 | 12 | φ16 | φ40 | 10 | 22 | 5 × 2.3 | M4 | 5 | - | - | 0.44 |
| S2S 36B # 1218 | 36 | φ72 | φ76 | B1 | 12 | φ18 | φ40 | 10 | 22 | 6 × 2.8 | M5 | 5 | - | - | 0.43 |
| S2S 36B # 1220 | 36 | φ72 | φ76 | B1 | 12 | φ20 | φ40 | 10 | 22 | 6 × 2.8 | M5 | 5 | - | - | 0.42 |
| S2S 36B - 2016 | 36 | φ72 | φ76 | B1 | 20 | φ16 | φ50 | 10 | 30 | - | - | - | - | - | 0.75 |
| S2S 36B # 2020 | 36 | φ72 | φ76 | B1 | 20 | φ20 | φ50 | 10 | 30 | 6 × 2.8 | M5 | 5 | - | - | 0.71 |
| S2S 36B # 2025 | 36 | φ72 | φ76 | B1 | 20 | φ25 | φ50 | 10 | 30 | 8 × 3.3 | M6 | 5 | - | - | 0.67 |
| S2S 38B - 1214 | 38 | φ76 | φ80 | B1 | 12 | φ14 | φ60 | 10 | 22 | - | - | - | - | - | 0.62 |
| S2S 38B - 2016 | 38 | φ76 | φ80 | B1 | 20 | φ16 | φ60 | 10 | 30 | - | - | - | - | - | 0.89 |

【=】(イコール)にはキマ材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキマ材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 36 | 12 | 0.084 | 0.84 | 1.69 | 3.13 | 5.19 | 7.35 | 8.90 | 100 |
| 36 | 20 | 0.141 | 1.41 | 2.81 | 5.22 | 8.64 | 12.26 | 14.83 | 80.21 |
| 38 | 12 | 0.090 | 0.90 | 1.81 | 3.32 | 5.53 | 7.82 | 9.47 | 134.65 |
| 38 | 20 | 0.151 | 1.51 | 3.02 | 5.54 | 9.21 | 13.03 | 15.79 | 85.94 |
| | | | | | | | | | 144.20 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

2

圧力角 20° (並歯) 歯数 40

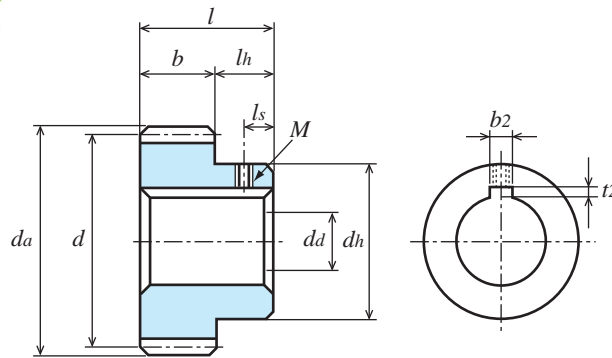
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 40

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 40A - 1216F | 40 | φ80 | φ84 | A1 | 12 | φ16 | - | - | 12 | - | - | - | - | 0.45 | |
| S2S 40A = 1220 | 40 | φ80 | φ84 | A1 | 12 | φ20 | - | - | 12 | 6 × 2.8 | - | - | - | 0.44 | |
| S2S 40A - 2016F | 40 | φ80 | φ84 | A1 | 20 | φ16 | - | - | 20 | - | - | - | - | 0.76 | |
| S2S 40A = 2020 | 40 | φ80 | φ84 | A1 | 20 | φ20 | - | - | 20 | 6 × 2.8 | - | - | - | 0.74 | |
| S2S 40A = 2025 | 40 | φ80 | φ84 | A1 | 20 | φ25 | - | - | 20 | 8 × 3.3 | - | - | - | 0.71 | |
| S2S 40B - 1214 | 40 | φ80 | φ84 | B1 | 12 | φ14 | φ40 | 10 | 22 | - | - | - | - | 0.55 | |
| S2S 40B # 1215 | 40 | φ80 | φ84 | B1 | 12 | φ15 | φ40 | 10 | 22 | 5 × 2.3 | M4 | 5 | - | 0.54 | |
| S2S 40B # 1216 | 40 | φ80 | φ84 | B1 | 12 | φ16 | φ40 | 10 | 22 | 5 × 2.3 | M4 | 5 | - | 0.53 | |
| S2S 40B # 1218 | 40 | φ80 | φ84 | B1 | 12 | φ18 | φ40 | 10 | 22 | 6 × 2.8 | M5 | 5 | - | 0.52 | |
| S2S 40B # 1220 | 40 | φ80 | φ84 | B1 | 12 | φ20 | φ40 | 10 | 22 | 6 × 2.8 | M5 | 5 | - | 0.51 | |
| ● S2S 40BF - 2010 | 40 | φ80 | φ84 | B1 | 20 | φ10(H8) | φ60 | 20 | 40 | - | - | - | - | 1.2 | |
| ● S2S 40B - 2010H | 40 | φ80 | φ84 | B1 | 20 | φ10(H※) | φ60 | 20 | 40 | - | - | - | - | 1.2 | |
| S2S 40B - 2016 | 40 | φ80 | φ84 | B1 | 20 | φ16 | φ50 | 10 | 30 | - | - | - | - | 0.90 | |
| S2S 40B # 2020 | 40 | φ80 | φ84 | B1 | 20 | φ20 | φ50 | 10 | 30 | 6 × 2.8 | M5 | 5 | - | 0.86 | |
| S2S 40B # 2025 | 40 | φ80 | φ84 | B1 | 20 | φ25 | φ50 | 10 | 30 | 8 × 3.3 | M6 | 5 | - | 0.82 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 40 | 12 | - | 0.10 | 0.97 | 1.93 | 3.51 | 5.87 | 8.28 | 10.05 |
| 40 | 20 | - | 0.160 | 1.610 | 3.210 | 5.840 | 9.760 | 13.760 | 16.700 |
| 40 | 20 | ○ | 0.170 | 1.703 | 3.407 | 6.239 | 10.575 | 14.990 | 18.738 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.012 | 0.120 | 0.240 | 0.450 | 0.790 | 1.160 | 1.450 |
| 0.053 | 0.586 | 1.209 | 2.282 | 3.986 | 5.752 | 7.261 |

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圧力角 20° (並歯) 歯数 42 ~ 48

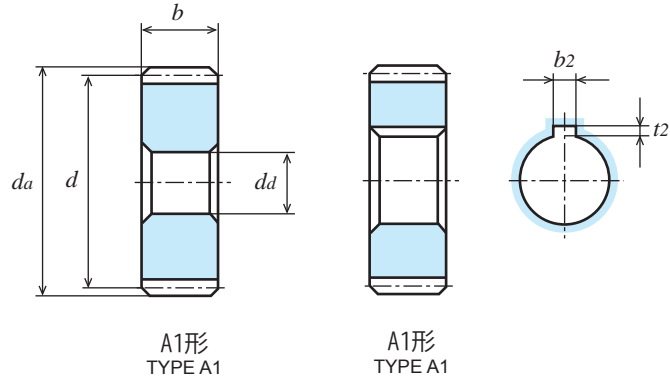
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 42 to Z 48

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



仕様変更 省スペース・軽量化、締結加工不要。

Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 42B - 1214 | 42 | φ84 | φ 88 | B1 | 12 | φ14 | φ60 | 10 | 22 | - | - | - | - | 0.72 | |
| S2S 42B - 2016 | 42 | φ84 | φ 88 | B1 | 20 | φ16 | φ60 | 10 | 30 | - | - | - | - | 1.05 | |
| S2S 44B - 1214 | 44 | φ88 | φ 92 | B1 | 12 | φ14 | φ60 | 10 | 22 | - | - | - | - | 0.77 | |
| S2S 44B - 2016 | 44 | φ88 | φ 92 | B1 | 20 | φ16 | φ60 | 10 | 30 | - | - | - | - | 1.13 | |
| S2S 45A - 1218F | 45 | φ90 | φ 94 | A1 | 12 | φ18 | - | - | 12 | - | - | - | - | 0.58 | |
| S2S 45A - 2020F | 45 | φ90 | φ 94 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | 0.95 | |
| S2S 45B - 1214 | 45 | φ90 | φ 94 | B1 | 12 | φ14 | φ60 | 10 | 22 | - | - | - | - | 0.80 | |
| S2S 45B - 2016 | 45 | φ90 | φ 94 | B1 | 20 | φ16 | φ60 | 10 | 30 | - | - | - | - | 1.17 | |
| S2S 46B - 1214 | 46 | φ92 | φ 96 | B1 | 12 | φ14 | φ60 | 10 | 22 | - | - | - | - | 0.82 | |
| S2S 46B - 2016 | 46 | φ92 | φ 96 | B1 | 20 | φ16 | φ60 | 10 | 30 | - | - | - | - | 1.22 | |
| S2S 48A - 1218F | 48 | φ96 | φ100 | A1 | 12 | φ18 | - | - | 12 | - | - | - | - | 0.66 | |
| S2S 48A = 1220 | 48 | φ96 | φ100 | A1 | 12 | φ20 | - | - | 12 | 6 × 2.8 | - | - | - | 0.65 | |
| S2S 48A - 2018F | 48 | φ96 | φ100 | A1 | 20 | φ18 | - | - | 20 | - | - | - | - | 1.10 | |
| S2S 48A = 2020 | 48 | φ96 | φ100 | A1 | 20 | φ20 | - | - | 20 | 6 × 2.8 | - | - | - | 1.08 | |
| S2S 48A = 2025 | 48 | φ96 | φ100 | A1 | 20 | φ25 | - | - | 20 | 8 × 3.3 | - | - | - | 1.06 | |
| S2S 48B - 1216 | 48 | φ96 | φ100 | B1 | 12 | φ16 | φ40 | 10 | 22 | - | - | - | - | 0.75 | |
| S2S 48B # 1220 | 48 | φ96 | φ100 | B1 | 12 | φ20 | φ40 | 10 | 22 | 6 × 2.8 | M5 | 5 | - | 0.72 | |
| S2S 48B - 2018 | 48 | φ96 | φ100 | B1 | 20 | φ18 | φ50 | 10 | 30 | - | - | - | - | 1.23 | |
| S2S 48B # 2020 | 48 | φ96 | φ100 | B1 | 20 | φ20 | φ50 | 10 | 30 | 6 × 2.8 | M5 | 5 | - | 1.21 | |
| S2S 48B # 2025 | 48 | φ96 | φ100 | B1 | 20 | φ25 | φ50 | 10 | 30 | 8 × 3.3 | M6 | 5 | - | 1.17 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 42 | 12 | 0.10 | 1.03 | 2.06 | 3.69 | 6.20 | 8.75 | 10.61 | 100 |
| 42 | 20 | 0.17 | 1.71 | 3.43 | 6.15 | 10.34 | 14.59 | 17.69 | 100 |
| 44 | 12 | 0.11 | 1.09 | 2.18 | 3.87 | 6.53 | 9.22 | 11.17 | 100 |
| 44 | 20 | 0.18 | 1.82 | 3.63 | 6.45 | 10.89 | 15.37 | 18.61 | 100 |
| 45 | 12 | 0.11 | 1.12 | 2.24 | 3.96 | 6.70 | 9.46 | 11.44 | 100 |
| 45 | 20 | 0.19 | 1.87 | 3.74 | 6.60 | 11.16 | 15.76 | 19.07 | 100 |
| 46 | 12 | 0.12 | 1.15 | 2.30 | 4.05 | 6.86 | 9.69 | 11.72 | 100 |
| 46 | 20 | 0.19 | 1.92 | 3.84 | 6.74 | 11.44 | 16.15 | 19.53 | 100 |
| 48 | 12 | 0.12 | 1.21 | 2.43 | 4.22 | 7.19 | 10.16 | 12.27 | 100 |
| 48 | 20 | 0.20 | 2.02 | 4.04 | 7.03 | 11.98 | 16.93 | 20.45 | 100 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車 SPUR GEARS

モジュール
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2

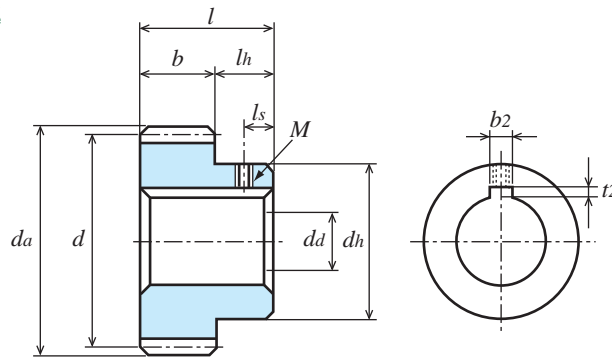
圧力角 20° (並歯) 歯数 50 52

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 50 to Z 52

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 50A - 1218F | 50 | φ100 | φ104 | A1 | 12 | φ18 | - | - | 12 | - | - | - | - | 0.72 | |
| S2S 50A = 1220 | 50 | φ100 | φ104 | A1 | 12 | φ20 | - | - | 12 | 6 × 2.8 | - | - | - | 0.71 | |
| S2S 50A = 1225 | 50 | φ100 | φ104 | A1 | 12 | φ25 | - | - | 12 | 8 × 3.3 | - | - | - | 0.69 | |
| S2S 50A - 2018F | 50 | φ100 | φ104 | A1 | 20 | φ18 | - | - | 20 | - | - | - | - | 1.19 | |
| S2S 50A = 2020 | 50 | φ100 | φ104 | A1 | 20 | φ20 | - | - | 20 | 6 × 2.8 | - | - | - | 1.18 | |
| S2S 50A = 2025 | 50 | φ100 | φ104 | A1 | 20 | φ25 | - | - | 20 | 8 × 3.3 | - | - | - | 1.15 | |
| S2S 50A = 2030 | 50 | φ100 | φ104 | A1 | 20 | φ30 | - | - | 20 | 8 × 3.3 | - | - | - | 1.12 | |
| S2S 50B - 1216 | 50 | φ100 | φ104 | B1 | 12 | φ16 | φ50 | 10 | 22 | - | - | - | - | 0.86 | |
| S2S 50B # 1220 | 50 | φ100 | φ104 | B1 | 12 | φ20 | φ50 | 10 | 22 | 6 × 2.8 | M5 | 5 | - | 0.84 | |
| S2S 50B # 1225 | 50 | φ100 | φ104 | B1 | 12 | φ25 | φ50 | 10 | 22 | 8 × 3.3 | M6 | 5 | - | 0.80 | |
| ● S2S 50BF - 2012 | 50 | φ100 | φ104 | B1 | 20 | φ12(H8) | φ70 | 20 | 40 | - | - | - | - | 1.8 | |
| ● S2S 50B - 2012H | 50 | φ100 | φ104 | B1 | 20 | φ12(H※) | φ70 | 20 | 40 | - | - | - | - | 1.8 | |
| S2S 50B - 2018 | 50 | φ100 | φ104 | B1 | 20 | φ18 | φ60 | 10 | 30 | - | - | - | - | 1.40 | |
| S2S 50B # 2020 | 50 | φ100 | φ104 | B1 | 20 | φ20 | φ60 | 10 | 30 | 6 × 2.8 | M5 | 5 | - | 1.38 | |
| S2S 50B # 2025 | 50 | φ100 | φ104 | B1 | 20 | φ25 | φ60 | 10 | 30 | 8 × 3.3 | M6 | 5 | - | 1.33 | |
| S2S 50B # 2030 | 50 | φ100 | φ104 | B1 | 20 | φ30 | φ60 | 10 | 30 | 8 × 3.3 | M6 | 5 | - | 1.28 | |
| S2S 52B - 1216 | 52 | φ104 | φ108 | B1 | 12 | φ16 | φ60 | 10 | 22 | - | - | - | - | 0.99 | |
| S2S 52B - 2018 | 52 | φ104 | φ108 | B1 | 20 | φ18 | φ60 | 10 | 30 | - | - | - | - | 1.50 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。[#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 50 | 12 | - | 0.13 | 1.28 | 2.54 | 4.39 | 7.52 | 10.62 | 12.81 |
| 50 | 20 | - | 0.210 | 2.120 | 4.210 | 7.280 | 12.470 | 17.630 | 21.270 |
| 50 | 20 | ○ | 0.225 | 2.247 | 4.466 | 7.822 | 13.550 | 19.776 | 24.720 |
| 52 | 12 | - | 0.13 | 1.34 | 2.64 | 4.56 | 7.84 | 11.08 | 13.40 |
| 52 | 20 | - | 0.22 | 2.23 | 4.41 | 7.59 | 13.06 | 18.47 | 22.34 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.019 | 0.190 | 0.390 | 0.690 | 1.240 | 1.860 | 2.320 |
| 0.085 | 0.936 | 1.917 | 3.460 | 6.180 | 9.181 | 11.589 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

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ラック
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かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

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平歯車 SPUR GEARS

モジュール
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2

圧力角 20° (並歯) 歯数 55 ~ 56

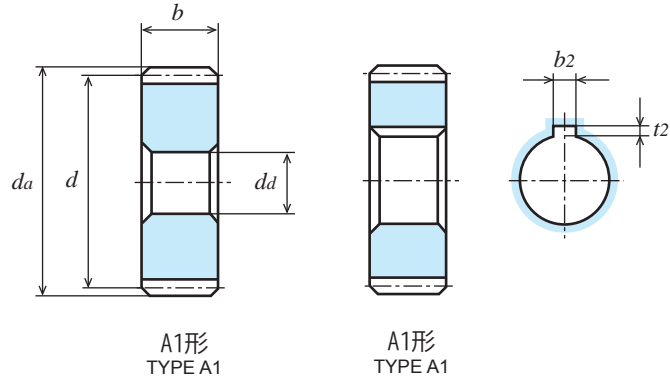
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 55 to Z 56

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



仕様変更 省スペース・軽量化、締結加工不要。

Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キミぞ Key Way <i>b₂ × t₂</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>b_w</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|--|-----------------|-----------|---------------------------------------|---|-------------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S2S 55A - 1218F | 55 | φ110 | φ114 | A1 | 12 | φ18 | - | - | 12 | - | - | - | - | - | 0.87 |
| S2S 55A - 2020F | 55 | φ110 | φ114 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | - | 1.44 |
| S2S 55B - 1216 | 55 | φ110 | φ114 | B1 | 12 | φ16 | φ60 | 10 | 22 | - | - | - | - | - | 1.08 |
| S2S 55B - 2018 | 55 | φ110 | φ114 | B1 | 20 | φ18 | φ60 | 10 | 30 | - | - | - | - | - | 1.66 |
| S2S 56A - 1218F | 56 | φ112 | φ116 | A1 | 12 | φ18 | - | - | 12 | - | - | - | - | - | 0.90 |
| S2S 56A = 1220 | 56 | φ112 | φ116 | A1 | 12 | φ20 | - | - | 12 | 6 × 2.8 | - | - | - | - | 0.90 |
| S2S 56A - 2020F | 56 | φ112 | φ116 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | - | 1.50 |
| S2S 56A = 2025 | 56 | φ112 | φ116 | A1 | 20 | φ25 | - | - | 20 | 8 × 3.3 | - | - | - | - | 1.47 |
| S2S 56B - 1216 | 56 | φ112 | φ116 | B1 | 12 | φ16 | φ50 | 10 | 22 | - | - | - | - | - | 1.05 |
| S2S 56B # 1220 | 56 | φ112 | φ116 | B1 | 12 | φ20 | φ50 | 10 | 22 | 6 × 2.8 | M5 | 5 | - | - | 1.02 |
| S2S 56B - 2018 | 56 | φ112 | φ116 | B1 | 20 | φ18 | φ60 | 10 | 30 | - | - | - | - | - | 1.71 |
| S2S 56B # 2020 | 56 | φ112 | φ116 | B1 | 20 | φ20 | φ60 | 10 | 30 | 6 × 2.8 | M5 | 5 | - | - | 1.69 |
| S2S 56B # 2025 | 56 | φ112 | φ116 | B1 | 20 | φ25 | φ60 | 10 | 30 | 8 × 3.3 | M6 | 5 | - | - | 1.65 |

【=】 (イコール) にはキー材が付いております。【=】: Gear with key way / with key

【#】 (シャープ) にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|-------|-------|-------|--------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 | |
| 55 | 12 | 0.14 | 1.43 | 2.81 | 4.80 | 8.32 | 11.76 | 14.35 | 136.56 | |
| 55 | 20 | 0.24 | 2.39 | 4.68 | 8.00 | 13.86 | 19.61 | 23.91 | 228.23 | |
| 56 | 12 | 0.15 | 1.47 | 2.86 | 4.88 | 8.47 | 11.99 | 14.67 | 140.38 | |
| 56 | 20 | 0.24 | 2.44 | 4.76 | 8.13 | 14.12 | 19.98 | 24.44 | 233.01 | |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

2

圧力角 20° (並歯) 歯数 60

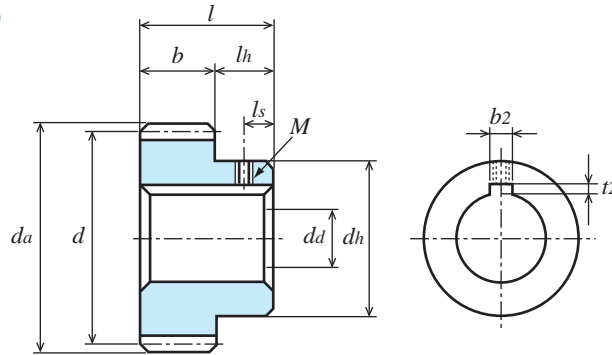
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 60

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|------|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 60A - 1220F | 60 | φ120 | φ124 | A1 | 12 | φ20 | - | - | 12 | - | - | - | - | 1.04 | |
| S2S 60A = 1225 | 60 | φ120 | φ124 | A2 | 12 | φ25 | φ50 | - | 12 | 8 × 3.3 | - | φ102 | 6 | 0.74 | |
| S2S 60A - 2018F | 60 | φ120 | φ124 | A1 | 20 | φ18 | - | - | 20 | - | - | - | - | 1.74 | |
| S2S 60A = 2020 | 60 | φ120 | φ124 | A2 | 20 | φ20 | φ40 | - | 20 | 6 × 2.8 | - | φ102 | 10 | 1.22 | |
| S2S 60A = 2025 | 60 | φ120 | φ124 | A2 | 20 | φ25 | φ50 | - | 20 | 8 × 3.3 | - | φ102 | 10 | 1.24 | |
| S2S 60A = 2030 | 60 | φ120 | φ124 | A2 | 20 | φ30 | φ60 | - | 20 | 8 × 3.3 | - | φ102 | 10 | 1.28 | |
| S2S 60B - 1216 | 60 | φ120 | φ124 | B1 | 12 | φ16 | φ50 | 10 | 22 | - | - | - | - | 1.19 | |
| S2S 60B # 1220 | 60 | φ120 | φ124 | B3 | 12 | φ20 | φ50 | 10 | 22 | 6 × 2.8 | M5 | φ102 | 6 | 1.16 | |
| S2S 60B # 1225 | 60 | φ120 | φ124 | B3 | 12 | φ25 | φ50 | 10 | 22 | 8 × 3.3 | M6 | φ102 | 6 | 1.13 | |
| ● S2S 60BF - 2012 | 60 | φ120 | φ124 | B1 | 20 | φ12(H8) | φ85 | 20 | 40 | - | - | - | - | 2.62 | |
| ● S2S 60B - 2012H | 60 | φ120 | φ124 | B1 | 20 | φ12(H※) | φ85 | 20 | 40 | - | - | - | - | 2.62 | |
| S2S 60B - 2018 | 60 | φ120 | φ124 | B1 | 20 | φ18 | φ60 | 10 | 30 | - | - | - | - | 1.94 | |
| S2S 60B # 2020 | 60 | φ120 | φ124 | B3 | 20 | φ20 | φ60 | 10 | 30 | 6 × 2.8 | M5 | φ102 | 10 | 1.92 | |
| S2S 60B # 2025 | 60 | φ120 | φ124 | B3 | 20 | φ25 | φ60 | 10 | 30 | 8 × 3.3 | M6 | φ102 | 10 | 1.87 | |
| S2S 60B # 2030 | 60 | φ120 | φ124 | B3 | 20 | φ30 | φ60 | 10 | 30 | 8 × 3.3 | M6 | φ102 | 10 | 1.82 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 60 | 12 | - | 0.16 | 1.59 | 3.07 | 5.19 | 9.10 | 12.88 | 15.94 |
| 60 | 20 | - | 0.260 | 2.640 | 5.090 | 8.610 | 15.080 | 21.350 | 26.410 |
| 60 | 20 | ○ | 0.280 | 2.800 | 5.411 | 9.285 | 16.428 | 24.642 | 30.802 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.028 | 0.280 | 0.550 | 0.970 | 1.810 | 2.720 | 3.480 |
| 0.124 | 1.371 | 2.731 | 4.830 | 8.810 | 13.451 | 16.980 |

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平歯車 SPUR GEARS

モジュール
MODULE

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圧力角 20° (並歯) 歯数 64 ~ 65

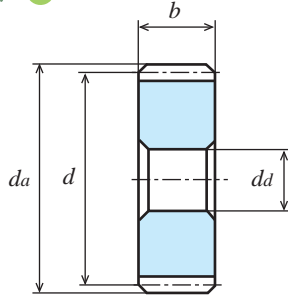
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 64 to Z 65

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8

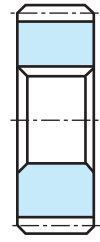


New 仕様変更 省スペース・軽量化、締結加工不要。

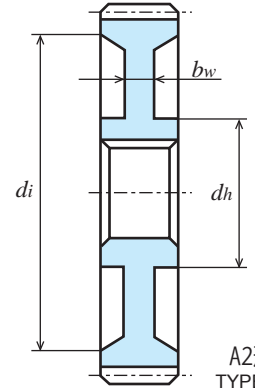
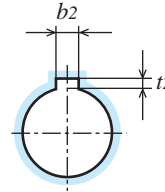
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



A1形
TYPE A1



A1形
TYPE A1



A2形
TYPE A2

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da(H7)</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キミぞ Key Way <i>b2 × t2</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>bw</i> | 重量 Weight <i>W(kg)</i> |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|----------------------------------|-----------------|-----------|---------------------------------------|--|------------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S2S 64A - 1220F | 64 | φ128 | φ132 | A1 | 12 | φ20 | - | - | 12 | - | - | - | - | - | 1.18 |
| S2S 64A = 1225 | 64 | φ128 | φ132 | A2 | 12 | φ25 | φ50 | - | 12 | 8 × 3.3 | - | - | φ110 | 6 | 0.85 |
| S2S 64A - 2018F | 64 | φ128 | φ132 | A1 | 20 | φ18 | - | - | 20 | - | - | - | - | - | 1.98 |
| S2S 64A = 2020 | 64 | φ128 | φ132 | A2 | 20 | φ20 | φ40 | - | 20 | 6 × 2.8 | - | - | φ110 | 10 | 1.36 |
| S2S 64A = 2025 | 64 | φ128 | φ132 | A2 | 20 | φ25 | φ50 | - | 20 | 8 × 3.3 | - | - | φ110 | 10 | 1.39 |
| S2S 64B - 1216 | 64 | φ128 | φ132 | B1 | 12 | φ16 | φ50 | 10 | 22 | - | - | - | - | - | 1.33 |
| S2S 64B # 1220 | 64 | φ128 | φ132 | B3 | 12 | φ20 | φ50 | 10 | 22 | 6 × 2.8 | M5 | 5 | φ110 | 6 | 0.97 |
| S2S 64B - 2018 | 64 | φ128 | φ132 | B1 | 20 | φ18 | φ60 | 10 | 30 | - | - | - | - | - | 2.18 |
| S2S 64B # 2020 | 64 | φ128 | φ132 | B3 | 20 | φ20 | φ60 | 10 | 30 | 6 × 2.8 | M5 | 5 | φ110 | 10 | 1.68 |
| S2S 64B # 2025 | 64 | φ128 | φ132 | B3 | 20 | φ25 | φ60 | 10 | 30 | 8 × 3.3 | M6 | 5 | φ110 | 10 | 1.63 |
| S2S 65A - 1218F | 65 | φ130 | φ134 | A1 | 12 | φ18 | - | - | 12 | - | - | - | - | - | 1.23 |
| S2S 65A - 2020F | 65 | φ130 | φ134 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | - | 2.04 |
| S2S 65B - 1216 | 65 | φ130 | φ134 | B1 | 12 | φ16 | φ60 | 10 | 22 | - | - | - | - | - | 1.44 |
| S2S 65B - 2018 | 65 | φ130 | φ134 | B1 | 20 | φ18 | φ70 | 10 | 30 | - | - | - | - | - | 2.33 |

【=】 (イコール) にはキマ材が付いております。【=】: Gear with key way / with key

【#】 (シャープ) にはキマ材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 64 | 12 | 0.17 | 1.72 | 3.27 | 5.50 | 9.75 | 13.77 | - | 100 |
| 64 | 20 | 0.29 | 2.87 | 5.46 | 9.16 | 16.25 | 22.95 | - | 164.25 |
| 65 | 12 | 0.18 | 1.75 | 3.33 | 5.57 | 9.91 | 14.02 | - | 274.07 |
| 65 | 20 | 0.29 | 2.92 | 5.54 | 9.29 | 16.52 | 23.37 | - | 167.12 |
| | | | | | | | | | 278.85 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

平歯車 SPUR GEARS

モジュール
MODULE

2

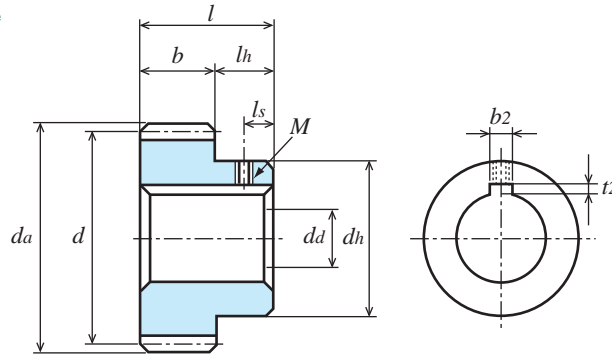
圧力角 20° (並歯) 歯数 70 ~ 72

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 70 to Z 72

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|-----------------|------|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 70A - 1220F | 70 | φ140 | φ144 | A1 | 12 | φ20 | - | - | 12 | - | - | - | - | 1.42 | |
| S2S 70A - 2018F | 70 | φ140 | φ144 | A1 | 20 | φ18 | - | - | 20 | - | - | - | - | 2.38 | |
| S2S 70B - 1216 | 70 | φ140 | φ144 | B1 | 12 | φ16 | φ60 | 10 | 22 | - | - | - | - | 1.64 | |
| ● S2S 70BF - 2015 | 70 | φ140 | φ144 | B1 | 20 | φ15 | φ100 | 20 | 40 | - | - | - | - | 3.59 | |
| ● S2S 70B - 2015H | 70 | φ140 | φ144 | B1 | 20 | φ15(H※) | φ100 | 20 | 40 | - | - | - | - | 3.59 | |
| S2S 70B - 2018 | 70 | φ140 | φ144 | B1 | 20 | φ18 | φ70 | 10 | 30 | - | - | - | - | 2.66 | |
| S2S 72A - 1220F | 72 | φ144 | φ148 | A1 | 12 | φ20 | - | - | 12 | - | - | - | - | 1.51 | |
| S2S 72A = 1225 | 72 | φ144 | φ148 | A2 | 12 | φ25 | φ50 | - | 12 | 8 × 3.3 | - | φ126 | 6 | 1.01 | |
| S2S 72A - 2018F | 72 | φ144 | φ148 | A1 | 20 | φ18 | - | - | 20 | - | - | - | - | 2.52 | |
| S2S 72A = 2025 | 72 | φ144 | φ148 | A2 | 20 | φ25 | φ50 | - | 20 | 8 × 3.3 | - | φ126 | 10 | 1.70 | |
| S2S 72B - 1218 | 72 | φ144 | φ148 | B1 | 12 | φ18 | φ50 | 10 | 22 | - | - | - | - | 1.65 | |
| S2S 72B # 1220 | 72 | φ144 | φ148 | B3 | 12 | φ20 | φ50 | 10 | 22 | 6 × 2.8 | M5 | 5 | φ126 | 6 | 1.15 |
| S2S 72B - 2020 | 72 | φ144 | φ148 | B1 | 20 | φ20 | φ60 | 10 | 30 | - | - | - | - | 2.71 | |
| S2S 72B # 2025 | 72 | φ144 | φ148 | B3 | 20 | φ25 | φ60 | 10 | 30 | 8 × 3.3 | M6 | 5 | φ126 | 10 | 1.94 |
| S2S 72B # 2030 | 72 | φ144 | φ148 | B3 | 20 | φ30 | φ60 | 10 | 30 | 8 × 3.3 | M6 | 5 | φ126 | 10 | 1.89 |

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【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

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許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|--------|--------|--------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 70 | 12 | - | 0.19 | 1.91 | 3.58 | 5.93 | 10.71 | 15.31 | - |
| 70 | 20 | - | 0.320 | 3.170 | 5.920 | 9.820 | 17.740 | 25.350 | - |
| 70 | 20 | ○ | 0.336 | 3.359 | 6.316 | 10.633 | 19.705 | 29.557 | - |
| 72 | 12 | - | 0.20 | 1.98 | 3.67 | 6.08 | 11.03 | 15.82 | - |
| 72 | 20 | - | 0.33 | 3.30 | 6.12 | 10.13 | 18.38 | 26.37 | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|--------|--------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.039 | 0.390 | 0.750 | 1.290 | 2.510 | 3.810 | - |
| 0.171 | 1.893 | 3.670 | 6.370 | 12.168 | 18.579 | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

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歯研歯車
SPUR GEARS

内歯車
INTERNAL GEARS

歯研ラック
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ラック
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ハニカムギヤ
HELIICAL GEARS AND SCREW GEARS

ウォーム
WORMS AND WORM WHEELS

かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

技術データ
REFERENCE DATA

平歯車

SPUR GEARS

モジュール
MODULE

2

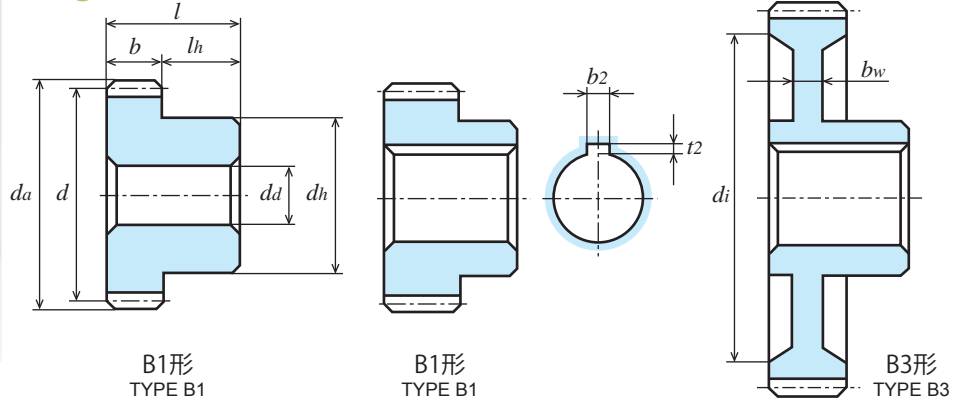
圧力角 20° (並歯) 歯数 75 80

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 75 to 80

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 75A - 1218F | 75 | φ150 | φ154 | A1 | 12 | φ18 | - | - | 12 | - | - | - | - | - | 1.64 |
| S2S 75A - 2020F | 75 | φ150 | φ154 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | - | 2.73 |
| S2S 75B - 1218 | 75 | φ150 | φ154 | B1 | 12 | φ18 | φ 60 | 10 | 22 | - | - | - | - | - | 1.84 |
| S2S 75B - 2020 | 75 | φ150 | φ154 | B1 | 20 | φ20 | φ 70 | 10 | 30 | - | - | - | - | - | 3.00 |
| S2S 80A - 1220F | 80 | φ160 | φ164 | A1 | 12 | φ20 | - | - | 12 | - | - | - | - | - | 1.86 |
| S2S 80A = 1225 | 80 | φ160 | φ164 | A2 | 12 | φ25 | φ 50 | - | 12 | 8 × 3.3 | - | - | φ142 | 6 | 1.21 |
| S2S 80A - 2018F | 80 | φ160 | φ164 | A1 | 20 | φ18 | - | - | 20 | - | - | - | - | - | 3.12 |
| S2S 80A = 2025 | 80 | φ160 | φ164 | A2 | 20 | φ25 | φ 50 | - | 20 | 8 × 3.3 | - | - | φ142 | 10 | 2.03 |
| S2S 80A = 2030 | 80 | φ160 | φ164 | A2 | 20 | φ30 | φ 60 | - | 20 | 8 × 3.3 | - | - | φ142 | 10 | 2.07 |
| S2S 80B - 1218 | 80 | φ160 | φ164 | B1 | 12 | φ18 | φ 50 | 10 | 22 | - | - | - | - | - | 2.01 |
| S2S 80B # 1220 | 80 | φ160 | φ164 | B3 | 12 | φ20 | φ 50 | 10 | 22 | 6 × 2.8 | M5 | 5 | φ142 | 6 | 1.35 |
| S2S 80B # 1225 | 80 | φ160 | φ164 | B3 | 12 | φ25 | φ 50 | 10 | 22 | 8 × 3.3 | M6 | 5 | φ142 | 6 | 1.32 |
| S2S 80BF - 2015 | 80 | φ160 | φ164 | B1 | 20 | φ15 | φ115 | 20 | 40 | - | - | - | - | - | 4.72 |
| S2S 80B - 2015H | 80 | φ160 | φ164 | B1 | 20 | φ15(H※) | φ115 | 20 | 40 | - | - | - | - | - | 4.72 |
| S2S 80B - 2020 | 80 | φ160 | φ164 | B1 | 20 | φ20 | φ 60 | 10 | 30 | - | - | - | - | - | 3.31 |
| S2S 80B # 2025 | 80 | φ160 | φ164 | B3 | 20 | φ25 | φ 60 | 10 | 30 | 8 × 3.3 | M6 | 5 | φ142 | 10 | 2.28 |
| S2S 80B # 2030 | 80 | φ160 | φ164 | B3 | 20 | φ30 | φ 60 | 10 | 30 | 8 × 3.3 | M6 | 5 | φ142 | 10 | 2.23 |

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【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|--------|--------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 75 | 12 | - | 0.21 | 2.07 | 3.82 | 6.35 | 11.50 | 16.59 | - |
| 75 | 20 | - | 0.35 | 3.46 | 6.37 | 10.58 | 19.14 | 27.65 | - |
| 80 | 12 | - | 0.22 | 2.24 | 4.06 | 6.79 | 12.28 | - | - |
| 80 | 20 | - | 0.370 | 3.700 | 6.720 | 11.230 | 20.310 | - | - |
| 80 | 20 | ○ | 0.392 | 3.921 | 7.181 | 12.171 | 23.005 | - | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。 Please refer to the conversion fomulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|--------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.051 | 0.520 | 0.970 | 1.690 | 3.330 | - | - |
| 0.226 | 2.505 | 4.728 | 8.261 | 16.096 | - | - |

平歯車 SPUR GEARS

モジュール
MODULE

2

圧力角 20° (並歯) 歯数 85 95

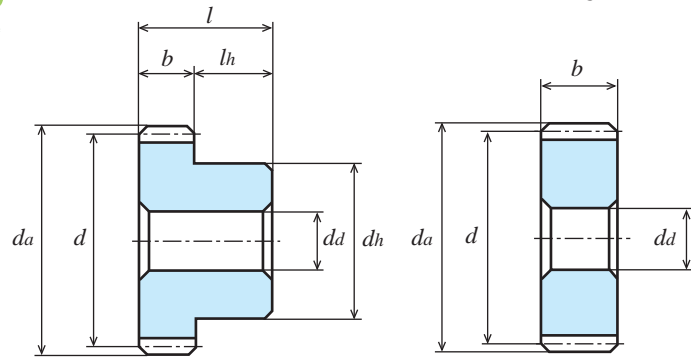
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 85 to Z 95

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b ₂ × t ₂ | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---|--------------------------------|---------------------------------|-----------------------|
| S2S 85A - 1218F | 85 | φ170 | φ174 | A1 | 12 | φ18 | - | - | 12 | - | - | - | 2.11 |
| S2S 85A - 2020F | 85 | φ170 | φ174 | A1 | 20 | φ20 | - | - | 20 | - | - | - | 3.51 |
| S2S 85B - 1218 | 85 | φ170 | φ174 | B1 | 12 | φ18 | φ60 | 10 | 22 | - | - | - | 2.32 |
| S2S 85B - 2020 | 85 | φ170 | φ174 | B1 | 20 | φ20 | φ70 | 10 | 30 | - | - | - | 3.79 |
| S2S 90A - 1218F | 90 | φ180 | φ184 | A1 | 12 | φ18 | - | - | 12 | - | - | - | 2.37 |
| S2S 90A - 2020F | 90 | φ180 | φ184 | A1 | 20 | φ20 | - | - | 20 | - | - | - | 3.95 |
| S2S 90B - 1218 | 90 | φ180 | φ184 | B1 | 12 | φ18 | φ60 | 10 | 22 | - | - | - | 2.58 |
| ● S2S 90BF - 2015 | 90 | φ180 | φ184 | B1 | 20 | φ15 | φ130 | 20 | 40 | - | - | - | 6.01 |
| ● S2S 90B - 2015H | 90 | φ180 | φ184 | B1 | 20 | φ15(H※) | φ130 | 20 | 40 | - | - | - | 6.01 |
| S2S 90B - 2020 | 90 | φ180 | φ184 | B1 | 20 | φ20 | φ80 | 10 | 30 | - | - | - | 4.32 |
| S2S 95A - 1218F | 95 | φ190 | φ194 | A1 | 12 | φ18 | - | - | 12 | - | - | - | 2.65 |
| S2S 95A - 2020F | 95 | φ190 | φ194 | A1 | 20 | φ20 | - | - | 20 | - | - | - | 4.40 |
| S2S 95B - 1218 | 95 | φ190 | φ194 | B1 | 12 | φ18 | φ60 | 10 | 22 | - | - | - | 2.85 |
| S2S 95B - 2020 | 95 | φ190 | φ194 | B1 | 20 | φ20 | φ80 | 10 | 30 | - | - | - | 4.78 |

● の商品は新商品です。Products with ● marks are new item.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|--------|--------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 85 | 12 | - | 0.24 | 2.39 | 4.29 | 7.21 | 13.02 | - | - |
| 85 | 20 | - | 0.40 | 3.99 | 7.14 | 12.02 | 21.71 | - | - |
| 90 | 12 | - | 0.26 | 2.56 | 4.51 | 7.64 | 13.77 | - | - |
| 90 | 20 | - | 0.420 | 4.230 | 7.460 | 12.630 | 22.780 | - | - |
| 90 | 20 | ○ | 0.448 | 4.481 | 7.997 | 13.707 | 26.290 | - | - |
| 95 | 12 | - | 0.27 | 2.72 | 4.73 | 8.06 | 14.51 | - | - |
| 95 | 20 | - | 0.45 | 4.53 | 7.89 | 13.43 | 24.18 | - | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|--------|--------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.066 | 0.670 | 1.210 | 2.150 | 4.260 | - | - |
| 0.189 | 3.206 | 5.897 | 10.419 | 20.601 | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

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モジュール
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2

圧力角 20° (並歯) 歯数 100

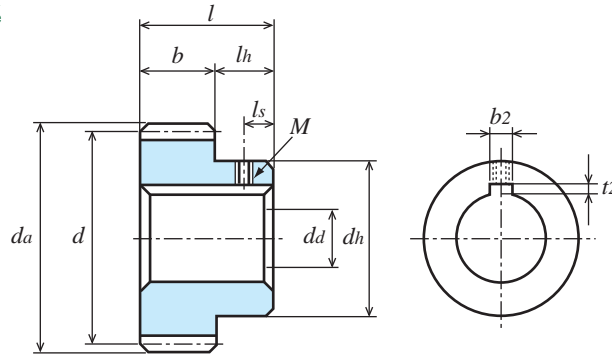
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 100

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



仕様変更 省スペース・軽量化、締結加工不要。

Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2S 100A - 1220F | 100 | φ200 | φ204 | A1 | 12 | φ20 | - | - | 12 | - | - | - | - | - | 2.93 |
| S2S 100A = 1225 | 100 | φ200 | φ204 | A2 | 12 | φ25 | φ 50 | - | 12 | 8 × 3.3 | - | - | φ182 | 6 | 1.80 |
| S2S 100A - 2018F | 100 | φ200 | φ204 | A1 | 20 | φ18 | - | - | 20 | - | - | - | - | - | 4.89 |
| S2S 100A = 2025 | 100 | φ200 | φ204 | A2 | 20 | φ25 | φ 50 | - | 20 | 8 × 3.3 | - | - | φ182 | 10 | 3.03 |
| S2S 100A = 2030 | 100 | φ200 | φ204 | A2 | 20 | φ30 | φ 60 | - | 20 | 8 × 3.3 | - | - | φ182 | 10 | 3.06 |
| S2S 100B - 1218 | 100 | φ200 | φ204 | B1 | 12 | φ18 | φ 50 | 10 | 22 | - | - | - | - | - | 3.07 |
| S2S 100B # 1220 | 100 | φ200 | φ204 | B3 | 12 | φ20 | φ 50 | 10 | 22 | 6 × 2.8 | M5 | 5 | φ182 | 6 | 1.95 |
| S2S 100B # 1225 | 100 | φ200 | φ204 | B3 | 12 | φ25 | φ 50 | 10 | 22 | 8 × 3.3 | M6 | 5 | φ182 | 6 | 1.91 |
| S2S 100BF - 2015 | 100 | φ200 | φ204 | B1 | 20 | φ15 | φ140 | 20 | 40 | - | - | - | - | - | 7.28 |
| S2S 100B - 2015H | 100 | φ200 | φ204 | B1 | 20 | φ15(H※) | φ140 | 20 | 40 | - | - | - | - | - | 7.28 |
| S2S 100B - 2020 | 100 | φ200 | φ204 | B1 | 20 | φ20 | φ 60 | 10 | 30 | - | - | - | - | - | 5.08 |
| S2S 100B # 2025 | 100 | φ200 | φ204 | B3 | 20 | φ25 | φ 60 | 10 | 30 | 8 × 3.3 | M6 | 5 | φ182 | 10 | 3.28 |
| S2S 100B # 2030 | 100 | φ200 | φ204 | B3 | 20 | φ30 | φ 60 | 10 | 30 | 8 × 3.3 | M6 | 5 | φ182 | 10 | 3.22 |

●の商品は新商品です。Products with ● marks are new item.

[=] (イコール) にはキー材が付いております。 [=]: Gear with key way / with key

[#] (シャープ) にはキー材とセットスクリューが付いております。 [#]: Gear with key way and Threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (kW) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|--------|--------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 100 | 12 | - | 0.29 | 2.86 | 4.95 | 8.48 | 15.36 | - | - |
| 100 | 20 | - | 0.480 | 4.730 | 8.180 | 14.010 | 25.390 | - | - |
| 100 | 20 | ○ | 0.505 | 5.015 | 8.784 | 15.217 | 29.611 | - | - |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|-------|-------|--------|--------|-------|-------|---|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| - | - | - | - | - | - | - | - |
| 0.082 | 0.830 | 1.480 | 2.660 | 5.340 | - | - | - |
| 0.361 | 3.972 | 7.171 | 12.807 | 25.689 | - | - | - |

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GROUND RACKS

ラック
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へりかき・スクリューギヤ
HELICAL GEARS AND SCREW GEARS

ワーム・ワームホイール
WORMS AND WORM WHEELS

かみ歯
BEVEL GEARS

スプロケット
SPROCKETS

技術資料
REFERENCE DATA

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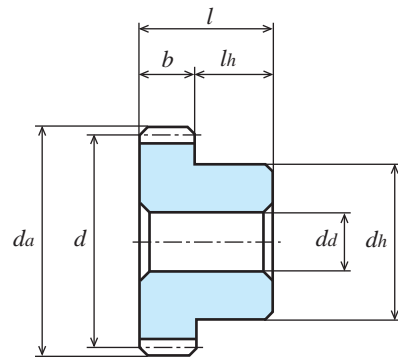
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯)
 MODULE 2.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
 System of accuracy : JIS B 1702-1(ISO) class 9-10



New 仕様変更 省スペース・軽量化。
 Specification change Space-saving and weight saving.



B1形
 TYPE B1

ポリアセタール (黒色)
 Material : Poly Acetal (Black)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|----------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| ▲ S2.5D 14B - 2812N | 14 | φ35 | φ40 | B1 | 28 | φ12 | φ28 | 12 | 40 | 42.0 |
| ▲ S2.5D 15B - 2812N | 15 | φ37.5 | φ42.5 | B1 | 28 | φ12 | φ30 | 12 | 40 | 49.2 |
| ▲ S2.5D 16B - 2812N | 16 | φ40 | φ45 | B1 | 28 | φ12 | φ32 | 12 | 40 | 56.8 |
| ▲ S2.5D 18B - 2812N | 18 | φ45 | φ50 | B1 | 28 | φ12 | φ36 | 12 | 40 | 73.6 |
| ▲ S2.5D 20B - 2814N | 20 | φ50 | φ55 | B1 | 28 | φ14 | φ40 | 12 | 40 | 90.1 |
| ▲ S2.5D 24B - 2816N | 24 | φ60 | φ65 | B1 | 28 | φ16 | φ42 | 12 | 40 | 123.7 |
| ▲ S2.5D 25B - 2816N | 25 | φ62.5 | φ67.5 | B1 | 28 | φ16 | φ42 | 12 | 40 | 133.2 |
| ▲ S2.5D 28B - 2816N | 28 | φ70 | φ75 | B1 | 28 | φ16 | φ46 | 12 | 40 | 168.7 |
| ▲ S2.5D 30B - 2818N | 30 | φ75 | φ80 | B1 | 28 | φ18 | φ46 | 12 | 40 | 188.2 |
| ▲ S2.5D 32B - 2818N | 32 | φ80 | φ85 | B1 | 28 | φ18 | φ50 | 12 | 40 | 217.3 |
| ▲ S2.5D 35B - 2818N | 35 | φ87.5 | φ92.5 | B1 | 28 | φ18 | φ60 | 12 | 40 | 270.9 |
| ▲ S2.5D 36B - 2818N | 36 | φ90 | φ95 | B1 | 28 | φ18 | φ60 | 12 | 40 | 284.7 |

▲の商品は2017年5月20日をもってカタログ商品(規格品)としての生産を中止とします。米国・EU市場の食品接触用途・規制に適合した青 POM® ギヤシリーズをご利用ください。Products with ▲ mark will be terminated with effective 20th May 2017. Alternative products are indicated on separate catalogue of Blue Poly Acetal gears which adapted to relevant regulations for the food industries in the US and EU markets.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|--------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S2.5D 14B - 2812N | 4.86 | 48.56 | 97.02 | 193.64 | 385.64 | 576.02 | 716.18 |
| S2.5D 15B - 2812N | 5.21 | 52.03 | 103.94 | 207.40 | 412.94 | 616.60 | 765.14 |
| S2.5D 16B - 2812N | 5.56 | 55.49 | 110.85 | 221.16 | 440.20 | 657.03 | 813.81 |
| S2.5D 18B - 2812N | 6.25 | 62.42 | 124.67 | 248.66 | 494.63 | 735.80 | 910.28 |
| S2.5D 20B - 2814N | 6.94 | 69.34 | 138.48 | 276.12 | 548.92 | 813.81 | 1,005.58 |
| S2.5D 24B - 2816N | 8.33 | 83.19 | 166.07 | 330.95 | 657.03 | 967.60 | 1,192.67 |
| S2.5D 25B - 2816N | 8.68 | 86.65 | 172.97 | 344.63 | 683.37 | 1,005.58 | 1,238.71 |
| S2.5D 28B - 2816N | 9.72 | 97.02 | 193.64 | 385.64 | 761.89 | 1,118.39 | 1,370.93 |
| S2.5D 30B - 2818N | 10.41 | 103.94 | 207.40 | 412.94 | 813.81 | 1,192.67 | 1,456.58 |
| S2.5D 32B - 2818N | 11.11 | 110.85 | 221.16 | 440.20 | 865.41 | 1,265.99 | 1,540.60 |
| S2.5D 35B - 2818N | 12.15 | 121.21 | 241.79 | 481.03 | 942.17 | 1,370.93 | 1,663.56 |
| S2.5D 36B - 2818N | 12.50 | 124.67 | 248.66 | 494.63 | 967.60 | 1,405.39 | 1,703.72 |

The above numerical values are Lewis formulas as reference only.
 動力の換算式は P26 をご参照ください。
 Please refer to the conversion formulas of power on page P26.

平歯車

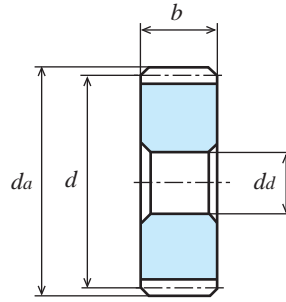
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯)
 MODULE 2.5 20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
 System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



A1形
TYPE A1

ポリアセタール (黒色)
 Material : Poly Acetal (Black)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|----------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| ▲ S2.5D 40A - 2818 | 40 | φ100 | φ105 | A1 | 28 | φ18 | - | - | 28 | 300.0 |
| ▲ S2.5D 45A - 2818 | 45 | φ112.5 | φ117.5 | A1 | 28 | φ18 | - | - | 28 | 382.4 |
| ▲ S2.5D 48A - 2818 | 48 | φ120 | φ125 | A1 | 28 | φ18 | - | - | 28 | 436.5 |
| ▲ S2.5D 50A - 2818 | 50 | φ125 | φ130 | A1 | 28 | φ18 | - | - | 28 | 474.4 |
| ▲ S2.5D 56A - 2818 | 56 | φ140 | φ145 | A1 | 28 | φ18 | - | - | 28 | 597.7 |
| ▲ S2.5D 60A - 2818 | 60 | φ150 | φ155 | A1 | 28 | φ18 | - | - | 28 | 687.6 |
| ▲ S2.5D 64A - 2818 | 64 | φ160 | φ165 | A1 | 28 | φ18 | - | - | 28 | 783.7 |
| ▲ S2.5D 70A - 2818 | 70 | φ175 | φ180 | A1 | 28 | φ18 | - | - | 28 | 939.6 |
| ▲ S2.5D 72A - 2818 | 72 | φ180 | φ185 | A1 | 28 | φ18 | - | - | 28 | 994.6 |
| ▲ S2.5D 80A - 2818 | 80 | φ200 | φ205 | A1 | 28 | φ18 | - | - | 28 | 1,230.0 |

▲の商品は2017年5月20日をもってカタログ商品(規格品)としての生産を中止とします。米国・EU市場の食品接触用途・規制に適合した青 POM® ギヤシリーズをご利用ください。Products with ▲ mark will be terminated with effective 20th May 2017. Alternative products are indicated on separate catalogue of Blue Poly Acetal gears which adapted to relevant regulations for the food industries in the US and EU markets.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|----------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S2.5D 40A - 2818 | 13.89 | 138.48 | 276.12 | 548.92 | 1,068.46 | 1,540.60 | 1,853.98 |
| S2.5D 45A - 2818 | 15.62 | 155.73 | 310.40 | 616.60 | 1,192.67 | 1,703.72 | 2,019.98 |
| S2.5D 48A - 2818 | 16.66 | 166.07 | 330.95 | 657.03 | 1,265.99 | 1,797.77 | 2,112.57 |
| S2.5D 50A - 2818 | 17.36 | 172.97 | 344.63 | 683.37 | 1,312.92 | 1,853.98 | 2,171.37 |
| S2.5D 56A - 2818 | 19.44 | 193.64 | 385.64 | 761.89 | 1,450.93 | 2,013.62 | - |
| S2.5D 60A - 2818 | 20.82 | 207.40 | 412.94 | 813.81 | 1,540.60 | 2,112.57 | - |
| S2.5D 64A - 2818 | 22.21 | 221.16 | 440.20 | 865.41 | 1,628.41 | - | - |
| S2.5D 70A - 2818 | 24.29 | 241.79 | 481.03 | 942.17 | 1,756.64 | - | - |
| S2.5D 72A - 2818 | 24.99 | 248.66 | 494.63 | 967.60 | 1,797.77 | - | - |
| S2.5D 80A - 2818 | 27.76 | 276.12 | 548.92 | 1,068.46 | 1,944.33 | - | - |

The above numerical values are Lewis formulas as reference only.
 動力の換算式は P26 をご参照ください。
 Please refer to the conversion formulas of power on page P26.

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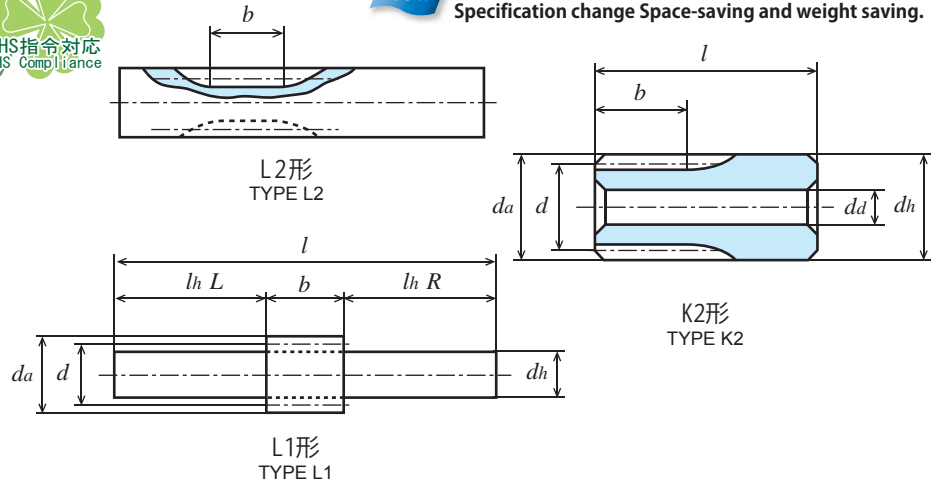
平歯車 SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 8 ~ 14
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 8 to Z 14

JIS B 1702-1 (ISO) 8級~9級
 System of accuracy: JIS B 1702-1(ISO) class 8-9



New 仕様変更 省スペース・軽量化。
 Specification change Space-saving and weight saving.



S45C 機械構造用炭素鋼 (JIS G 4051) *印を付した商品は転位歯車です。転位係数 x は 0.5 です。
 Material: Carbon Steel (ISO C45) * mark has been profile shifted gears. (Rack shift coefficient $x = 0.5$)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $da(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(g)$ |
|--------------------------|------------------------------|------------------------------------|-------------------------------|-----------|-------------------------|---------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| S2.5S 8L - 2815 | 8 | * | $\phi 26.59$ | L1 | 28 | - | $\phi 15(h9)$ | L40 R80 | 148 | 235.5 |
| S2.5S 8L - 2826F | 8 | * | $\phi 26.59$ | L2 | 28 | - | $\phi 26.59$ | L40 R80 | 148 | 592.1 |
| S2.5S 10L - 2820 | 10 | * | $\phi 31.66$ | L1 | 28 | - | $\phi 20(h9)$ | L40 R80 | 148 | 403.8 |
| S2.5S 10L - 2831F | 10 | * | $\phi 31.66$ | L2 | 28 | - | $\phi 31.66$ | L40 R80 | 148 | 849.5 |
| S2.5S 12K - 2812 | 12 | $\phi 30$ | $\phi 35$ | K2 | 28 | $\phi 12(H8)$ | $\phi 35$ | 32 | 60 | 343.8 |
| S2.5S 14A - 1612 | 14 | $\phi 35$ | $\phi 40$ | A1 | 16 | $\phi 12$ | - | - | 16 | 106.6 |
| S2.5S 14A - 1812 | 14 | $\phi 35$ | $\phi 40$ | A1 | 18 | $\phi 12$ | - | - | 18 | 120.0 |
| S2.5S 14A - 2512 | 14 | $\phi 35$ | $\phi 40$ | A1 | 25 | $\phi 12$ | - | - | 25 | 166.6 |
| S2.5S 14A - 2812 | 14 | $\phi 35$ | $\phi 40$ | A1 | 28 | $\phi 12$ | - | - | 28 | 186.6 |
| S2.5S 14B - 1612N | 14 | $\phi 35$ | $\phi 40$ | B1 | 16 | $\phi 12$ | $\phi 27$ | 12 | 28 | 150.0 |
| S2.5S 14B - 1812N | 14 | $\phi 35$ | $\phi 40$ | B1 | 18 | $\phi 12$ | $\phi 28$ | 12 | 30 | 167.4 |
| S2.5S 14B - 2512N | 14 | $\phi 35$ | $\phi 40$ | B1 | 25 | $\phi 12(H8)$ | $\phi 27$ | 12 | 37 | 210.0 |
| S2.5S 14B - 2812N | 14 | $\phi 35$ | $\phi 40$ | B1 | 28 | $\phi 12(H8)$ | $\phi 28$ | 12 | 40 | 234.1 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 8 | 28 | 0.046 | 0.46 | 0.93 | 1.87 | 3.74 | 5.31 | 6.33 | 100 |
| 10 | 28 | 0.064 | 0.64 | 1.29 | 2.58 | 5.07 | 7.02 | 8.29 | 43.92 |
| 12 | 28 | 0.059 | 0.59 | 1.18 | 2.37 | 4.57 | 6.29 | 7.40 | 61.11 |
| 14 | 16 | 0.044 | 0.44 | 0.88 | 1.77 | 3.30 | 4.50 | 5.25 | 56.34 |
| 14 | 18 | 0.049 | 0.49 | 0.99 | 1.99 | 3.72 | 5.06 | 5.91 | 42.01 |
| 14 | 25 | 0.069 | 0.69 | 1.38 | 2.76 | 5.17 | 7.03 | 8.21 | 46.79 |
| 14 | 28 | 0.077 | 0.77 | 1.55 | 3.10 | 5.79 | 7.88 | 9.20 | 65.89 |
| | | | | | | | | | 73.53 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

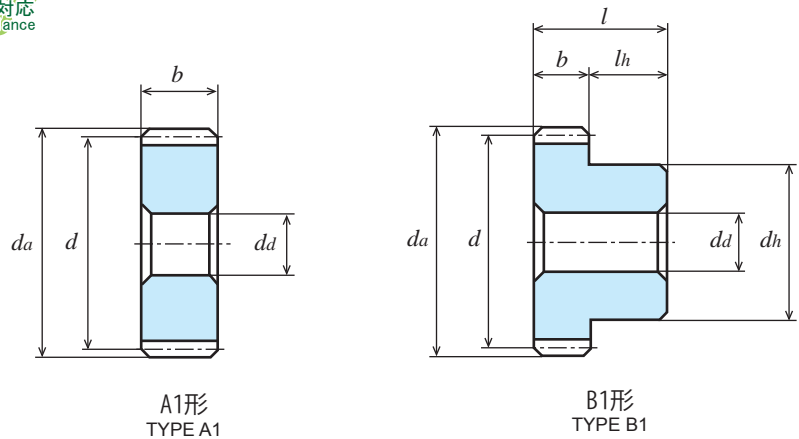
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 15 16
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 15 to Z 16

JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|-----------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------|
| S2.5S 15A - 1612 | 15 | φ37.5 | φ42.5 | A1 | 16 | φ12 | - | - | 16 | 124.5 |
| S2.5S 15A - 1812 | 15 | φ37.5 | φ42.5 | A1 | 18 | φ12 | - | - | 18 | 140.1 |
| S2.5S 15A - 2512 | 15 | φ37.5 | φ42.5 | A1 | 25 | φ12 | - | - | 25 | 194.6 |
| S2.5S 15A - 2812 | 15 | φ37.5 | φ42.5 | A1 | 28 | φ12 | - | - | 28 | 217.9 |
| S2.5S 15B - 1612N | 15 | φ37.5 | φ42.5 | B1 | 16 | φ12 | φ30 | 12 | 28 | 280.6 |
| S2.5S 15B - 1812N | 15 | φ37.5 | φ42.5 | B1 | 18 | φ12 | φ30 | 12 | 30 | 196.1 |
| S2.5S 15B - 2512N | 15 | φ37.5 | φ42.5 | B1 | 25 | φ12(H8) | φ30 | 12 | 37 | 250.7 |
| S2.5S 15B - 2812N | 15 | φ37.5 | φ42.5 | B1 | 28 | φ12(H8) | φ30 | 12 | 40 | 274.0 |
| S2.5S 16A - 1612 | 16 | φ40 | φ45 | A1 | 16 | φ12 | - | - | 16 | 143.6 |
| S2.5S 16A - 1812 | 16 | φ40 | φ45 | A1 | 18 | φ12 | - | - | 18 | 161.6 |
| S2.5S 16A - 2512 | 16 | φ40 | φ45 | A1 | 25 | φ12 | - | - | 25 | 224.4 |
| S2.5S 16A - 2812 | 16 | φ40 | φ45 | A1 | 28 | φ12 | - | - | 28 | 251.4 |
| S2.5S 16B - 1612N | 16 | φ40 | φ45 | B1 | 16 | φ12 | φ32 | 12 | 28 | 208.9 |
| S2.5S 16B - 1812N | 16 | φ40 | φ45 | B1 | 18 | φ12 | φ32 | 12 | 30 | 226.8 |
| S2.5S 16B - 2512N | 16 | φ40 | φ45 | B1 | 25 | φ12(H8) | φ32 | 12 | 37 | 289.7 |
| S2.5S 16B - 2812N | 16 | φ40 | φ45 | B1 | 28 | φ12(H8) | φ32 | 12 | 40 | 316.7 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

T (N · m)

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 15 | 16 | 0.049 | 0.49 | 0.99 | 1.98 | 3.65 | 4.94 | 5.75 | 46.79 |
| 15 | 18 | 0.055 | 0.55 | 1.11 | 2.23 | 4.11 | 5.56 | 6.47 | 52.52 |
| 15 | 25 | 0.077 | 0.78 | 1.55 | 3.10 | 5.71 | 7.73 | 9.00 | 74.48 |
| 15 | 28 | 0.087 | 0.87 | 1.74 | 3.47 | 6.40 | 8.66 | 10.08 | 83.08 |
| 16 | 16 | 0.055 | 0.55 | 1.10 | 2.20 | 3.99 | 5.38 | 6.31 | 52.52 |
| 16 | 18 | 0.061 | 0.61 | 1.23 | 2.47 | 4.49 | 6.05 | 7.10 | 58.25 |
| 16 | 25 | 0.086 | 0.86 | 1.72 | 3.44 | 6.25 | 8.41 | 9.87 | 82.12 |
| 16 | 28 | 0.096 | 0.96 | 1.93 | 3.85 | 7.00 | 9.42 | 11.06 | 91.67 |

KG 規格は“並幅” (軽荷重用) と“広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

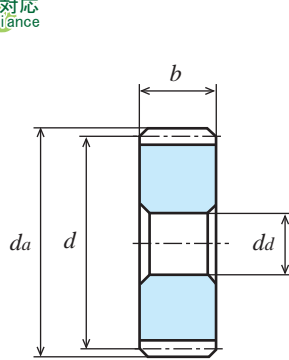
平歯車 SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 18
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 18

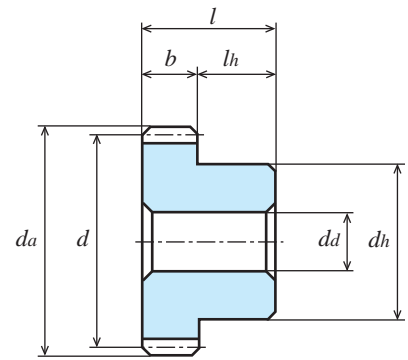
JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化。
 Specification change Space-saving and weight saving.



A1形
TYPE A1



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キーみぞ Key Way <i>b₂ × t₂</i> | 重量 Weight <i>W</i> (g) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|---|------------------------------|
| S2.5S 18A - 1612 | 18 | φ45 | φ50 | A1 | 16 | φ12 | - | - | 16 | - | 185.6 |
| S2.5S 18A - 1812 | 18 | φ45 | φ50 | A1 | 18 | φ12 | - | - | 18 | - | 208.7 |
| S2.5S 18A - 2512 | 18 | φ45 | φ50 | A1 | 25 | φ12 | - | - | 25 | - | 289.9 |
| S2.5S 18A - 2814 | 18 | φ45 | φ50 | A1 | 28 | φ14 | - | - | 28 | - | 315.7 |
| S2.5S 18B - 1612N | 18 | φ45 | φ50 | B1 | 16 | φ12 | φ36 | 12 | 28 | - | 271.0 |
| S2.5S 18B - 1814N | 18 | φ45 | φ50 | B1 | 18 | φ14 | φ36 | 12 | 30 | - | 284.5 |
| S2.5S 18B - 2512N | 18 | φ45 | φ50 | B1 | 25 | φ12(H8) | φ36 | 12 | 37 | - | 375.4 |
| S2.5S 18B - 2814N | 18 | φ45 | φ50 | B1 | 28 | φ14 | φ36 | 12 | 40 | - | 397.4 |

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 18 | 16 | 0.066 | 0.66 | 1.32 | 2.64 | 4.67 | 6.23 | 7.48 | 63.02 |
| 18 | 18 | 0.074 | 0.74 | 1.48 | 2.97 | 5.25 | 7.01 | 8.41 | 70.66 |
| 18 | 25 | 0.103 | 1.03 | 2.07 | 4.14 | 7.30 | 9.74 | 11.69 | 98.36 |
| 18 | 28 | 0.116 | 1.16 | 2.32 | 4.63 | 8.18 | 10.91 | 13.09 | 110.77 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

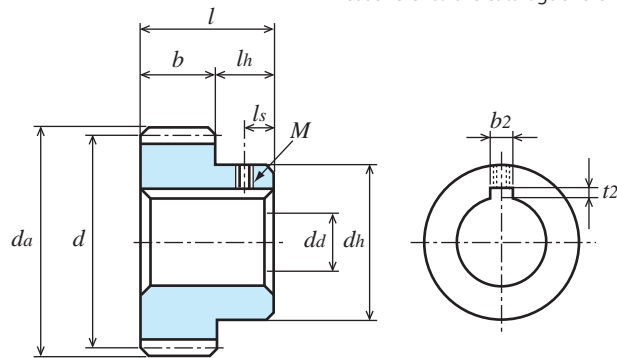
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 20
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 20

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 20A - 1612F | 20 | φ50 | φ55 | A1 | 16 | φ12 | - | - | 16 | - | - | - | - | - | 232.4 |
| S2.5S 20A - 1812F | 20 | φ50 | φ55 | A1 | 18 | φ12 | - | - | 18 | - | - | - | - | - | 261.5 |
| S2.5S 20A = 1815 | 20 | φ50 | φ55 | A1 | 18 | φ15 | - | - | 18 | 5 × 2.3 | - | - | - | - | 250.8 |
| S2.5S 20A = 1820 | 20 | φ50 | φ55 | A1 | 18 | φ20 | - | - | 18 | 6 × 2.8 | - | - | - | - | 230.7 |
| S2.5S 20A - 2514F | 20 | φ50 | φ55 | A1 | 25 | φ14 | - | - | 25 | - | - | - | - | - | 355.1 |
| S2.5S 20A - 2814F | 20 | φ50 | φ55 | A1 | 28 | φ14 | - | - | 28 | - | - | - | - | - | 397.7 |
| S2.5S 20A = 2820 | 20 | φ50 | φ55 | A1 | 28 | φ20 | - | - | 28 | 6 × 2.8 | - | - | - | - | 358.8 |
| S2.5S 20A = 2825 | 20 | φ50 | φ55 | A1 | 28 | φ25 | - | - | 28 | 8 × 3.3 | - | - | - | - | 317.9 |
| S2.5S 20B - 1612 | 20 | φ50 | φ55 | B1 | 16 | φ12 | φ42 | 12 | 28 | - | - | - | - | - | 352.5 |
| S2.5S 20B - 1812 | 20 | φ50 | φ55 | B1 | 18 | φ12 | φ40 | 12 | 30 | - | - | - | - | - | 369.4 |
| S2.5S 20B # 1815 | 20 | φ50 | φ55 | B1 | 18 | φ15 | φ40 | 12 | 30 | 5 × 2.3 | M4 | 6 | - | - | 350.9 |
| S2.5S 20B # 1818 | 20 | φ50 | φ55 | B1 | 18 | φ18 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | - | 331.1 |
| S2.5S 20B # 1820 | 20 | φ50 | φ55 | B1 | 18 | φ20 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | - | 317.2 |
| S2.5S20BF - 2510 | 20 | φ50 | φ55 | B1 | 25 | φ10(H8) | φ42 | 20 | 45 | - | - | - | - | - | 569.3 |
| S2.5S20B - 2510H | 20 | φ50 | φ55 | B1 | 25 | φ10(H※) | φ42 | 20 | 45 | - | - | - | - | - | 569.3 |
| S2.5S 20B - 2514 | 20 | φ50 | φ55 | B1 | 25 | φ14 | φ42 | 12 | 37 | - | - | - | - | - | 471.4 |
| S2.5S 20B - 2814 | 20 | φ50 | φ55 | B1 | 28 | φ14 | φ42 | 12 | 40 | - | - | - | - | - | 514.1 |
| S2.5S 20B # 2820 | 20 | φ50 | φ55 | B1 | 28 | φ20 | φ42 | 12 | 40 | 6 × 2.8 | M5 | 6 | - | - | 457.4 |
| S2.5S 20B # 2825 | 20 | φ50 | φ55 | B1 | 28 | φ25 | φ42 | 12 | 40 | 8 × 3.3 | M5 | 6 | - | - | 399.3 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|-------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 20 | 16 | - | 0.077 | 0.78 | 1.55 | 3.09 | 5.34 | 7.13 | 8.66 |
| 20 | 18 | - | 0.087 | 0.87 | 1.75 | 3.47 | 6.01 | 8.03 | 9.74 |
| 20 | 25 | - | 0.122 | 1.220 | 2.450 | 4.860 | 8.400 | 11.230 | 13.620 |
| 20 | 25 | ○ | 0.130 | 1.297 | 2.593 | 5.153 | 9.025 | 12.163 | 14.791 |
| 20 | 28 | - | 0.136 | 1.36 | 2.72 | 5.40 | 9.34 | 12.48 | 15.15 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.006 | 0.060 | 0.110 | 0.230 | 0.400 | 0.550 | 0.680 |
| 0.025 | 0.274 | 0.564 | 1.156 | 2.087 | 2.863 | 3.516 |
| - | - | - | - | - | - | - |

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かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

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REFERENCE DATA

平歯車

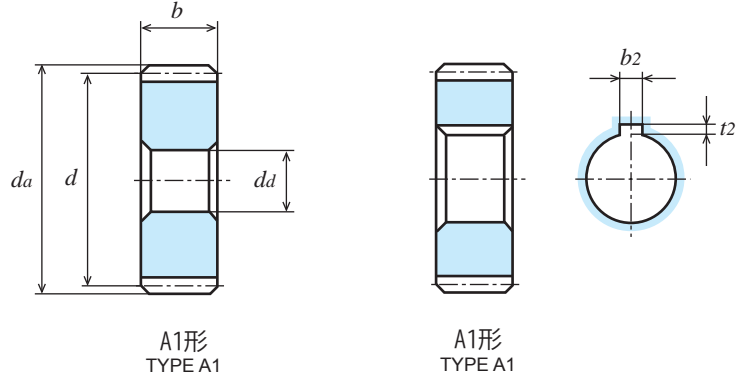
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 24
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 24

JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 24A - 1614F | 24 | φ60 | φ65 | A1 | 16 | φ14 | - | - | 16 | - | - | - | - | 335.8 | |
| S2.5S 24A - 1814F | 24 | φ60 | φ65 | A1 | 18 | φ14 | - | - | 18 | - | - | - | - | 377.8 | |
| S2.5S 24A = 1815 | 24 | φ60 | φ65 | A1 | 18 | φ15 | - | - | 18 | 5 × 2.3 | - | - | - | 372.9 | |
| S2.5S 24A = 1820 | 24 | φ60 | φ65 | A1 | 18 | φ20 | - | - | 18 | 6 × 2.8 | - | - | - | 352.8 | |
| S2.5S 24A - 2514F | 24 | φ60 | φ65 | A1 | 25 | φ14 | - | - | 25 | - | - | - | - | 524.7 | |
| S2.5S 24A - 2814F | 24 | φ60 | φ65 | A1 | 28 | φ14 | - | - | 28 | - | - | - | - | 587.6 | |
| S2.5S 24A = 2820 | 24 | φ60 | φ65 | A1 | 28 | φ20 | - | - | 28 | 6 × 2.8 | - | - | - | 548.7 | |
| S2.5S 24A = 2825 | 24 | φ60 | φ65 | A1 | 28 | φ25 | - | - | 28 | 8 × 3.3 | - | - | - | 507.8 | |
| S2.5S 24B - 1614 | 24 | φ60 | φ65 | B1 | 16 | φ14 | φ50 | 12 | 28 | - | - | - | - | 506.6 | |
| S2.5S 24B - 1814 | 24 | φ60 | φ65 | B1 | 18 | φ14 | φ40 | 12 | 30 | - | - | - | - | 482.0 | |
| S2.5S 24B # 1815 | 24 | φ60 | φ65 | B1 | 18 | φ15 | φ40 | 12 | 30 | 5 × 2.3 | M4 | 6 | - | 473.0 | |
| S2.5S 24B # 1818 | 24 | φ60 | φ65 | B1 | 18 | φ18 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | 453.3 | |
| S2.5S 24B # 1820 | 24 | φ60 | φ65 | B1 | 18 | φ20 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | 439.3 | |
| S2.5S 24B - 2515 | 24 | φ60 | φ65 | B1 | 25 | φ15 | φ50 | 12 | 37 | - | - | - | - | 689.0 | |
| S2.5S 24B - 2815 | 24 | φ60 | φ65 | B1 | 28 | φ15 | φ50 | 12 | 40 | - | - | - | - | 751.4 | |
| S2.5S 24B # 2820 | 24 | φ60 | φ65 | B1 | 28 | φ20 | φ50 | 12 | 40 | 6 × 2.8 | M5 | 6 | - | 701.4 | |
| S2.5S 24B # 2825 | 24 | φ60 | φ65 | B1 | 28 | φ25 | φ50 | 12 | 40 | 8 × 3.3 | M6 | 6 | - | 642.7 | |

【=】 (イコール) にはキー材が付いております。 [=] : Gear with key way / with key
 【#】 (シャープ) にはキー材とセットスクリューが付いております。 [#] : Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 24 | 16 | 0.101 | 1.01 | 2.03 | 3.90 | 6.60 | 9.08 | 10.97 | 100 |
| 24 | 18 | 0.114 | 1.14 | 2.28 | 4.39 | 7.43 | 10.22 | 12.34 | 96.45 |
| 24 | 25 | 0.158 | 1.58 | 3.17 | 6.10 | 10.32 | 14.19 | 17.13 | 108.86 |
| 24 | 28 | 0.177 | 1.77 | 3.55 | 6.83 | 11.56 | 15.89 | 19.19 | 150.88 |
| | | | | | | | | | 169.02 |

The above numerical values are equivalent to JGMA formulas as reference only.
 動力の換算式は P26 をご参照ください。 Please refer to the conversion fomulas of power on page P26.

平歯車

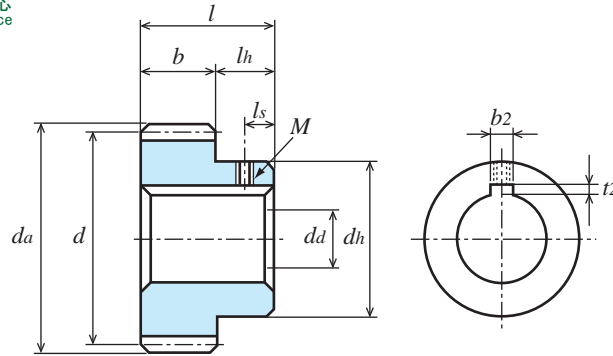
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 25
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 25

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(g) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 25A - 1614F | 25 | φ62.5 | φ67.5 | A1 | 16 | φ14 | - | - | 16 | - | - | - | - | 366.0 | |
| S2.5S 25A - 1814F | 25 | φ62.5 | φ67.5 | A1 | 18 | φ14 | - | - | 18 | - | - | - | - | 411.8 | |
| S2.5S 25A = 1815 | 25 | φ62.5 | φ67.5 | A1 | 18 | φ15 | - | - | 18 | 5 × 2.3 | - | - | - | 406.9 | |
| S2.5S 25A = 1820 | 25 | φ62.5 | φ67.5 | A1 | 18 | φ20 | - | - | 18 | 6 × 2.8 | - | - | - | 386.7 | |
| S2.5S 25A - 2516F | 25 | φ62.5 | φ67.5 | A1 | 25 | φ16 | - | - | 25 | - | - | - | - | 562.6 | |
| S2.5S 25A - 2816F | 25 | φ62.5 | φ67.5 | A1 | 28 | φ16 | - | - | 28 | - | - | - | - | 630.1 | |
| S2.5S 25A = 2820 | 25 | φ62.5 | φ67.5 | A1 | 28 | φ20 | - | - | 28 | 6 × 2.8 | - | - | - | 601.6 | |
| S2.5S 25A = 2825 | 25 | φ62.5 | φ67.5 | A1 | 28 | φ25 | - | - | 28 | 8 × 3.3 | - | - | - | 560.6 | |
| S2.5S 25B - 1614 | 25 | φ62.5 | φ67.5 | B1 | 16 | φ14 | φ52 | 12 | 28 | - | - | - | - | 551.9 | |
| S2.5S 25B - 1814 | 25 | φ62.5 | φ67.5 | B1 | 18 | φ14 | φ40 | 12 | 30 | - | - | - | - | 516.0 | |
| S2.5S 25B # 1815 | 25 | φ62.5 | φ67.5 | B1 | 18 | φ15 | φ40 | 12 | 30 | 5 × 2.3 | M4 | 6 | - | 507.0 | |
| S2.5S 25B # 1818 | 25 | φ62.5 | φ67.5 | B1 | 18 | φ18 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | 487.3 | |
| S2.5S 25B # 1820 | 25 | φ62.5 | φ67.5 | B1 | 18 | φ20 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | 473.3 | |
| ● S2.5S 25BF - 2510 | 25 | φ62.5 | φ67.5 | B1 | 25 | φ10(H8) | φ52 | 20 | 45 | - | - | - | - | 900.9 | |
| ● S2.5S 25B - 2510H | 25 | φ62.5 | φ67.5 | B1 | 25 | φ10(H※) | φ52 | 20 | 45 | - | - | - | - | 900.9 | |
| S2.5S 25B - 2515 | 25 | φ62.5 | φ67.5 | B1 | 25 | φ15 | φ52 | 12 | 37 | - | - | - | - | 751.3 | |
| S2.5S 25B - 2815 | 25 | φ62.5 | φ67.5 | B1 | 28 | φ15 | φ50 | 12 | 40 | - | - | - | - | 804.3 | |
| S2.5S 25B # 2820 | 25 | φ62.5 | φ67.5 | B1 | 28 | φ20 | φ50 | 12 | 40 | 6 × 2.8 | M5 | 6 | - | 754.3 | |
| S2.5S 25B # 2825 | 25 | φ62.5 | φ67.5 | B1 | 28 | φ25 | φ50 | 12 | 40 | 8 × 3.3 | M6 | 6 | - | 695.5 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。[#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※

歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 25 | 16 | - | 0.107 | 1.07 | 2.15 | 4.10 | 6.91 | 9.57 | 11.54 |
| 25 | 18 | - | 0.121 | 1.21 | 2.41 | 4.62 | 7.77 | 10.76 | 12.98 |
| 25 | 25 | - | 0.168 | 1.680 | 3.370 | 6.430 | 10.830 | 15.000 | 18.090 |
| 25 | 25 | ○ | 0.178 | 1.784 | 3.568 | 6.848 | 11.693 | 16.282 | 19.684 |
| 25 | 28 | - | 0.188 | 1.88 | 3.76 | 7.18 | 12.09 | 16.74 | 20.19 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.009 | 0.090 | 0.180 | 0.350 | 0.610 | 0.870 | 1.080 |
| 0.039 | 0.437 | 0.901 | 1.782 | 3.136 | 4.446 | 5.428 |
| - | - | - | - | - | - | - |

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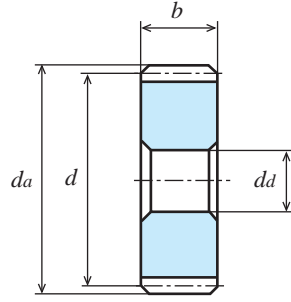
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 28
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 28

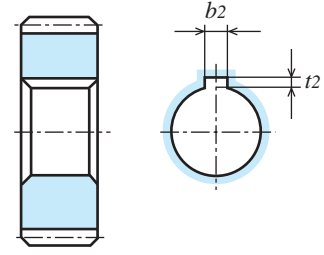
JIS B 1702-1 (ISO) 8級
 System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



A1形
TYPE A1



A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 28A - 1614F | 28 | φ70 | φ75 | A1 | 16 | φ14 | - | - | 16 | - | - | - | - | 0.46 | |
| S2.5S 28A - 1814F | 28 | φ70 | φ75 | A1 | 18 | φ14 | - | - | 18 | - | - | - | - | 0.52 | |
| S2.5S 28A = 1815 | 28 | φ70 | φ75 | A1 | 18 | φ15 | - | - | 18 | 5 × 2.3 | - | - | - | 0.52 | |
| S2.5S 28A = 1820 | 28 | φ70 | φ75 | A1 | 18 | φ20 | - | - | 18 | 6 × 2.8 | - | - | - | 0.50 | |
| S2.5S 28A - 2516F | 28 | φ70 | φ75 | A1 | 25 | φ16 | - | - | 25 | - | - | - | - | 0.72 | |
| S2.5S 28A - 2816F | 28 | φ70 | φ75 | A1 | 28 | φ16 | - | - | 28 | - | - | - | - | 0.80 | |
| S2.5S 28A = 2820 | 28 | φ70 | φ75 | A1 | 28 | φ20 | - | - | 28 | 6 × 2.8 | - | - | - | 0.77 | |
| S2.5S 28A = 2825 | 28 | φ70 | φ75 | A1 | 28 | φ25 | - | - | 28 | 8 × 3.3 | - | - | - | 0.73 | |
| S2.5S 28B - 1614 | 28 | φ70 | φ75 | B1 | 16 | φ14 | φ60 | 12 | 28 | - | - | - | - | 0.72 | |
| S2.5S 28B - 1814 | 28 | φ70 | φ75 | B1 | 18 | φ14 | φ40 | 12 | 30 | - | - | - | - | 0.63 | |
| S2.5S 28B # 1815 | 28 | φ70 | φ75 | B1 | 18 | φ15 | φ40 | 12 | 30 | 5 × 2.3 | M4 | 6 | - | 0.62 | |
| S2.5S 28B # 1818 | 28 | φ70 | φ75 | B1 | 18 | φ18 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | 0.60 | |
| S2.5S 28B # 1820 | 28 | φ70 | φ75 | B1 | 18 | φ20 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | 0.58 | |
| S2.5S 28B - 2516 | 28 | φ70 | φ75 | B1 | 25 | φ16 | φ50 | 12 | 37 | - | - | - | - | 0.96 | |
| S2.5S 28B - 2816 | 28 | φ70 | φ75 | B1 | 28 | φ16 | φ50 | 12 | 40 | - | - | - | - | 0.97 | |
| S2.5S 28B # 2820 | 28 | φ70 | φ75 | B1 | 28 | φ20 | φ50 | 12 | 40 | 6 × 2.8 | M5 | 6 | - | 0.93 | |
| S2.5S 28B # 2825 | 28 | φ70 | φ75 | B1 | 28 | φ25 | φ50 | 12 | 40 | 8 × 3.3 | M6 | 6 | - | 0.87 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key
 【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 28 | 16 | 0.13 | 1.26 | 2.51 | 4.70 | 7.79 | 11.01 | 13.30 | 100 |
| 28 | 18 | 0.14 | 1.41 | 2.83 | 5.28 | 8.77 | 12.38 | 14.97 | 120.32 |
| 28 | 25 | 0.20 | 1.96 | 3.93 | 7.34 | 12.18 | 17.20 | 20.79 | 134.65 |
| 28 | 28 | 0.22 | 2.20 | 4.40 | 8.22 | 13.64 | 19.26 | 23.28 | 187.17 |
| | | | | | | | | | 210.09 |

The above numerical values are equivalent to JGMA formulas as reference only.
 動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

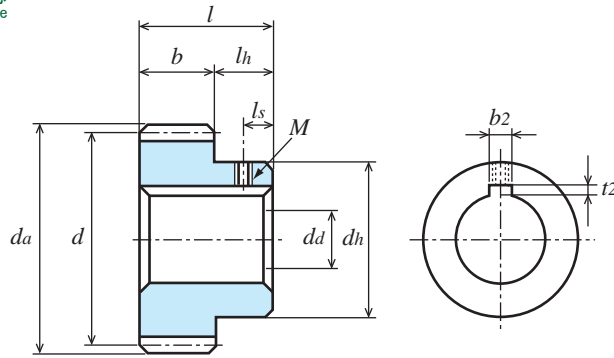
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 30
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z30

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 30A - 1616F | 30 | φ75 | φ80 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | - | 0.53 |
| S2.5S 30A - 1816F | 30 | φ75 | φ80 | A1 | 18 | φ16 | - | - | 18 | - | - | - | - | - | 0.60 |
| S2.5S 30A = 1820 | 30 | φ75 | φ80 | A1 | 18 | φ20 | - | - | 18 | 6 × 2.8 | - | - | - | - | 0.58 |
| S2.5S 30A - 2518F | 30 | φ75 | φ80 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | - | 0.82 |
| S2.5S 30A = 2520 | 30 | φ75 | φ80 | A1 | 25 | φ20 | - | - | 25 | 6 × 2.8 | - | - | - | - | 0.80 |
| S2.5S 30A = 2525 | 30 | φ75 | φ80 | A1 | 25 | φ25 | - | - | 25 | 8 × 3.3 | - | - | - | - | 0.77 |
| S2.5S 30B - 1614 | 30 | φ75 | φ80 | B1 | 16 | φ14 | φ65 | 12 | 28 | - | - | - | - | - | 0.83 |
| S2.5S 30B - 1814 | 30 | φ75 | φ80 | B1 | 18 | φ14 | φ40 | 12 | 30 | - | - | - | - | - | 0.71 |
| S2.5S 30B # 1815 | 30 | φ75 | φ80 | B1 | 18 | φ15 | φ40 | 12 | 30 | 5 × 2.3 | M4 | 6 | - | - | 0.70 |
| S2.5S 30B # 1818 | 30 | φ75 | φ80 | B1 | 18 | φ18 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | - | 0.68 |
| S2.5S 30B # 1820 | 30 | φ75 | φ80 | B1 | 18 | φ20 | φ40 | 12 | 30 | 6 × 2.8 | M5 | 6 | - | - | 0.66 |
| ● S2.5S 30BF - 2512 | 30 | φ75 | φ80 | B1 | 25 | φ12(H8) | φ65 | 20 | 45 | - | - | - | - | - | 1.34 |
| ● S2.5S 30B - 2512H | 30 | φ75 | φ80 | B1 | 25 | φ12(H※) | φ65 | 20 | 45 | - | - | - | - | - | 1.34 |
| S2.5S 30B - 2516 | 30 | φ75 | φ80 | B1 | 25 | φ16 | φ65 | 12 | 37 | - | - | - | - | - | 1.12 |
| S2.5S 30B - 2816 | 30 | φ75 | φ80 | B1 | 28 | φ16 | φ50 | 12 | 40 | - | - | - | - | - | 1.09 |
| S2.5S 30B # 2820 | 30 | φ75 | φ80 | B1 | 28 | φ20 | φ50 | 12 | 40 | 6 × 2.8 | M5 | 6 | - | - | 1.05 |
| S2.5S 30B # 2825 | 30 | φ75 | φ80 | B1 | 28 | φ25 | φ50 | 12 | 40 | 8 × 3.3 | M6 | 6 | - | - | 0.99 |

● の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|-------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 30 | 16 | - | 0.14 | 1.38 | 2.76 | 5.08 | 8.44 | 11.95 | 14.47 |
| 30 | 18 | - | 0.16 | 1.55 | 3.10 | 5.72 | 9.50 | 13.44 | 16.28 |
| 30 | 25 | - | 0.220 | 2.160 | 4.320 | 7.950 | 13.210 | 18.690 | 22.640 |
| 30 | 25 | ○ | 0.229 | 2.288 | 4.575 | 8.490 | 14.307 | 20.326 | 25.163 |
| 30 | 28 | - | 0.24 | 2.41 | 4.82 | 8.89 | 14.77 | 20.91 | 25.33 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.013 | 0.130 | 0.270 | 0.500 | 0.860 | 1.270 | 1.590 |
| 0.058 | 0.640 | 1.320 | 2.524 | 4.385 | 6.342 | 7.928 |
| - | - | - | - | - | - | - |

平歯車

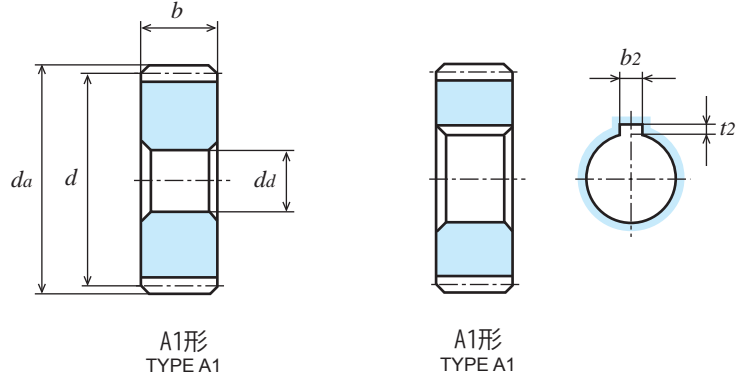
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 32
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z32

JIS B 1702-1 (ISO) 8級
 System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キーマイ Key Way <i>b2 × t2</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>bw</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------------|-----------------|-----------|---------------------------------------|--|-------------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S2.5S 32A - 1616F | 32 | φ80 | φ85 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 0.61 | |
| S2.5S 32A = 1620 | 32 | φ80 | φ85 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | 0.59 | |
| S2.5S 32A = 1625 | 32 | φ80 | φ85 | A1 | 16 | φ25 | - | - | 16 | 8 × 3.3 | - | - | - | 0.57 | |
| S2.5S 32A - 2518F | 32 | φ80 | φ85 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | 0.94 | |
| S2.5S 32A = 2520 | 32 | φ80 | φ85 | A1 | 25 | φ20 | - | - | 25 | 6 × 2.8 | - | - | - | 0.92 | |
| S2.5S 32A = 2525 | 32 | φ80 | φ85 | A1 | 25 | φ25 | - | - | 25 | 8 × 3.3 | - | - | - | 0.88 | |
| S2.5S 32A = 2530 | 32 | φ80 | φ85 | A1 | 25 | φ30 | - | - | 25 | 8 × 3.3 | - | - | - | 0.84 | |
| S2.5S 32B - 1616 | 32 | φ80 | φ85 | B1 | 16 | φ16 | φ50 | 12 | 28 | - | - | - | - | 0.77 | |
| S2.5S 32B # 1620 | 32 | φ80 | φ85 | B1 | 16 | φ20 | φ50 | 12 | 28 | 6 × 2.8 | M5 | 6 | - | 0.74 | |
| S2.5S 32B # 1625 | 32 | φ80 | φ85 | B1 | 16 | φ25 | φ50 | 12 | 28 | 8 × 3.3 | M6 | 6 | - | 0.70 | |
| S2.5S 32B - 2516 | 32 | φ80 | φ85 | B1 | 25 | φ16 | φ60 | 12 | 37 | - | - | - | - | 1.20 | |
| S2.5S 32B # 2520 | 32 | φ80 | φ85 | B1 | 25 | φ20 | φ60 | 12 | 37 | 6 × 2.8 | M5 | 6 | - | 1.16 | |
| S2.5S 32B # 2525 | 32 | φ80 | φ85 | B1 | 25 | φ25 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 1.10 | |
| S2.5S 32B # 2530 | 32 | φ80 | φ85 | B1 | 25 | φ30 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 1.04 | |

【=】 (イコール) にはキーマ材が付いております。【=】: Gear with key way / with key
 【#】 (シャープ) にはキーマ材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 32 | 16 | 0.15 | 1.50 | 3.01 | 5.46 | 9.13 | 12.89 | 15.64 | 100 |
| 32 | 25 | 0.24 | 2.35 | 4.70 | 8.54 | 14.27 | 20.14 | 24.44 | 143.24 |
| | | | | | | | | | 224.41 |

The above numerical values are equivalent to JGMA formulas as reference only.
 動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

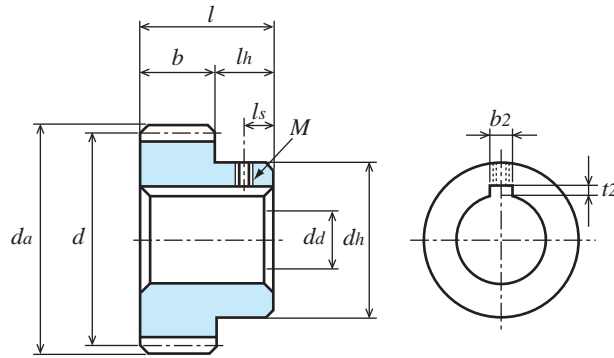
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 36
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z36

JIS B 1702-1 (ISO) 8級
 System of accuracy: JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
 TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマゾ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 36A - 1616F | 36 | φ90 | φ95 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 0.77 | |
| S2.5S 36A = 1620 | 36 | φ90 | φ95 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | 0.76 | |
| S2.5S 36A = 1625 | 36 | φ90 | φ95 | A1 | 16 | φ25 | - | - | 16 | 8 × 3.3 | - | - | - | 0.73 | |
| S2.5S 36A - 2518F | 36 | φ90 | φ95 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | 1.20 | |
| S2.5S 36A = 2525 | 36 | φ90 | φ95 | A1 | 25 | φ25 | - | - | 25 | 8 × 3.3 | - | - | - | 1.15 | |
| S2.5S 36A = 2530 | 36 | φ90 | φ95 | A1 | 25 | φ30 | - | - | 25 | 8 × 3.3 | - | - | - | 1.11 | |
| S2.5S 36B - 1616 | 36 | φ90 | φ95 | B1 | 16 | φ16 | φ50 | 12 | 28 | - | - | - | - | 0.94 | |
| S2.5S 36B # 1620 | 36 | φ90 | φ95 | B1 | 16 | φ20 | φ50 | 12 | 28 | 6 × 2.8 | M5 | 6 | - | 0.91 | |
| S2.5S 36B # 1625 | 36 | φ90 | φ95 | B1 | 16 | φ25 | φ50 | 12 | 28 | 8 × 3.3 | M6 | 6 | - | 0.87 | |
| S2.5S 36B - 2518 | 36 | φ90 | φ95 | B1 | 25 | φ18 | φ60 | 12 | 37 | - | - | - | - | 1.44 | |
| S2.5S 36B # 2525 | 36 | φ90 | φ95 | B1 | 25 | φ25 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 1.36 | |
| S2.5S 36B # 2530 | 36 | φ90 | φ95 | B1 | 25 | φ30 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 1.30 | |

【=】(イコール)にはキー材が付いております。【#】: Gear with key way / with key
 【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 36 | 16 | 0.18 | 1.76 | 3.51 | 6.20 | 10.50 | 14.83 | 17.94 | 168.07 |
| 36 | 25 | 0.27 | 2.75 | 5.49 | 9.69 | 16.41 | 23.17 | 28.03 | 262.61 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion fomulas of power on page P26.

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 かみ歯車 BEVEL GEARS
 スプロケット SPROCKETS
 技術資料 REFERENCE DATA

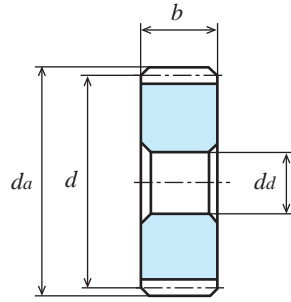
平歯車 SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 40 45
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 40 to Z 45

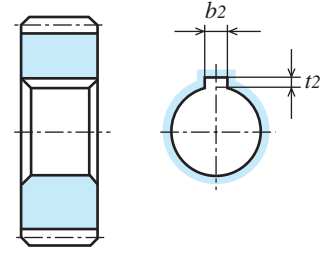
JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



A1形
TYPE A1



A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 40A - 1616F | 40 | φ100 | φ105 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 0.96 | |
| S2.5S 40A = 1620 | 40 | φ100 | φ105 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | 0.94 | |
| S2.5S 40A = 1625 | 40 | φ100 | φ105 | A1 | 16 | φ25 | - | - | 16 | 8 × 3.3 | - | - | - | 0.92 | |
| S2.5S 40A - 2518F | 40 | φ100 | φ105 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | 1.49 | |
| S2.5S 40A = 2525 | 40 | φ100 | φ105 | A1 | 25 | φ25 | - | - | 25 | 8 × 3.3 | - | - | - | 1.44 | |
| S2.5S 40A = 2530 | 40 | φ100 | φ105 | A1 | 25 | φ30 | - | - | 25 | 8 × 3.3 | - | - | - | 1.40 | |
| S2.5S 40B - 1616 | 40 | φ100 | φ105 | B1 | 16 | φ16 | φ50 | 12 | 28 | - | - | - | - | 1.13 | |
| S2.5S 40B # 1620 | 40 | φ100 | φ105 | B1 | 16 | φ20 | φ50 | 12 | 28 | 6 × 2.8 | M5 | 6 | - | 1.10 | |
| S2.5S 40B # 1625 | 40 | φ100 | φ105 | B1 | 16 | φ25 | φ50 | 12 | 28 | 8 × 3.3 | M6 | 6 | - | 1.06 | |
| S2.5S 40BF - 2512 | 40 | φ100 | φ105 | B1 | 25 | φ12(H8) | φ70 | 20 | 45 | - | - | - | - | 2.1 | |
| S2.5S 40B - 2512H | 40 | φ100 | φ105 | B1 | 25 | φ12(H※) | φ70 | 20 | 45 | - | - | - | - | 2.1 | |
| S2.5S 40B - 2518 | 40 | φ100 | φ105 | B1 | 25 | φ18 | φ60 | 12 | 37 | - | - | - | - | 1.73 | |
| S2.5S 40B # 2525 | 40 | φ100 | φ105 | B1 | 25 | φ25 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 1.66 | |
| S2.5S 40B # 2530 | 40 | φ100 | φ105 | B1 | 25 | φ30 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 1.59 | |
| S2.5S 45B - 1616 | 45 | φ112.5 | φ117.5 | B1 | 16 | φ16 | φ60 | 12 | 28 | - | - | - | - | 1.47 | |
| S2.5S 45B - 2518 | 45 | φ112.5 | φ117.5 | B1 | 25 | φ18 | φ60 | 12 | 37 | - | - | - | - | 2.14 | |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|--------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 40 | 16 | - | 0.20 | 2.01 | 4.00 | 6.92 | 11.85 | 16.74 | 20.19 |
| 40 | 25 | - | 0.310 | 3.140 | 6.230 | 10.780 | 18.470 | 26.100 | 31.480 |
| 40 | 25 | ○ | 0.333 | 3.327 | 6.612 | 11.580 | 20.061 | 29.278 | 36.598 |
| 45 | 16 | - | 0.23 | 2.33 | 4.55 | 7.76 | 13.48 | 19.07 | 23.35 |
| 45 | 25 | - | 0.36 | 3.65 | 7.11 | 12.13 | 21.06 | 29.80 | 36.48 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.024 | 0.240 | 0.480 | 0.860 | 1.550 | 2.320 | 2.900 |
| 0.106 | 1.169 | 2.396 | 4.326 | 7.725 | 11.476 | 14.486 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

平歯車

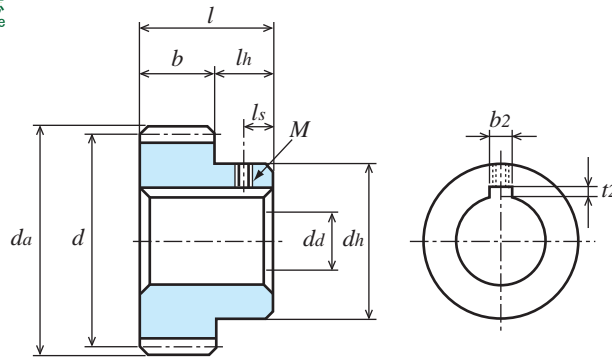
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 48
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 48

JIS B 1702-1 (ISO) 8 級
 System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
 Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマゾ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 48A - 1616F | 48 | φ120 | φ125 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 1.40 | |
| S2.5S 48A = 1620 | 48 | φ120 | φ125 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | 1.38 | |
| S2.5S 48A = 1625 | 48 | φ120 | φ125 | A1 | 16 | φ25 | - | - | 16 | 8 × 3.3 | - | - | - | 1.40 | |
| S2.5S 48A - 2518F | 48 | φ120 | φ125 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | 2.17 | |
| S2.5S 48A = 2525 | 48 | φ120 | φ125 | A1 | 25 | φ25 | - | - | 25 | 8 × 3.3 | - | - | - | 2.12 | |
| S2.5S 48A = 2530 | 48 | φ120 | φ125 | A1 | 25 | φ30 | - | - | 25 | 8 × 3.3 | - | - | - | 2.10 | |
| S2.5S 48B - 1616 | 48 | φ120 | φ125 | B1 | 16 | φ16 | φ50 | 12 | 28 | - | - | - | - | 1.56 | |
| S2.5S 48B # 1620 | 48 | φ120 | φ125 | B1 | 16 | φ20 | φ50 | 12 | 28 | 6 × 2.8 | M5 | 6 | - | 1.53 | |
| S2.5S 48B # 1625 | 48 | φ120 | φ125 | B1 | 16 | φ25 | φ50 | 12 | 28 | 8 × 3.3 | M6 | 6 | - | 1.49 | |
| S2.5S 48B - 2518 | 48 | φ120 | φ125 | B1 | 25 | φ18 | φ60 | 12 | 37 | - | - | - | - | 2.41 | |
| S2.5S 48B # 2525 | 48 | φ120 | φ125 | B1 | 25 | φ25 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 2.33 | |
| S2.5S 48B # 2530 | 48 | φ120 | φ125 | B1 | 25 | φ30 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 2.27 | |

【=】(イコール)にはキー材が付いております。【#】: Gear with key way / with key
 【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 48 | 16 | 0.25 | 2.53 | 4.87 | 8.25 | 14.45 | 20.45 | 25.30 | 100 |
| 48 | 25 | 0.40 | 3.95 | 7.61 | 12.89 | 22.58 | 31.95 | 39.53 | 100 |

KG 規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

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The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

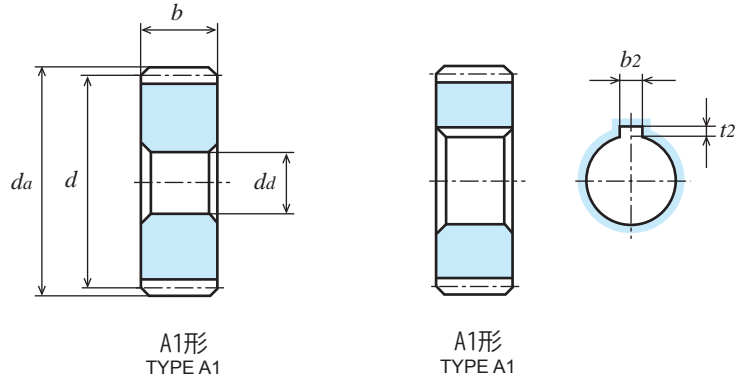
SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 50
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 50

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
 Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 50A - 1616F | 50 | φ125 | φ130 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | 1.52 | |
| S2.5S 50A = 1620 | 50 | φ125 | φ130 | A1 | 16 | φ20 | - | - | 16 | 6 × 2.8 | - | - | - | 1.50 | |
| S2.5S 50A = 1625 | 50 | φ125 | φ130 | A1 | 16 | φ25 | - | - | 16 | 8 × 3.3 | - | - | - | 1.50 | |
| S2.5S 50A - 2518F | 50 | φ125 | φ130 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | 2.36 | |
| S2.5S 50A = 2525 | 50 | φ125 | φ130 | A1 | 25 | φ25 | - | - | 25 | 8 × 3.3 | - | - | - | 2.31 | |
| S2.5S 50A = 2530 | 50 | φ125 | φ130 | A1 | 25 | φ30 | - | - | 25 | 8 × 3.3 | - | - | - | 2.26 | |
| S2.5S 50B - 1616 | 50 | φ125 | φ130 | B1 | 16 | φ16 | φ50 | 12 | 28 | - | - | - | - | 1.68 | |
| S2.5S 50B # 1620 | 50 | φ125 | φ130 | B1 | 16 | φ20 | φ50 | 12 | 28 | 6 × 2.8 | M5 | 6 | - | 1.65 | |
| S2.5S 50B # 1625 | 50 | φ125 | φ130 | B1 | 16 | φ25 | φ50 | 12 | 28 | 8 × 3.3 | M6 | 6 | - | 1.61 | |
| S2.5S 50BF - 2515 | 50 | φ125 | φ130 | B1 | 25 | φ15(H8) | φ90 | 20 | 45 | - | - | - | - | 3.33 | |
| S2.5S 50B - 2515H | 50 | φ125 | φ130 | B1 | 25 | φ15(H※) | φ90 | 20 | 45 | - | - | - | - | 3.33 | |
| S2.5S 50B - 2518 | 50 | φ125 | φ130 | B1 | 25 | φ18 | φ60 | 12 | 37 | - | - | - | - | 2.60 | |
| S2.5S 50B # 2525 | 50 | φ125 | φ130 | B1 | 25 | φ25 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 2.52 | |
| S2.5S 50B # 2530 | 50 | φ125 | φ130 | B1 | 25 | φ30 | φ60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | 2.46 | |

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【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|--------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 50 | 16 | - | 0.27 | 2.66 | 5.09 | 8.56 | 15.12 | 21.36 | 26.61 |
| 50 | 25 | - | 0.410 | 4.140 | 7.910 | 13.330 | 23.530 | 33.230 | 41.400 |
| 50 | 25 | ○ | 0.439 | 4.389 | 8.423 | 14.383 | 25.750 | 38.625 | 48.281 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。 Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|--------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.038 | 0.390 | 0.750 | 1.310 | 2.470 | 3.710 | 4.770 |
| 0.169 | 1.867 | 3.693 | 6.500 | 11.995 | 18.316 | 23.120 |

平歯車

SPUR GEARS

モジュール
MODULE

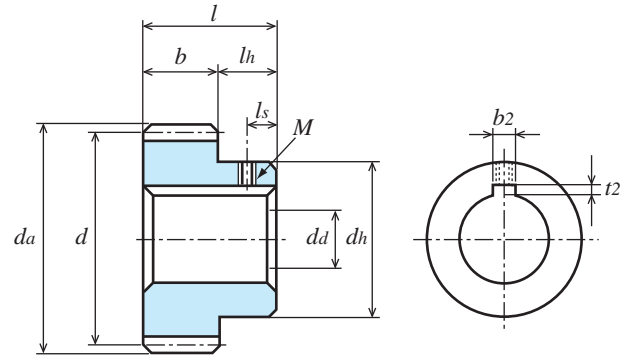
2.5

圧力角 20° (並歯) 歯数 56 60
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 56 to Z 60

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 56A - 1616F | 56 | φ140 | φ145 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | - | 1.91 |
| S2.5S 56A - 2518F | 56 | φ140 | φ145 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | - | 2.97 |
| S2.5S 56B - 1618 | 56 | φ140 | φ145 | B1 | 16 | φ18 | φ 60 | 12 | 28 | - | - | - | - | - | 2.15 |
| S2.5S 56B - 2520 | 56 | φ140 | φ145 | B1 | 25 | φ20 | φ 60 | 12 | 37 | - | - | - | - | - | 3.20 |
| S2.5S 56B # 2525 | 56 | φ140 | φ145 | B1 | 25 | φ25 | φ 60 | 12 | 37 | 8 × 3.3 | M6 | 6 | - | - | 3.14 |
| S2.5S 60A - 1616F | 60 | φ150 | φ155 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | - | 2.19 |
| S2.5S 60A = 1625 | 60 | φ150 | φ155 | A2 | 16 | φ25 | φ 50 | - | 16 | 8 × 3.3 | - | - | φ127 | 8 | 1.51 |
| S2.5S 60A - 2518F | 60 | φ150 | φ155 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | - | 3.42 |
| S2.5S 60A = 2525 | 60 | φ150 | φ155 | A2 | 25 | φ25 | φ 50 | - | 25 | 8 × 3.3 | - | - | φ127 | 13 | 2.42 |
| S2.5S 60A = 2530 | 60 | φ150 | φ155 | A2 | 25 | φ30 | φ 60 | - | 25 | 8 × 3.3 | - | - | φ127 | 13 | 2.46 |
| S2.5S 60A = 2535 | 60 | φ150 | φ155 | A2 | 25 | φ35 | φ 70 | - | 25 | 10 × 3.3 | - | - | φ127 | 13 | 2.51 |
| S2.5S 60B - 1618 | 60 | φ150 | φ155 | B1 | 16 | φ18 | φ 60 | 12 | 28 | - | - | - | - | - | 2.43 |
| S2.5S 60B # 1625 | 60 | φ150 | φ155 | B3 | 16 | φ25 | φ 60 | 12 | 28 | 8 × 3.3 | M6 | 6 | φ127 | 8 | 1.78 |
| S2.5S 60BF - 2515 | 60 | φ150 | φ155 | B1 | 25 | φ15(H8) | φ105 | 20 | 45 | - | - | - | - | - | 4.75 |
| S2.5S 60B - 2515H | 60 | φ150 | φ155 | B1 | 25 | φ15(H※) | φ105 | 20 | 45 | - | - | - | - | - | 4.75 |
| S2.5S 60B - 2520 | 60 | φ150 | φ155 | B1 | 25 | φ20 | φ 70 | 12 | 37 | - | - | - | - | - | 3.74 |
| S2.5S 60B # 2525 | 60 | φ150 | φ155 | B3 | 25 | φ25 | φ 70 | 12 | 37 | 8 × 3.3 | M6 | 6 | φ127 | 13 | 2.91 |
| S2.5S 60B # 2530 | 60 | φ150 | φ155 | B3 | 25 | φ30 | φ 70 | 12 | 37 | 8 × 3.3 | M6 | 6 | φ127 | 13 | 2.85 |
| S2.5S 60B # 2535 | 60 | φ150 | φ155 | B3 | 25 | φ35 | φ 70 | 12 | 37 | 10 × 3.3 | M8 | 6 | φ127 | 13 | 2.77 |

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【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|--------|--------|--------|--------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 56 | 16 | - | 0.31 | 3.06 | 5.71 | 9.47 | 17.11 | 24.44 | - |
| 56 | 25 | - | 0.48 | 4.77 | 8.92 | 14.80 | 26.73 | 38.19 | - |
| 60 | 16 | - | 0.33 | 3.32 | 6.12 | 10.16 | 18.41 | 26.56 | - |
| 60 | 25 | - | 0.52 | 5.19 | 9.56 | 15.87 | 28.76 | 41.50 | - |
| 60 | 25 | - | 0.520 | 5.160 | 9.500 | 15.790 | 28.600 | 41.270 | - |
| 60 | 25 | ○ | 0.547 | 5.469 | 10.148 | 17.102 | 32.086 | 48.129 | - |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|--------|--------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.056 | 0.570 | 1.070 | 1.850 | 3.640 | 5.570 | - |
| 0.247 | 2.735 | 5.231 | 9.088 | 17.575 | 26.836 | - |

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スプロケット
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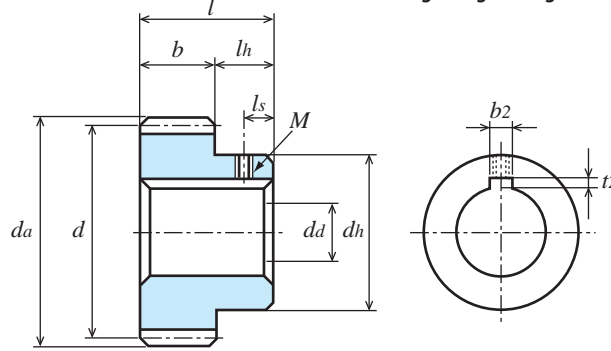
平歯車 SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 64 ~ 72
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 64 to Z 72

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
 Specification change Space-saving and weight saving.
 Additional machining on tightening is not necessary.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 64A - 1616F | 64 | φ160 | φ165 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | - | 2.50 |
| S2.5S 64A - 2518F | 64 | φ160 | φ165 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | - | 3.90 |
| S2.5S 64B - 1618 | 64 | φ160 | φ165 | B1 | 16 | φ18 | φ 60 | 12 | 28 | - | - | - | - | - | 2.74 |
| S2.5S 64B - 2520 | 64 | φ160 | φ165 | B1 | 25 | φ20 | φ 70 | 12 | 37 | - | - | - | - | - | 4.22 |
| S2.5S 64B # 2525 | 64 | φ160 | φ165 | B3 | 25 | φ25 | φ 70 | 12 | 37 | 8 × 3.3 | M6 | 6 | φ137 | 13 | 3.20 |
| S2.5S 70BF - 2520 | 70 | φ175 | φ180 | B1 | 25 | φ20 | φ125 | 20 | 45 | - | - | - | - | - | 6.52 |
| S2.5S 70B - 2520H | 70 | φ175 | φ180 | B1 | 25 | φ20(H※) | φ125 | 20 | 45 | - | - | - | - | - | 6.52 |
| S2.5S 72A - 1616F | 72 | φ180 | φ185 | A1 | 16 | φ16 | - | - | 16 | - | - | - | - | - | 3.17 |
| S2.5S 72A - 2518F | 72 | φ180 | φ185 | A1 | 25 | φ18 | - | - | 25 | - | - | - | - | - | 4.94 |
| S2.5S 72B - 1618 | 72 | φ180 | φ185 | B1 | 16 | φ18 | φ 70 | 12 | 28 | - | - | - | - | - | 3.50 |
| S2.5S 72B - 2520 | 72 | φ180 | φ185 | B1 | 25 | φ20 | φ 70 | 12 | 37 | - | - | - | - | - | 5.27 |
| S2.5S 72B # 2525 | 72 | φ180 | φ185 | B3 | 25 | φ25 | φ 70 | 12 | 37 | 8 × 3.3 | M6 | 6 | φ157 | 13 | 3.82 |

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 【#】(シャープ)にはキー材とセットスクリューが付いております。[#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

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許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|--------|--------|--------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 64 | 16 | - | 0.36 | 3.59 | 6.51 | 10.89 | 19.69 | - | - |
| 64 | 25 | - | 0.56 | 5.60 | 10.17 | 17.01 | 30.77 | - | - |
| 70 | 25 | - | 0.620 | 6.190 | 11.000 | 18.560 | 33.500 | - | - |
| 70 | 25 | ○ | 0.656 | 6.560 | 11.782 | 20.139 | 38.485 | - | - |
| 72 | 16 | - | 0.41 | 4.12 | 7.27 | 12.31 | 22.20 | - | - |
| 72 | 25 | - | 0.64 | 6.44 | 11.37 | 19.24 | 34.69 | - | - |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|--------|--------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 0.078 | 0.790 | 1.430 | 2.540 | 5.020 | - | - |
| 0.341 | 3.777 | 6.994 | 12.323 | 24.275 | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

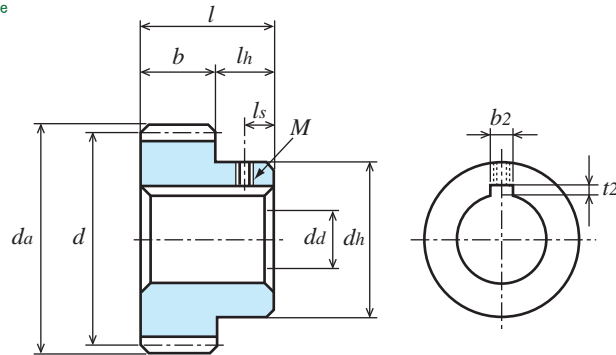
平歯車 SPUR GEARS

モジュール **2.5** 圧力角 20° (並歯) 歯数 80
 MODULE 20° PRESSURE ANGLE FULL DEPTH TOOTH Z 80

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
 System of accuracy: JIS B 1702-1(ISO) class 8
 (Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。
 Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|------|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S2.5S 80A - 1618F | 80 | φ200 | φ205 | A1 | 16 | φ18 | - | - | 16 | - | - | - | - | 3.91 | |
| S2.5S 80A = 1625 | 80 | φ200 | φ205 | A2 | 16 | φ25 | φ 50 | - | 16 | 8 × 3.3 | - | φ177 | 8 | 2.50 | |
| S2.5S 80A - 2520F | 80 | φ200 | φ205 | A1 | 25 | φ20 | - | - | 25 | - | - | - | - | 6.10 | |
| S2.5S 80A = 2525 | 80 | φ200 | φ205 | A2 | 25 | φ25 | φ 50 | - | 25 | 8 × 3.3 | - | φ177 | 13 | 4.02 | |
| S2.5S 80A = 2530 | 80 | φ200 | φ205 | A2 | 25 | φ30 | φ 60 | - | 25 | 8 × 3.3 | - | φ177 | 13 | 4.06 | |
| S2.5S 80A = 2535 | 80 | φ200 | φ205 | A2 | 25 | φ35 | φ 70 | - | 25 | 10 × 3.3 | - | φ177 | 13 | 4.10 | |
| S2.5S 80B - 1618 | 80 | φ200 | φ205 | B1 | 16 | φ18 | φ 60 | 12 | 28 | - | - | - | - | 4.16 | |
| S2.5S 80B # 1625 | 80 | φ200 | φ205 | B3 | 16 | φ25 | φ 60 | 12 | 28 | 8 × 3.3 | M6 | 6 | φ177 | 8 | 2.77 |
| ● S2.5S 80BF - 2520 | 80 | φ200 | φ205 | B1 | 25 | φ20 | φ140 | 20 | 45 | - | - | - | - | 8.45 | |
| ● S2.5S 80B - 2520H | 80 | φ200 | φ205 | B1 | 25 | φ20(H※) | φ140 | 20 | 45 | - | - | - | - | 8.45 | |
| S2.5S 80B - 2522 | 80 | φ200 | φ205 | B1 | 25 | φ22 | φ 70 | 12 | 37 | - | - | - | - | 6.42 | |
| S2.5S 80B # 2525 | 80 | φ200 | φ205 | B3 | 25 | φ25 | φ 70 | 12 | 37 | 8 × 3.3 | M6 | 6 | φ177 | 13 | 4.51 |
| S2.5S 80B # 2530 | 80 | φ200 | φ205 | B3 | 25 | φ30 | φ 70 | 12 | 37 | 8 × 3.3 | M6 | 6 | φ177 | 13 | 4.45 |
| S2.5S 80B # 2535 | 80 | φ200 | φ205 | B3 | 25 | φ35 | φ 70 | 12 | 37 | 10 × 3.3 | M8 | 6 | φ177 | 13 | 4.37 |

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【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

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許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|--------|--------|--------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 80 | 16 | - | 0.47 | 4.62 | 8.00 | 13.70 | 24.84 | - | - |
| 80 | 25 | - | 0.720 | 7.170 | 12.410 | 21.260 | 38.530 | - | - |
| 80 | 25 | ○ | 0.766 | 7.610 | 13.328 | 23.090 | 44.931 | - | - |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | | |
|---|-------|-------|--------|--------|-------|-------|---|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| - | - | - | - | - | - | - | - |
| 0.103 | 1.040 | 1.850 | 3.330 | 6.680 | - | - | - |
| 0.452 | 4.965 | 8.964 | 16.008 | 32.111 | - | - | - |

平歯車 SPUR GEARS

モジュール
MODULE

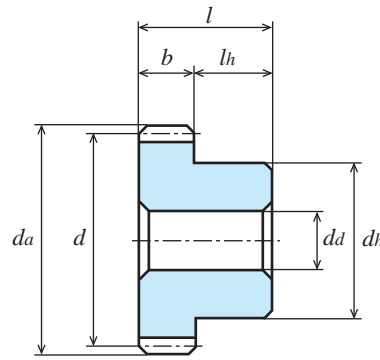
3

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



New 仕様変更 省スペース・軽量化。
Specification change Space-saving and weight saving.



B1形
TYPE B1

ポリアセタール (黒色)
Material : Poly Acetal (Black)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>dd</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|----------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| ▲ S3D 14B - 3016N | 14 | φ 42 | φ 48 | B1 | 30 | φ16 | φ34 | 13 | 43 | 63.1 |
| ▲ S3D 15B - 3016N | 15 | φ 45 | φ 51 | B1 | 30 | φ16 | φ36 | 13 | 43 | 73.7 |
| ▲ S3D 16B - 3016N | 16 | φ 48 | φ 54 | B1 | 30 | φ16 | φ40 | 13 | 43 | 87.4 |
| ▲ S3D 18B - 3018N | 18 | φ 54 | φ 60 | B1 | 30 | φ18 | φ46 | 13 | 43 | 111.9 |
| ▲ S3D 20B - 3018N | 20 | φ 60 | φ 66 | B1 | 30 | φ18 | φ52 | 13 | 43 | 143.1 |
| ▲ S3D 24B - 3020N | 24 | φ 72 | φ 78 | B1 | 30 | φ20 | φ56 | 13 | 43 | 198.3 |
| ▲ S3D 25B - 3020N | 25 | φ 75 | φ 81 | B1 | 30 | φ20 | φ56 | 13 | 43 | 213.0 |
| ▲ S3D 28B - 3020N | 28 | φ 84 | φ 90 | B1 | 30 | φ20 | φ60 | 13 | 43 | 267.2 |
| ▲ S3D 30B - 3020N | 30 | φ 90 | φ 96 | B1 | 30 | φ20 | φ60 | 13 | 43 | 301.9 |
| ▲ S3D 32B - 3020N | 32 | φ 96 | φ102 | B1 | 30 | φ20 | φ80 | 13 | 43 | 379.3 |
| ▲ S3D 35B - 3020N | 35 | φ105 | φ111 | B1 | 30 | φ20 | φ80 | 13 | 43 | 439.4 |
| ▲ S3D 36B - 3020N | 36 | φ108 | φ114 | B1 | 30 | φ20 | φ80 | 13 | 43 | 460.6 |

▲の商品は2017年5月20日をもってカタログ商品(規格品)としての生産を中止とします。米国・EU市場の食品接触用途・規制に適合した青 POM[®] ギヤシリーズをご利用ください。Products with ▲ mark will be terminated with effective 20th May 2017. Alternative products are indicated on separate catalogue of Blue Poly Acetal gears which adapted to relevant regulations for the food industries in the US and EU markets.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|--------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S3D 14B - 3016 | 6.85 | 68.38 | 136.59 | 272.49 | 542.23 | 808.24 | 1,000.62 |
| S3D 15B - 3016 | 7.33 | 73.26 | 146.32 | 291.85 | 580.54 | 863.60 | 1,068.39 |
| S3D 16B - 3016 | 7.82 | 78.14 | 156.05 | 311.19 | 618.79 | 918.64 | 1,135.66 |
| S3D 18B - 3018 | 8.80 | 87.89 | 175.49 | 349.84 | 695.13 | 1,027.78 | 1,268.73 |
| S3D 20B - 3018 | 9.78 | 97.63 | 194.92 | 388.43 | 771.16 | 1,135.66 | 1,399.82 |
| S3D 24B - 3020 | 11.73 | 117.12 | 233.73 | 465.44 | 918.69 | 1,347.62 | 1,649.49 |
| S3D 25B - 3020 | 12.22 | 121.99 | 243.43 | 484.66 | 955.16 | 1,399.82 | 1,709.58 |
| S3D 28B - 3020 | 13.69 | 136.59 | 272.49 | 542.23 | 1,063.88 | 1,551.92 | 1,885.69 |
| S3D 30B - 3020 | 14.67 | 146.32 | 291.85 | 580.54 | 1,135.66 | 1,649.49 | 1,999.64 |
| S3D 32B - 3020 | 15.65 | 156.05 | 311.19 | 618.79 | 1,206.88 | 1,745.30 | 2,110.03 |
| S3D 35B - 3020 | 17.11 | 170.63 | 340.19 | 676.07 | 1,312.65 | 1,885.69 | 2,255.99 |
| S3D 36B - 3020 | 17.60 | 175.49 | 349.84 | 695.13 | 1,347.62 | 1,931.61 | 2,302.67 |

The above numerical values are Lewis formulas as reference only.

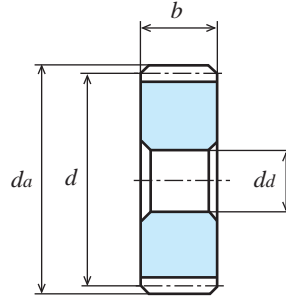
動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

JIS B 1702-1 (ISO) 9~10 級
System of accuracy : JIS B 1702-1(ISO) class 9-10



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



A1形
TYPE A1

ポリアセタール (黒色) Material : Poly Acetal (Black)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W(g)</i> |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|----------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------|
| ▲ S3D 40A - 3020 | 40 | φ120 | φ126 | A1 | 30 | φ20 | - | - | 30 | 465.1 |
| ▲ S3D 45A - 3020 | 45 | φ135 | φ141 | A1 | 30 | φ20 | - | - | 30 | 592.2 |
| ▲ S3D 48A - 3020 | 48 | φ144 | φ150 | A1 | 30 | φ20 | - | - | 30 | 675.6 |
| ▲ S3D 50A - 3020 | 50 | φ150 | φ156 | A1 | 30 | φ20 | - | - | 30 | 734.2 |
| ▲ S3D 56A - 3020 | 56 | φ168 | φ174 | A1 | 30 | φ20 | - | - | 30 | 924.4 |
| ▲ S3D 60A - 3020 | 60 | φ180 | φ186 | A1 | 30 | φ20 | - | - | 30 | 1,063.0 |
| ▲ S3D 64A - 3020 | 64 | φ192 | φ198 | A1 | 30 | φ20 | - | - | 30 | 1,211.0 |

▲の商品は2017年5月20日をもってカタログ商品(規格品)としての生産を中止とします。米国・EU市場の食品接触用途・規制に適合した青 POM® ギヤシリーズをご利用ください。Products with ▲ mark will be terminated with effective 20th May 2017. Alternative products are indicated on separate catalogue of Blue Poly Acetal gears which adapted to relevant regulations for the food industries in the US and EU markets.

許容伝達動力表 曲げ強さ (W)

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|--------|--------|----------|----------|----------|----------|
| | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| S3D 40A - 3020 | 19.56 | 194.92 | 388.43 | 771.16 | 1,485.88 | 2,110.03 | 2,479.51 |
| S3D 45A - 3020 | 22.00 | 219.18 | 436.59 | 863.60 | 1,649.49 | 2,302.67 | - |
| S3D 48A - 3020 | 23.46 | 233.73 | 465.44 | 918.64 | 1,745.30 | 2,410.67 | - |
| S3D 50A - 3020 | 24.44 | 243.43 | 484.66 | 955.16 | 1,808.19 | 2,479.51 | - |
| S3D 56A - 3020 | 27.37 | 272.49 | 542.23 | 1,063.88 | 1,992.13 | - | - |
| S3D 60A - 3020 | 29.33 | 291.85 | 580.54 | 1,135.66 | 2,110.03 | - | - |
| S3D 64A - 3020 | 31.28 | 311.19 | 618.79 | 1,206.88 | 2,214.74 | - | - |

The above numerical values are Lewis formulas as reference only.

動力の換算式は P26 をご参照ください。

Please refer to the conversion formulas of power on page P26.

平歯車 SPUR GEARS

モジュール
MODULE

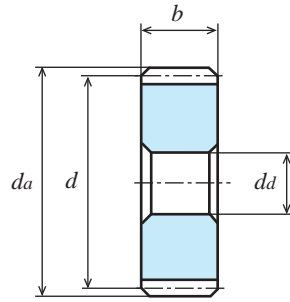
3

圧力角 20° (並歯) 歯数 14 ~ 15
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 14 to Z 15

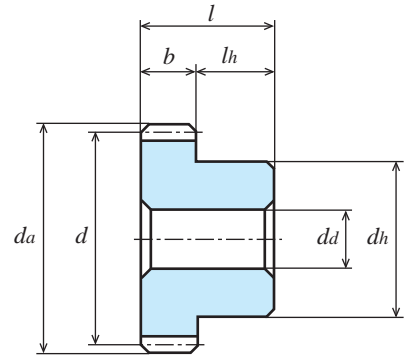
JIS B 1702-1 (ISO) 8級~9級
System of accuracy : JIS B 1702-1(ISO) class 8-9



New 仕様変更 省スペース・軽量化。
Specification change Space-saving and weight saving.



A1形
TYPE A1



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)
Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $d_d(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(kg)$ |
|--------------------------|------------------------------|------------------------------------|--------------------------------|-----------|-------------------------|----------------------------------|-------------------------------|---------------------------------|-----------------------------|-------------------------|
| S3S 14A - 2216 | 14 | φ42 | φ48 | A1 | 22 | φ16 | - | - | 22 | 0.20 |
| S3S 14A - 3016 | 14 | φ42 | φ48 | A1 | 30 | φ16 | - | - | 30 | 0.28 |
| S3S 14A - 3516 | 14 | φ42 | φ48 | A1 | 35 | φ16 | - | - | 35 | 0.33 |
| S3S 14B - 2216N | 14 | φ42 | φ48 | B1 | 22 | φ16 | φ34 | 13 | 35 | 0.28 |
| S3S 14B - 3016N | 14 | φ42 | φ48 | B1 | 30 | φ16 | φ34 | 13 | 43 | 0.35 |
| S3S 14B - 3516N | 14 | φ42 | φ48 | B1 | 35 | φ16(H8) | φ34 | 13 | 48 | 0.40 |
| S3S 15A - 2216 | 15 | φ45 | φ51 | A1 | 22 | φ16 | - | - | 22 | 0.24 |
| S3S 15A - 3016 | 15 | φ45 | φ51 | A1 | 30 | φ16 | - | - | 30 | 0.33 |
| S3S 15A - 3516 | 15 | φ45 | φ51 | A1 | 35 | φ16 | - | - | 35 | 0.38 |
| S3S 15B - 2216N | 15 | φ45 | φ51 | B1 | 22 | φ16 | φ36 | 13 | 35 | 0.32 |
| S3S 15B - 3016N | 15 | φ45 | φ51 | B1 | 30 | φ16 | φ36 | 13 | 43 | 0.41 |
| S3S 15B - 3516N | 15 | φ45 | φ51 | B1 | 35 | φ16(H8) | φ36 | 13 | 48 | 0.47 |

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (W) Bending Strength

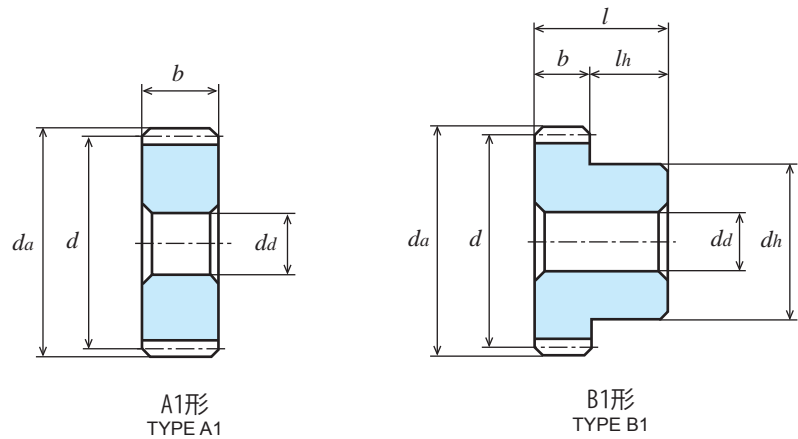
| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 14 | 22 | 0.087 | 0.88 | 1.75 | 3.51 | 6.29 | 8.44 | 10.00 | 84.03 |
| 14 | 30 | 0.120 | 1.20 | 2.39 | 4.78 | 8.58 | 11.51 | 13.63 | 114.59 |
| 14 | 35 | 0.139 | 1.39 | 2.79 | 5.58 | 10.01 | 13.43 | 15.91 | 132.74 |
| 15 | 22 | 0.098 | 0.98 | 1.96 | 3.93 | 6.94 | 9.25 | 11.10 | 93.58 |
| 15 | 30 | 0.134 | 1.34 | 2.68 | 5.36 | 9.46 | 12.61 | 15.14 | 127.96 |
| 15 | 35 | 0.156 | 1.56 | 3.13 | 6.25 | 11.04 | 14.72 | 17.67 | 148.97 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8

御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|------------------------------------|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-------------------------------|
| S3S 16A - 2216 | 16 | φ48 | φ54 | A1 | 22 | φ16 | - | - | 22 | 0.28 |
| S3S 16A - 3016 | 16 | φ48 | φ54 | A1 | 30 | φ16 | - | - | 30 | 0.38 |
| S3S 16A - 3516 | 16 | φ48 | φ54 | A1 | 35 | φ16 | - | - | 35 | 0.44 |
| S3S 16B - 2216N | 16 | φ48 | φ54 | B1 | 22 | φ16 | φ40 | 13 | 35 | 0.39 |
| S3S 16B - 3016N | 16 | φ48 | φ54 | B1 | 30 | φ16 | φ40 | 13 | 43 | 0.49 |
| S3S 16B - 3516N | 16 | φ48 | φ54 | B1 | 35 | φ16(H8) | φ40 | 13 | 48 | 0.55 |
| S3S 18A - 2216 | 18 | φ54 | φ60 | A1 | 22 | φ16 | - | - | 22 | 0.36 |
| S3S 18A - 3016 | 18 | φ54 | φ60 | A1 | 30 | φ16 | - | - | 30 | 0.49 |
| S3S 18A - 3518 | 18 | φ54 | φ60 | A1 | 35 | φ18 | - | - | 35 | 0.56 |
| S3S 18B - 2218N | 18 | φ54 | φ60 | B1 | 22 | φ18 | φ46 | 13 | 35 | 0.50 |
| S3S 18B - 3018N | 18 | φ54 | φ60 | B1 | 30 | φ18 | φ46 | 13 | 43 | 0.62 |
| S3S 18B - 3516N | 18 | φ54 | φ60 | B1 | 35 | φ16(H8) | φ46 | 13 | 48 | 0.70 |

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|----------------|----------------|---|------|------|------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 16 | 22 | 0.11 | 1.09 | 2.18 | 4.36 | 7.57 | 10.06 | 12.22 | 104.09 |
| 16 | 30 | 0.15 | 1.49 | 2.97 | 5.94 | 10.33 | 13.71 | 16.66 | 142.29 |
| 16 | 35 | 0.17 | 1.73 | 3.47 | 6.93 | 12.05 | 16.00 | 19.43 | 165.21 |
| 18 | 22 | 0.13 | 1.31 | 2.62 | 5.14 | 8.81 | 11.91 | 14.43 | 125.10 |
| 18 | 30 | 0.18 | 1.79 | 3.57 | 7.01 | 12.02 | 16.25 | 19.68 | 170.93 |
| 18 | 35 | 0.21 | 2.08 | 4.17 | 8.18 | 14.02 | 18.96 | 22.96 | 198.63 |

KG 規格は“並幅” (軽荷重用) と“広幅” (重荷重用) があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車 SPUR GEARS

モジュール
MODULE

3

圧力角 20° (並歯) 歯数 20

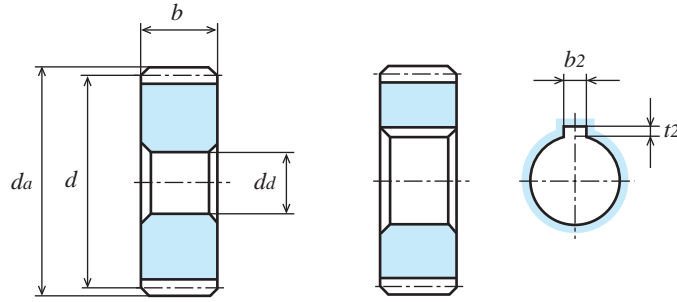
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 20

JIS B 1702-1 (ISO) 8 級 (高周波焼入品: 9 級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



仕様変更 省スペース・軽量化、締結加工不要。

Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



A1形
TYPE A1

A1形
TYPE A1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キミぞ Key Way <i>b2 × t2</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>bw</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|----------------------------------|-----------------|-----------|---------------------------------------|--|-------------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S3S 20A - 2216F | 20 | φ60 | φ66 | A1 | 22 | φ16 | - | - | 22 | - | - | - | - | - | 0.45 |
| S3S 20A = 2220 | 20 | φ60 | φ66 | A1 | 22 | φ20 | - | - | 22 | 6 × 2.8 | - | - | - | - | 0.43 |
| S3S 20A - 3018F | 20 | φ60 | φ66 | A1 | 30 | φ18 | - | - | 30 | - | - | - | - | - | 0.61 |
| S3S 20A - 3518F | 20 | φ60 | φ66 | A1 | 35 | φ18 | - | - | 35 | - | - | - | - | - | 0.71 |
| S3S 20A = 3525 | 20 | φ60 | φ66 | A1 | 35 | φ25 | - | - | 35 | 8 × 3.3 | - | - | - | - | 0.63 |
| S3S 20B - 2218 | 20 | φ60 | φ66 | B1 | 22 | φ18 | φ40 | 13 | 35 | - | - | - | - | - | 0.55 |
| S3S 20B # 2220 | 20 | φ60 | φ66 | B1 | 22 | φ20 | φ40 | 13 | 35 | 6 × 2.8 | M5 | 6.5 | - | - | 0.53 |
| ● S3S 20BF - 3012 | 20 | φ60 | φ66 | B1 | 30 | φ12(H8) | φ52 | 20 | 50 | - | - | - | - | - | 0.92 |
| ● S3S 20B - 3012H | 20 | φ60 | φ66 | B1 | 30 | φ12(H※) | φ52 | 20 | 50 | - | - | - | - | - | 0.92 |
| S3S 20B - 3018N | 20 | φ60 | φ66 | B1 | 30 | φ18 | φ52 | 13 | 43 | - | - | - | - | - | 0.80 |
| S3S 20B - 3516 | 20 | φ60 | φ66 | B1 | 35 | φ16(H8) | φ50 | 13 | 48 | - | - | - | - | - | 0.90 |
| S3S 20B # 3525 | 20 | φ60 | φ66 | B1 | 35 | φ25 | φ50 | 13 | 48 | 8 × 3.3 | M6 | 6.5 | - | - | 0.78 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 焼入 <i>H</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|----------------|---|-------|-------|-------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 20 | 22 | - | 0.15 | 1.54 | 3.08 | 5.93 | 10.03 | 13.79 | 16.65 |
| 20 | 30 | - | 0.210 | 2.110 | 4.230 | 8.140 | 13.780 | 18.950 | 22.880 |
| 20 | 30 | ○ | 0.224 | 2.240 | 4.481 | 8.659 | 14.857 | 20.558 | 24.882 |
| 20 | 35 | - | 0.24 | 2.45 | 4.90 | 9.43 | 15.96 | 21.94 | 26.50 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。 Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.010 | 0.100 | 0.200 | 0.390 | 0.680 | 0.960 | 1.190 |
| 0.044 | 0.481 | 0.992 | 1.977 | 3.496 | 4.924 | 6.019 |
| - | - | - | - | - | - | - |

平歯車 SPUR GEARS

モジュール
MODULE

3

圧力角 20° (並歯) 歯数 24

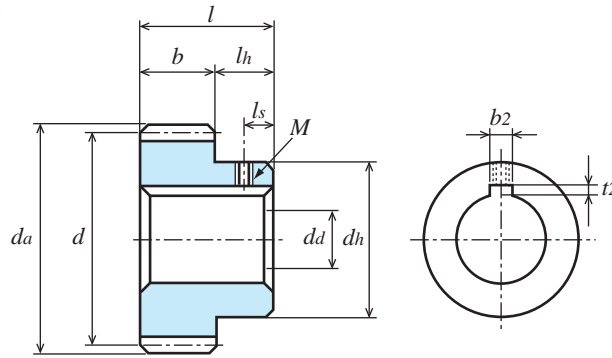
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 24

JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ 外径 Hub Diameter dh | ハブ 長さ Hub Projection lh | 全長 Overall Length l | キー みぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ 厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|--------------------------------|----------------------------------|---------------------------|--------------------------------|-----------------|-----|--------------------------------|-------------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S3S 24A - 2216F | 24 | φ72 | φ78 | A1 | 22 | φ16 | - | - | 22 | - | - | - | - | 0.67 | |
| S3S 24A = 2220 | 24 | φ72 | φ78 | A1 | 22 | φ20 | - | - | 22 | 6 × 2.8 | - | - | - | 0.65 | |
| S3S 24A = 2225 | 24 | φ72 | φ78 | A1 | 22 | φ25 | - | - | 22 | 8 × 3.3 | - | - | - | 0.61 | |
| S3S 24A - 3018F | 24 | φ72 | φ78 | A1 | 30 | φ18 | - | - | 30 | - | - | - | - | 0.90 | |
| S3S 24A - 3518F | 24 | φ72 | φ78 | A1 | 35 | φ18 | - | - | 35 | - | - | - | - | 1.05 | |
| S3S 24A = 3525 | 24 | φ72 | φ78 | A1 | 35 | φ25 | - | - | 35 | 8 × 3.3 | - | - | - | 0.98 | |
| S3S 24A = 3530 | 24 | φ72 | φ78 | A1 | 35 | φ30 | - | - | 35 | 8 × 3.3 | - | - | - | 0.92 | |
| S3S 24B - 2218 | 24 | φ72 | φ78 | B1 | 22 | φ18 | φ50 | 13 | 35 | - | - | - | - | 0.83 | |
| S3S 24B # 2220 | 24 | φ72 | φ78 | B1 | 22 | φ20 | φ50 | 13 | 35 | 6 × 2.8 | M5 | 6.5 | - | 0.81 | |
| S3S 24B # 2225 | 24 | φ72 | φ78 | B1 | 22 | φ25 | φ50 | 13 | 35 | 8 × 3.3 | M6 | 6.5 | - | 0.76 | |
| S3S 24B - 3020N | 24 | φ72 | φ78 | B1 | 30 | φ20 | φ60 | 13 | 43 | - | - | - | - | 1.14 | |
| S3S 24B - 3518 | 24 | φ72 | φ78 | B1 | 35 | φ18 | φ60 | 13 | 48 | - | - | - | - | 1.31 | |
| S3S 24B # 3525 | 24 | φ72 | φ78 | B1 | 35 | φ25 | φ60 | 13 | 48 | 8 × 3.3 | M6 | 6.5 | - | 1.21 | |
| S3S 24B # 3530 | 24 | φ72 | φ78 | B1 | 35 | φ30 | φ60 | 13 | 48 | 8 × 3.3 | M6 | 6.5 | - | 1.13 | |

【=】 (イコール) にはキー材が付いております。 [=]: Gear with key way / with key

【#】 (シャープ) にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 24 | 22 | 0.20 | 2.01 | 4.01 | 7.45 | 12.33 | 17.49 | 21.16 | 100 |
| 24 | 30 | 0.27 | 2.73 | 5.47 | 10.17 | 16.82 | 23.85 | 28.85 | 191.94 |
| 24 | 35 | 0.32 | 3.19 | 6.38 | 11.86 | 19.62 | 27.82 | 33.66 | 260.70 |
| | | | | | | | | | 304.63 |

KG 規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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WORMS AND WORM WHEELS

かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

技術資料
REFERENCE DATA

平歯車 SPUR GEARS

モジュール
MODULE

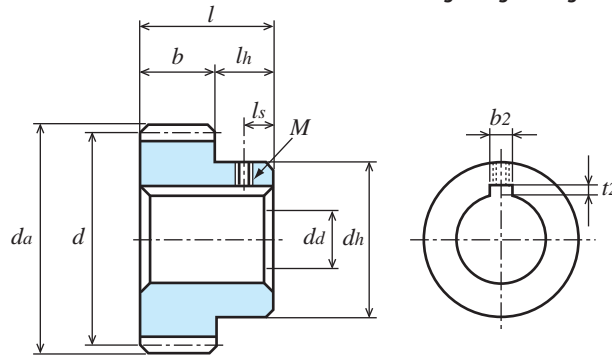
3

圧力角 20° (並歯) 歯数 25
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 25

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|-----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S3S 25A - 2218F | 25 | φ75 | φ81 | A1 | 22 | φ18 | - | - | 22 | - | - | - | - | - | 0.72 |
| S3S 25A = 2225 | 25 | φ75 | φ81 | A1 | 22 | φ25 | - | - | 22 | 8 × 3.3 | - | - | - | - | 0.67 |
| S3S 25A - 3018F | 25 | φ75 | φ81 | A1 | 30 | φ18 | - | - | 30 | - | - | - | - | - | 0.98 |
| S3S 25A - 3520F | 25 | φ75 | φ81 | A1 | 35 | φ20 | - | - | 35 | - | - | - | - | - | 1.13 |
| S3S 25A = 3525 | 25 | φ75 | φ81 | A1 | 35 | φ25 | - | - | 35 | 8 × 3.3 | - | - | - | - | 1.07 |
| S3S 25A = 3530 | 25 | φ75 | φ81 | A1 | 35 | φ30 | - | - | 35 | 8 × 3.3 | - | - | - | - | 1.01 |
| S3S 25B - 2220 | 25 | φ75 | φ81 | B1 | 22 | φ20 | φ50 | 13 | 35 | - | - | - | - | - | 0.88 |
| S3S 25B # 2225 | 25 | φ75 | φ81 | B1 | 22 | φ25 | φ50 | 13 | 35 | 8 × 3.3 | M6 | 6.5 | - | - | 0.82 |
| S3S 25BF - 3012 | 25 | φ75 | φ81 | B1 | 30 | φ12(H8) | φ60 | 20 | 50 | - | - | - | - | - | 1.43 |
| S3S 25B - 3012H | 25 | φ75 | φ81 | B1 | 30 | φ12(H※) | φ60 | 20 | 50 | - | - | - | - | - | 1.43 |
| S3S 25B - 3020N | 25 | φ75 | φ81 | B1 | 30 | φ20 | φ60 | 13 | 43 | - | - | - | - | - | 1.22 |
| S3S 25B - 3518 | 25 | φ75 | φ81 | B1 | 35 | φ18 | φ60 | 13 | 48 | - | - | - | - | - | 1.41 |
| S3S 25B # 3525 | 25 | φ75 | φ81 | B1 | 35 | φ25 | φ60 | 13 | 48 | 8 × 3.3 | M6 | 6.5 | - | - | 1.31 |
| S3S 25B # 3530 | 25 | φ75 | φ81 | B1 | 35 | φ30 | φ60 | 13 | 48 | 8 × 3.3 | M6 | 6.5 | - | - | 1.22 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|-------|--------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 25 | 22 | - | 0.21 | 2.12 | 4.25 | 7.83 | 13.01 | 18.40 | 22.29 |
| 25 | 30 | - | 0.290 | 2.910 | 5.820 | 10.710 | 17.800 | 25.180 | 30.510 |
| 25 | 30 | ○ | 0.308 | 3.083 | 6.166 | 11.441 | 19.280 | 27.391 | 33.911 |
| 25 | 35 | - | 0.34 | 3.38 | 6.76 | 12.46 | 20.69 | 29.28 | 35.47 |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.016 | 0.160 | 0.320 | 0.600 | 1.030 | 1.520 | 1.900 |
| 0.069 | 0.768 | 1.584 | 3.029 | 5.262 | 7.610 | 9.514 |
| - | - | - | - | - | - | - |

平歯車

SPUR GEARS

モジュール
MODULE

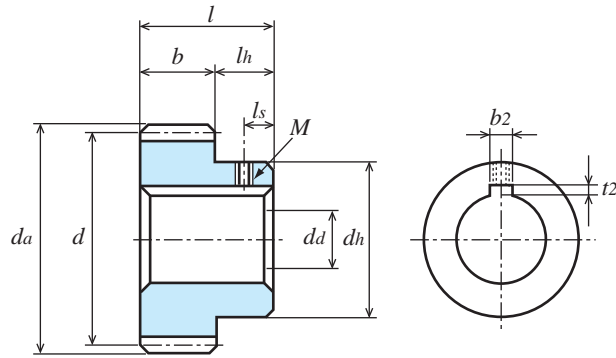
3

圧力角 20° (並歯) 歯数 28
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 28

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマゾ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|----------------------------|-----------------|-----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S3S 28A - 2218F | 28 | φ84 | φ90 | A1 | 22 | φ18 | - | - | 22 | - | - | - | - | 0.91 | |
| S3S 28A = 2225 | 28 | φ84 | φ90 | A1 | 22 | φ25 | - | - | 22 | 8 × 3.3 | - | - | - | 0.87 | |
| S3S 28A - 3020F | 28 | φ84 | φ90 | A1 | 30 | φ20 | - | - | 30 | - | - | - | - | 1.23 | |
| S3S 28A - 3520F | 28 | φ84 | φ90 | A1 | 35 | φ20 | - | - | 35 | - | - | - | - | 1.44 | |
| S3S 28A = 3525 | 28 | φ84 | φ90 | A1 | 35 | φ25 | - | - | 35 | 8 × 3.3 | - | - | - | 1.38 | |
| S3S 28A = 3530 | 28 | φ84 | φ90 | A1 | 35 | φ30 | - | - | 35 | 8 × 3.3 | - | - | - | 1.32 | |
| S3S 28B - 2220 | 28 | φ84 | φ90 | B1 | 22 | φ20 | φ50 | 13 | 35 | - | - | - | - | 1.07 | |
| S3S 28B # 2225 | 28 | φ84 | φ90 | B1 | 22 | φ25 | φ50 | 13 | 35 | 8 × 3.3 | M6 | 6.5 | - | 1.01 | |
| S3S 28B - 3022N | 28 | φ84 | φ90 | B1 | 30 | φ22 | φ60 | 13 | 43 | - | - | - | - | 1.47 | |
| S3S 28B - 3518 | 28 | φ84 | φ90 | B1 | 35 | φ18 | φ60 | 13 | 48 | - | - | - | - | 1.72 | |
| S3S 28B # 3525 | 28 | φ84 | φ90 | B1 | 35 | φ25 | φ60 | 13 | 48 | 8 × 3.3 | M6 | 6.5 | - | 1.61 | |
| S3S 28B # 3530 | 28 | φ84 | φ90 | B1 | 35 | φ30 | φ60 | 13 | 48 | 8 × 3.3 | M6 | 6.5 | - | 1.53 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリーが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 28 | 22 | 0.25 | 2.49 | 4.98 | 8.93 | 15.01 | 21.18 | 25.68 | 100 |
| 28 | 30 | 0.34 | 3.39 | 6.78 | 12.18 | 20.47 | 28.89 | 35.02 | 237.78 |
| 28 | 35 | 0.40 | 3.96 | 7.92 | 14.21 | 23.88 | 33.70 | 40.85 | 323.73 |
| | | | | | | | | | 378.16 |

KG 規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

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動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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SPUR GEARS

内歯車
INTERNAL GEARS

歯研ラック
GROUND RACKS

ラック
RACKS

ハニカムギヤ
HELICAL GEARS AND SCREW GEARS

ウォーム
WORMS AND WORM WHEELS

かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

技術資料
REFERENCE DATA

平歯車 SPUR GEARS

モジュール
MODULE

3

圧力角 20° (並歯) 歯数 30

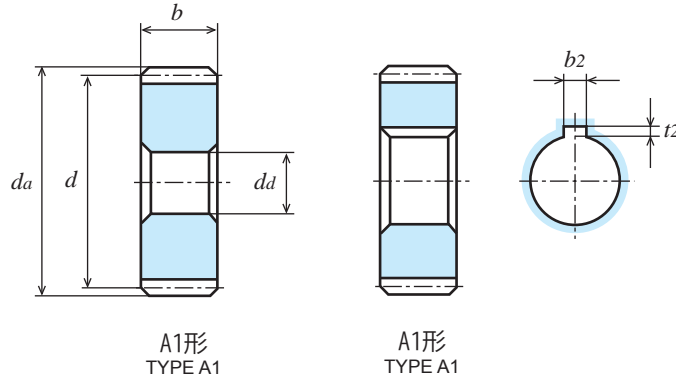
20° PRESSURE ANGLE FULL DEPTH TOOTH Z30

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of hardening: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



仕様変更 省スペース・軽量化、締結加工不要。

Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キミぞ Key Way <i>b2 × t2</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>bw</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|----------------------------------|-----------------|-----------|---------------------------------------|--|-------------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S3S 30A - 2220F | 30 | φ90 | φ96 | A1 | 22 | φ20 | - | - | 22 | - | - | - | - | - | 1.04 |
| S3S 30A = 2225 | 30 | φ90 | φ96 | A1 | 22 | φ25 | - | - | 22 | 8 × 3.3 | - | - | - | - | 1.01 |
| S3S 30A - 3022F | 30 | φ90 | φ96 | A1 | 30 | φ22 | - | - | 30 | - | - | - | - | - | 1.41 |
| S3S 30A = 3030 | 30 | φ90 | φ96 | A1 | 30 | φ30 | - | - | 30 | 8 × 3.3 | - | - | - | - | 1.33 |
| S3S 30A - 3522F | 30 | φ90 | φ96 | A1 | 35 | φ22 | - | - | 35 | - | - | - | - | - | 1.64 |
| S3S 30A = 3525 | 30 | φ90 | φ96 | A1 | 35 | φ25 | - | - | 35 | 8 × 3.3 | - | - | - | - | 1.61 |
| S3S 30A = 3530 | 30 | φ90 | φ96 | A1 | 35 | φ30 | - | - | 35 | 8 × 3.3 | - | - | - | - | 1.55 |
| S3S 30B - 2218 | 30 | φ90 | φ96 | B1 | 22 | φ18 | φ50 | 13 | 35 | - | - | - | - | - | 1.23 |
| S3S 30B # 2225 | 30 | φ90 | φ96 | B1 | 22 | φ25 | φ50 | 13 | 35 | 8 × 3.3 | M6 | 6.5 | - | - | 1.16 |
| ● S3S 30BF - 3012 | 30 | φ90 | φ96 | B1 | 30 | φ12(H8) | φ75 | 20 | 50 | - | - | - | - | - | 2.13 |
| ● S3S 30B - 3012H | 30 | φ90 | φ96 | B1 | 30 | φ12(H※) | φ75 | 20 | 50 | - | - | - | - | - | 2.13 |
| S3S 30B - 3022N | 30 | φ90 | φ96 | B1 | 30 | φ22 | φ60 | 13 | 43 | - | - | - | - | - | 1.66 |
| S3S 30B - 3520 | 30 | φ90 | φ96 | B1 | 35 | φ20 | φ60 | 13 | 48 | - | - | - | - | - | 1.92 |
| S3S 30B # 3525 | 30 | φ90 | φ96 | B1 | 35 | φ25 | φ60 | 13 | 48 | 8 × 3.3 | M6 | 6.5 | - | - | 1.84 |
| S3S 30B # 3530 | 30 | φ90 | φ96 | B1 | 35 | φ30 | φ60 | 13 | 48 | 8 × 3.3 | M6 | 6.5 | - | - | 1.76 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※
歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 焼入 <i>H</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|----------------|----------------|----------------|---|-------|-------|--------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 30 | 22 | - | 0.27 | 2.73 | 5.46 | 9.65 | 16.33 | 23.05 | 27.89 |
| 30 | 30 | - | 0.370 | 3.730 | 7.460 | 13.170 | 22.290 | 31.470 | 38.070 |
| 30 | 30 | ○ | 0.395 | 3.953 | 7.906 | 14.109 | 24.182 | 34.786 | 43.482 |
| 30 | 35 | - | 0.43 | 4.35 | 8.69 | 15.35 | 25.97 | 36.68 | 44.38 |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|-------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.023 | 0.230 | 0.470 | 0.840 | 1.500 | 2.230 | 2.790 |
| 0.102 | 1.125 | 2.320 | 4.269 | 7.542 | 11.043 | 13.940 |
| - | - | - | - | - | - | - |

平歯車 SPUR GEARS

モジュール
MODULE

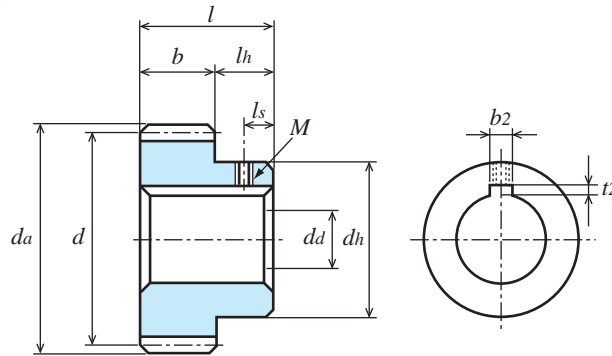
3

圧力角 20° (並歯) 歯数 32
20° PRESSURE ANGLE FULL DEPTH TOOTH Z32

JIS B 1702-1 (ISO) 8級
System of accuracy: JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマイぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------------------|-----------------|-----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S3S 32A - 2020F | 32 | φ96 | φ102 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | 1.09 | |
| S3S 32A = 2025 | 32 | φ96 | φ102 | A1 | 20 | φ25 | - | - | 20 | 8 × 3.3 | - | - | - | 1.06 | |
| S3S 32A - 3022F | 32 | φ96 | φ102 | A1 | 30 | φ22 | - | - | 30 | - | - | - | - | 1.62 | |
| S3S 32A = 3030 | 32 | φ96 | φ102 | A1 | 30 | φ30 | - | - | 30 | 8 × 3.3 | - | - | - | 1.53 | |
| S3S 32A - 3222F | 32 | φ96 | φ102 | A1 | 32 | φ22 | - | - | 32 | - | - | - | - | 1.72 | |
| S3S 32A = 3225 | 32 | φ96 | φ102 | A1 | 32 | φ25 | - | - | 32 | 8 × 3.3 | - | - | - | 1.69 | |
| S3S 32A = 3230 | 32 | φ96 | φ102 | A1 | 32 | φ30 | - | - | 32 | 8 × 3.3 | - | - | - | 1.63 | |
| S3S 32B - 2018 | 32 | φ96 | φ102 | B1 | 20 | φ18 | φ50 | 13 | 33 | - | - | - | - | 1.27 | |
| S3S 32B # 2025 | 32 | φ96 | φ102 | B1 | 20 | φ25 | φ50 | 13 | 33 | 8 × 3.3 | M6 | 6.5 | - | 1.20 | |
| S3S 32B - 3025N | 32 | φ96 | φ102 | B1 | 30 | φ25 | φ65 | 13 | 43 | - | - | - | - | 1.88 | |
| S3S 32B # 3030 | 32 | φ96 | φ102 | B1 | 30 | φ30 | φ65 | 13 | 43 | 8 × 3.3 | M6 | 6.5 | - | 1.74 | |
| S3S 32B - 3220 | 32 | φ96 | φ102 | B1 | 32 | φ20 | φ60 | 13 | 45 | - | - | - | - | 2.00 | |
| S3S 32B # 3225 | 32 | φ96 | φ102 | B1 | 32 | φ25 | φ60 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | - | 1.92 | |
| S3S 32B # 3230 | 32 | φ96 | φ102 | B1 | 32 | φ30 | φ60 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | - | 1.85 | |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|---------|---------|---|------|------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 32 | 20 | 0.27 | 2.71 | 5.41 | 9.41 | 16.03 | 22.65 | 27.36 | 100 |
| 32 | 30 | 0.41 | 4.06 | 8.12 | 14.11 | 24.05 | 33.98 | 41.04 | 258.79 |
| 32 | 32 | 0.43 | 4.33 | 8.66 | 15.05 | 25.66 | 36.25 | 43.78 | 387.71 |
| | | | | | | | | | 413.50 |

KG規格は“並幅”(軽荷重用)と“広幅”(重荷重用)があります。ご用途に応じてお選び下さい。

KG STOCK GEARS has Wide-face width for Heavy load, and Standard-face width for Light load.

You are able to multiple choices for your suitable design from our wide range.

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式はP26をご参照ください。Please refer to the conversion fomulas of power on page P26.

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平歯車 SPUR GEARS

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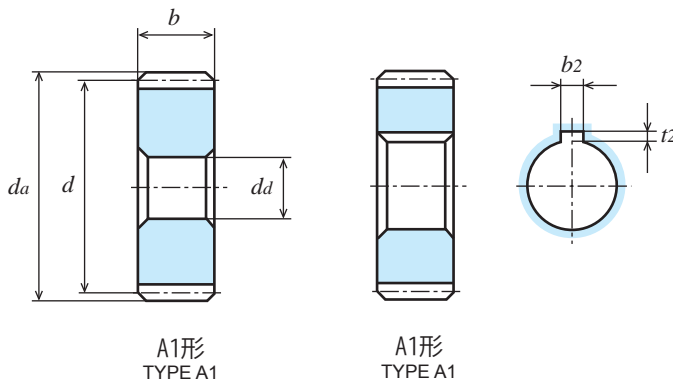
3

圧力角 20° (並歯) 歯数 36
20° PRESSURE ANGLE FULL DEPTH TOOTH Z36

JIS B 1702-1 (ISO) 8級
System of accuracy: JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $d_a(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | キミぞ Key Way $b_2 \times t_2$ | ねじ Set Screw | | リム内径 Dimension of Rim d_i | ウェブ厚さ Thickness of Web b_w | 重量 Weight $W(kg)$ |
|--------------------------|------------------------------|------------------------------------|------------------------------------|-----------|-------------------------|----------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------------------|-----------------|-------|-----------------------------------|------------------------------------|-------------------------|
| | | | | | | | | | | | M | l_s | | | |
| S3S 36A - 2020F | 36 | φ108 | φ114 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | - | 1.39 |
| S3S 36A = 2025 | 36 | φ108 | φ114 | A1 | 20 | φ25 | - | - | 20 | 8 × 3.3 | - | - | - | - | 1.36 |
| S3S 36A = 3030 | 36 | φ108 | φ114 | A1 | 30 | φ30 | - | - | 30 | 8 × 3.3 | - | - | - | - | 1.99 |
| S3S 36A - 3222F | 36 | φ108 | φ114 | A1 | 32 | φ22 | - | - | 32 | - | - | - | - | - | 2.21 |
| S3S 36A = 3225 | 36 | φ108 | φ114 | A1 | 32 | φ25 | - | - | 32 | 8 × 3.3 | - | - | - | - | 2.17 |
| S3S 36A = 3230 | 36 | φ108 | φ114 | A1 | 32 | φ30 | - | - | 32 | 8 × 3.3 | - | - | - | - | 2.12 |
| S3S 36B - 2020 | 36 | φ108 | φ114 | B1 | 20 | φ20 | φ50 | 13 | 33 | - | - | - | - | - | 1.56 |
| S3S 36B # 2025 | 36 | φ108 | φ114 | B1 | 20 | φ25 | φ50 | 13 | 33 | 8 × 3.3 | M6 | 6.5 | - | - | 1.50 |
| S3S 36B - 3025N | 36 | φ108 | φ114 | B1 | 30 | φ25 | φ70 | 13 | 43 | - | - | - | - | - | 2.39 |
| S3S 36B # 3035 | 36 | φ108 | φ114 | B1 | 30 | φ35 | φ70 | 13 | 43 | 10 × 3.3 | M8 | 6.5 | - | - | 2.21 |
| S3S 36B - 3222 | 36 | φ108 | φ114 | B1 | 32 | φ22 | φ60 | 13 | 45 | - | - | - | - | - | 2.46 |
| S3S 36B # 3225 | 36 | φ108 | φ114 | B1 | 32 | φ25 | φ60 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | - | - | 2.41 |
| S3S 36B # 3230 | 36 | φ108 | φ114 | B1 | 32 | φ30 | φ60 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | - | - | 2.33 |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|------|------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 36 | 20 | 0.32 | 3.16 | 6.20 | 10.64 | 18.39 | 26.00 | 31.63 | 100 |
| 36 | 30 | 0.47 | 4.74 | 9.31 | 15.96 | 27.58 | 39.00 | 47.44 | 301.77 |
| 36 | 32 | 0.51 | 5.06 | 9.93 | 17.02 | 29.42 | 41.60 | 50.60 | 452.65 |
| | | | | | | | | | 483.21 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

3

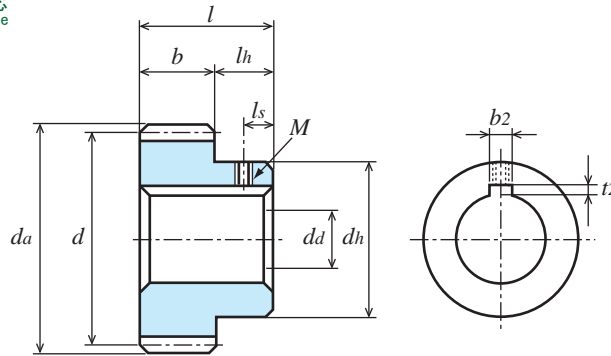
圧力角 20° (並歯) 歯数 40 45
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 40 to Z 45

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|-----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S3S 40A - 2020F | 40 | φ120 | φ126 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | - | 1.73 |
| S3S 40A = 2025 | 40 | φ120 | φ126 | A1 | 20 | φ25 | - | - | 20 | 8 × 3.3 | - | - | - | - | 1.69 |
| S3S 40A = 3030 | 40 | φ120 | φ126 | A1 | 30 | φ30 | - | - | 30 | 8 × 3.3 | - | - | - | - | 2.49 |
| S3S 40A - 3222F | 40 | φ120 | φ126 | A1 | 32 | φ22 | - | - | 32 | - | - | - | - | - | 2.75 |
| S3S 40A = 3225 | 40 | φ120 | φ126 | A1 | 32 | φ25 | - | - | 32 | 8 × 3.3 | - | - | - | - | 2.71 |
| S3S 40A = 3230 | 40 | φ120 | φ126 | A1 | 32 | φ30 | - | - | 32 | 8 × 3.3 | - | - | - | - | 2.66 |
| S3S 40B - 2020 | 40 | φ120 | φ126 | B1 | 20 | φ20 | φ50 | 13 | 33 | - | - | - | - | - | 1.90 |
| S3S 40B # 2025 | 40 | φ120 | φ126 | B1 | 20 | φ25 | φ50 | 13 | 33 | 8 × 3.3 | M6 | 6.5 | - | - | 1.84 |
| ● S3S 40BF - 3015 | 40 | φ120 | φ126 | B1 | 30 | φ15(H8) | φ85 | 20 | 50 | - | - | - | - | - | 3.47 |
| ● S3S 40B - 3015H | 40 | φ120 | φ126 | B1 | 30 | φ15(H※) | φ85 | 20 | 50 | - | - | - | - | - | 3.47 |
| S3S 40B - 3025N | 40 | φ120 | φ126 | B1 | 30 | φ25 | φ70 | 13 | 43 | - | - | - | - | - | 2.89 |
| S3S 40B # 3035 | 40 | φ120 | φ126 | B1 | 30 | φ35 | φ70 | 13 | 43 | 10 × 3.3 | M8 | 6.5 | - | - | 2.72 |
| S3S 40B - 3222 | 40 | φ120 | φ126 | B1 | 32 | φ22 | φ60 | 13 | 45 | - | - | - | - | - | 3.00 |
| S3S 40B # 3225 | 40 | φ120 | φ126 | B1 | 32 | φ25 | φ60 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | - | - | 2.95 |
| S3S 40B # 3230 | 40 | φ120 | φ126 | B1 | 32 | φ30 | φ60 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | - | - | 2.87 |
| S3S 45B - 2020 | 45 | φ135 | φ141 | B1 | 20 | φ20 | φ70 | 13 | 33 | - | - | - | - | - | 2.56 |
| S3S 45B - 3222F | 45 | φ135 | φ141 | B1 | 32 | φ22 | φ70 | 13 | 45 | - | - | - | - | - | 3.85 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|-------|--------|--------|--------|--------|--------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 40 | 20 | - | 0.36 | 3.62 | 6.98 | 11.81 | 20.69 | 29.29 | 36.23 |
| 40 | 30 | - | 0.540 | 5.420 | 10.440 | 17.680 | 30.970 | 43.830 | 54.230 |
| 40 | 30 | ○ | 0.575 | 5.749 | 11.110 | 19.063 | 33.729 | 50.593 | 63.241 |
| 40 | 32 | - | 0.58 | 5.80 | 11.16 | 18.90 | 33.11 | 46.86 | 57.97 |
| 45 | 20 | - | 0.42 | 4.20 | 7.91 | 13.19 | 23.65 | 33.62 | - |
| 45 | 32 | - | 0.67 | 6.72 | 12.66 | 21.11 | 37.83 | 53.79 | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|-------|-------|--------|--------|--------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.042 | 0.430 | 0.830 | 1.450 | 2.720 | 4.090 | 5.220 |
| 0.186 | 2.056 | 4.096 | 7.245 | 13.214 | 20.177 | 25.469 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |

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ワームとワームギヤ

かさ歯車

スプロケット

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平歯車 SPUR GEARS

モジュール
MODULE

3

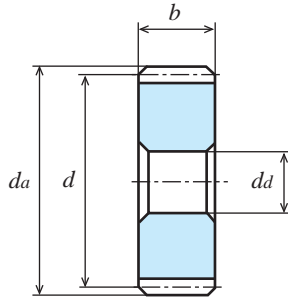
圧力角 20° (並歯) 歯数 48

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 48

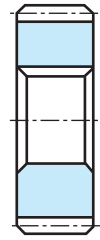
JIS B 1702-1 (ISO) 8級
System of accuracy : JIS B 1702-1(ISO) class 8



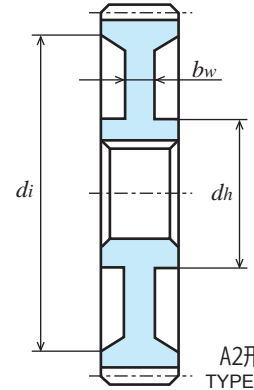
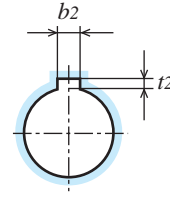
New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



A1形
TYPE A1



A1形
TYPE A1



A2形
TYPE A2

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Outside Diameter <i>da</i> | 形 Type | 歯幅 Face Width <i>b</i> | 穴径 Bore Diameter <i>da</i> (H7) | ハブ外径 Hub Diameter <i>dh</i> | ハブ長さ Hub Projection <i>lh</i> | 全長 Overall Length <i>l</i> | キミぞ Key Way <i>b2 × t2</i> | ねじ Set Screw | | リム内径 Dimension of Rim <i>di</i> | ウェブ厚さ Thickness of Web <i>bw</i> | 重量 Weight <i>W</i> (kg) |
|--------------------------|-----------------------------------|---|--|-----------|------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|----------------------------------|-----------------|-----------|---------------------------------------|--|-------------------------------|
| | | | | | | | | | | | <i>M</i> | <i>ls</i> | | | |
| S3S 48A - 2020F | 48 | φ144 | φ150 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | - | 2.51 |
| S3S 48A = 2025 | 48 | φ144 | φ150 | A2 | 20 | φ25 | φ50 | - | 20 | 8 × 3.3 | - | - | φ116 | 10 | 1.84 |
| S3S 48A = 3030 | 48 | φ144 | φ150 | A2 | 30 | φ30 | φ60 | - | 30 | 8 × 3.3 | - | - | φ116 | 16 | 2.89 |
| S3S 48A - 3222F | 48 | φ144 | φ150 | A1 | 32 | φ22 | - | - | 32 | - | - | - | - | - | 4.00 |
| S3S 48A = 3230 | 48 | φ144 | φ150 | A2 | 32 | φ30 | φ60 | - | 32 | 8 × 3.3 | - | - | φ116 | 16 | 3.04 |
| S3S 48B - 2020 | 48 | φ144 | φ150 | B1 | 20 | φ20 | φ50 | 13 | 33 | - | - | - | - | - | 2.68 |
| S3S 48B # 2025 | 48 | φ144 | φ150 | B3 | 20 | φ25 | φ50 | 13 | 33 | 8 × 3.3 | M6 | 6.5 | φ116 | 10 | 1.99 |
| S3S 48B - 3025N | 48 | φ144 | φ150 | B1 | 30 | φ25 | φ80 | 13 | 43 | - | - | - | - | - | 4.19 |
| S3S 48B # 3040 | 48 | φ144 | φ150 | B3 | 30 | φ40 | φ80 | 13 | 43 | 12 × 3.3 | M8 | 6.5 | φ116 | 16 | 3.38 |
| S3S 48B - 3222 | 48 | φ144 | φ150 | B1 | 32 | φ22 | φ60 | 13 | 45 | - | - | - | - | - | 4.25 |
| S3S 48B # 3230 | 48 | φ144 | φ150 | B3 | 32 | φ30 | φ60 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | φ116 | 16 | 3.25 |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 <i>z</i> | 歯幅 <i>b</i> | 回転速度 (min ⁻¹) revolution/min | | | | | | | 100 |
|----------------|----------------|---|------|-------|-------|-------|-------|-------|--------|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 48 | 20 | 0.46 | 4.55 | 8.46 | 14.00 | 25.40 | 36.43 | - | 434.51 |
| 48 | 30 | 0.68 | 6.83 | 12.69 | 21.01 | 38.10 | 54.65 | - | 652.24 |
| 48 | 32 | 0.73 | 7.29 | 13.54 | 22.41 | 40.64 | 58.29 | - | 696.17 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車 SPUR GEARS

モジュール
MODULE

3

圧力角 20° (並歯) 歯数 50

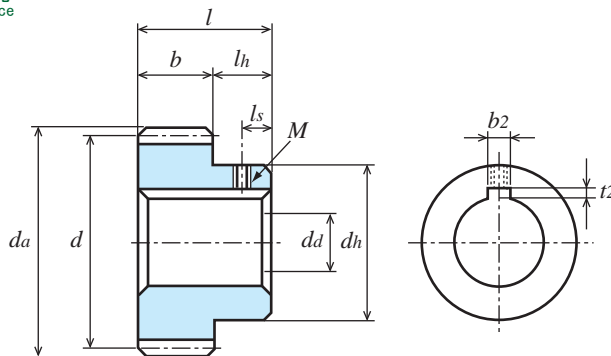
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 50

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|-----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S3S 50A - 2020F | 50 | φ150 | φ156 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | - | 2.73 |
| S3S 50A = 2025 | 50 | φ150 | φ156 | A2 | 20 | φ25 | φ 50 | - | 20 | 8 × 3.3 | - | - | φ122 | 10 | 1.97 |
| S3S 50A = 2030 | 50 | φ150 | φ156 | A2 | 20 | φ30 | φ 60 | - | 20 | 8 × 3.3 | - | - | φ122 | 10 | 1.94 |
| S3S 50A = 3030 | 50 | φ150 | φ156 | A2 | 30 | φ30 | φ 60 | - | 30 | 8 × 3.3 | - | - | φ122 | 16 | 3.10 |
| S3S 50A - 3222F | 50 | φ150 | φ156 | A1 | 32 | φ22 | - | - | 32 | - | - | - | - | - | 4.34 |
| S3S 50A = 3230 | 50 | φ150 | φ156 | A2 | 32 | φ30 | φ 60 | - | 32 | 8 × 3.3 | - | - | φ122 | 16 | 3.25 |
| S3S 50A = 3235 | 50 | φ150 | φ156 | A2 | 32 | φ35 | φ 70 | - | 32 | 10 × 3.3 | - | - | φ122 | 16 | 3.31 |
| S3S 50B - 2020 | 50 | φ150 | φ156 | B1 | 20 | φ20 | φ 60 | 13 | 33 | - | - | - | - | - | 2.98 |
| S3S 50B # 2025 | 50 | φ150 | φ156 | B3 | 20 | φ25 | φ 60 | 13 | 33 | 8 × 3.3 | M6 | 6.5 | φ122 | 10 | 2.27 |
| S3S 50B # 2030 | 50 | φ150 | φ156 | B3 | 20 | φ30 | φ 60 | 13 | 33 | 8 × 3.3 | M6 | 6.5 | φ122 | 10 | 2.22 |
| ● S3S 50BF - 3015 | 50 | φ150 | φ156 | B1 | 30 | φ15(H8) | φ105 | 20 | 50 | - | - | - | - | - | 5.43 |
| ● S3S 50B - 3015H | 50 | φ150 | φ156 | B1 | 30 | φ15(H※) | φ105 | 20 | 50 | - | - | - | - | - | 5.43 |
| S3S 50B - 3025N | 50 | φ150 | φ156 | B1 | 30 | φ25 | φ 80 | 13 | 43 | - | - | - | - | - | 4.51 |
| S3S 50B # 3040 | 50 | φ150 | φ156 | B3 | 30 | φ40 | φ 80 | 13 | 43 | 12 × 3.3 | M8 | 6.5 | φ122 | 16 | 3.58 |
| S3S 50B - 3222 | 50 | φ150 | φ156 | B1 | 32 | φ22 | φ 70 | 13 | 45 | - | - | - | - | - | 4.70 |
| S3S 50B # 3230 | 50 | φ150 | φ156 | B3 | 32 | φ30 | φ 70 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | φ122 | 16 | 3.69 |
| S3S 50B # 3235 | 50 | φ150 | φ156 | B3 | 32 | φ35 | φ 70 | 13 | 45 | 10 × 3.3 | M8 | 6.5 | φ122 | 16 | 3.60 |

●の商品は新商品です。Products with ● marks are new item.

【=】(イコール)にはキー材が付いております。 [=]: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。 [#]: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。 Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。 Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。 Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|--------|--------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 50 | 20 | - | 0.48 | 4.79 | 8.82 | 14.66 | 26.56 | 38.31 | - |
| 50 | 30 | - | 0.720 | 7.150 | 13.180 | 21.890 | 39.670 | 57.230 | - |
| 50 | 30 | ○ | 0.7585 | 7.5845 | 14.074 | 23.717 | 44.496 | 66.74 | - |
| 50 | 32 | - | 0.77 | 7.66 | 14.12 | 23.45 | 42.49 | 61.30 | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。 Please refer to the conversion fomulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|--------|--------|--------|-------|--------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.067 | 0.680 | 1.280 | 2.220 | 4.360 | 6.680 | - |
| 0.2967 | 3.2818 | 6.2774 | 10.905 | 21.09 | 32.203 | - |
| - | - | - | - | - | - | - |

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平歯車 SPUR GEARS

モジュール
MODULE

3

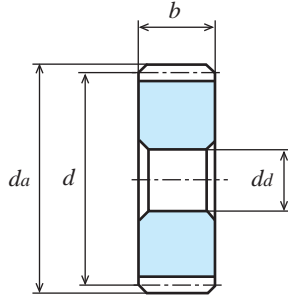
圧力角 20° (並歯) 歯数 56

20° PRESSURE ANGLE FULL DEPTH TOOTH Z 56

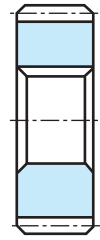
JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



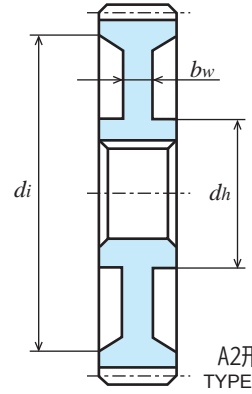
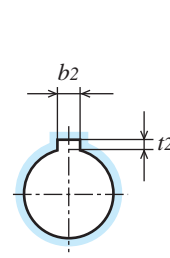
New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



A1形
TYPE A1



A1形
TYPE A1



A2形
TYPE A2

S45C 機械構造用炭素鋼 (JIS G 4051)
Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $d_a(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | キミぞ Key Way $b_2 \times t_2$ | ねじ Set Screw | | リム内径 Dimension of Rim d_i | ウェブ厚さ Thickness of Web b_w | 重量 Weight $W(kg)$ |
|--------------------------|------------------------------|------------------------------------|------------------------------------|-----------|-------------------------|----------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------------------|-----------------|-------|-----------------------------------|------------------------------------|-------------------------|
| | | | | | | | | | | | M | l_s | | | |
| S3S 56A - 2020F | 56 | $\phi 168$ | $\phi 174$ | A1 | 20 | $\phi 20$ | - | - | 20 | - | - | - | - | - | 3.43 |
| S3S 56A = 2025 | 56 | $\phi 168$ | $\phi 174$ | A2 | 20 | $\phi 25$ | $\phi 50$ | - | 20 | 8 × 3.3 | - | - | $\phi 140$ | 10 | 2.39 |
| S3S 56A - 3222F | 56 | $\phi 168$ | $\phi 174$ | A1 | 32 | $\phi 22$ | - | - | 32 | - | - | - | - | - | 5.47 |
| S3S 56A = 3230 | 56 | $\phi 168$ | $\phi 174$ | A2 | 32 | $\phi 30$ | $\phi 60$ | - | 32 | 8 × 3.3 | - | - | $\phi 140$ | 16 | 3.93 |
| S3S 56B - 2020 | 56 | $\phi 168$ | $\phi 174$ | B1 | 20 | $\phi 20$ | $\phi 60$ | 13 | 33 | - | - | - | - | - | 3.69 |
| S3S 56B # 2025 | 56 | $\phi 168$ | $\phi 174$ | B3 | 20 | $\phi 25$ | $\phi 60$ | 13 | 33 | 8 × 3.3 | M6 | 6.5 | $\phi 140$ | 10 | 2.70 |
| S3S 56B - 3222 | 56 | $\phi 168$ | $\phi 174$ | B1 | 32 | $\phi 22$ | $\phi 70$ | 13 | 45 | - | - | - | - | - | 5.83 |
| S3S 56B # 3230 | 56 | $\phi 168$ | $\phi 174$ | B3 | 32 | $\phi 30$ | $\phi 70$ | 13 | 45 | 8 × 3.3 | M6 | 6.5 | $\phi 140$ | 16 | 4.38 |
| S3S 56B # 3235 | 56 | $\phi 168$ | $\phi 174$ | B3 | 32 | $\phi 35$ | $\phi 70$ | 13 | 45 | 10 × 3.3 | M8 | 6.5 | $\phi 140$ | 16 | 4.28 |

【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

許容伝達動力表 曲げ強さ (kW)

T (N · m)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | |
| 56 | 20 | 0.55 | 5.50 | 9.87 | 16.59 | 29.97 | - | - | 100 |
| 56 | 32 | 0.88 | 8.80 | 15.80 | 26.54 | 47.95 | - | - | 840.37 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

平歯車

SPUR GEARS

モジュール
MODULE

3

圧力角 20° (並歯) 歯数 60

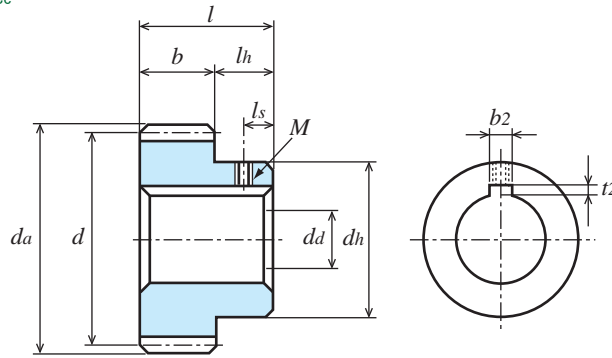
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 60

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



御注文には必ず“フルネームで商品記号”を明記してください。

Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051)

Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キミぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウェブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|---------------------------|-----------------|-----|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S3S 60A - 2020F | 60 | φ180 | φ186 | A1 | 20 | φ20 | - | - | 20 | - | - | - | - | 3.95 | |
| S3S 60A = 2030 | 60 | φ180 | φ186 | A2 | 20 | φ30 | φ60 | - | 20 | 8 × 3.3 | - | - | φ152 | 10 | 2.73 |
| S3S 60A = 3030 | 60 | φ180 | φ186 | A2 | 30 | φ30 | φ60 | - | 30 | 8 × 3.3 | - | - | φ152 | 16 | 4.24 |
| S3S 60A - 3222F | 60 | φ180 | φ186 | A1 | 32 | φ22 | - | - | 32 | - | - | - | - | 6.30 | |
| S3S 60A = 3230 | 60 | φ180 | φ186 | A2 | 32 | φ30 | φ60 | - | 32 | 8 × 3.3 | - | - | φ152 | 16 | 4.42 |
| S3S 60A = 3235 | 60 | φ180 | φ186 | A2 | 32 | φ35 | φ70 | - | 32 | 10 × 3.3 | - | - | φ152 | 16 | 4.48 |
| S3S 60B - 2022 | 60 | φ180 | φ186 | B1 | 20 | φ22 | φ60 | 13 | 33 | - | - | - | - | 4.19 | |
| S3S 60B # 2030 | 60 | φ180 | φ186 | B3 | 20 | φ30 | φ60 | 13 | 33 | 8 × 3.3 | M6 | 6.5 | φ152 | 10 | 2.94 |
| ● S3S 60BF - 3015 | 60 | φ180 | φ186 | B1 | 30 | φ15(H8) | φ130 | 20 | 50 | - | - | - | - | 7.98 | |
| ● S3S 60B - 3015H | 60 | φ180 | φ186 | B1 | 30 | φ15(H※) | φ130 | 20 | 50 | - | - | - | - | 7.98 | |
| S3S 60B - 3025N | 60 | φ180 | φ186 | B1 | 30 | φ25 | φ80 | 13 | 43 | - | - | - | - | 6.34 | |
| S3S 60B # 3040 | 60 | φ180 | φ186 | B3 | 30 | φ40 | φ80 | 13 | 43 | 12 × 3.3 | M8 | 6.5 | φ152 | 16 | 4.73 |
| S3S 60B - 3225 | 60 | φ180 | φ186 | B1 | 32 | φ25 | φ70 | 13 | 45 | - | - | - | - | 6.62 | |
| S3S 60B # 3230 | 60 | φ180 | φ186 | B3 | 32 | φ30 | φ70 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | φ152 | 16 | 4.87 |
| S3S 60B # 3235 | 60 | φ180 | φ186 | B3 | 32 | φ35 | φ70 | 13 | 45 | 10 × 3.3 | M8 | 6.5 | φ152 | 16 | 4.77 |

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【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|--------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 60 | 20 | - | 0.60 | 5.98 | 10.55 | 17.86 | 32.20 | - | - |
| 60 | 30 | - | 0.890 | 8.910 | 15.740 | 26.640 | 48.030 | - | - |
| 60 | 30 | ○ | 0.9451 | 9.4507 | 16.866 | 28.907 | 55.44 | - | - |
| 60 | 32 | - | 0.96 | 9.56 | 16.88 | 28.57 | 51.52 | - | - |

The above references are JGMA standard.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|--------|--------|-------|--------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.099 | 1.010 | 1.810 | 3.230 | 6.390 | - | - |
| 0.4347 | 4.8084 | 8.8459 | 15.63 | 30.901 | - | - |
| - | - | - | - | - | - | - |

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歯研歯車
SPUR GEARS

内歯車
INTERNAL GEARS

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GROUND RACKS

ラック
RACKS

ハニカムギヤ
HELICAL GEARS AND SCREW GEARS

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かさ歯車
BEVEL GEARS

スプロケット
SPROCKETS

技術資料
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平歯車 SPUR GEARS

モジュール
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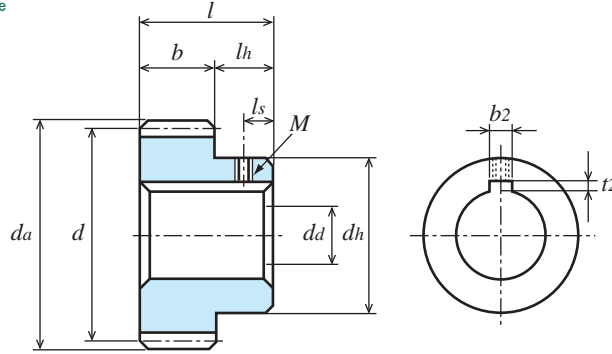
3

圧力角 20° (並歯) 歯数 64 ~ 80
20° PRESSURE ANGLE FULL DEPTH TOOTH Z 64 to Z 80

JIS B 1702-1 (ISO) 8級 (高周波焼入品: 9級)
System of accuracy: JIS B 1702-1(ISO) class 8
(Induction hardened products: class 9)



New 仕様変更 省スペース・軽量化、締結加工不要。
Specification change Space-saving and weight saving.
Additional machining on tightening is not necessary.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material: Carbon Steel (ISO C45)

単位: mm
Dimensions: mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Outside Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter da(H7) | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | キーマイぞ Key Way b2 × t2 | ねじ Set Screw | | リム内径 Dimension of Rim di | ウエブ厚さ Thickness of Web bw | 重量 Weight W(kg) |
|--------------------------|----------------------------|----------------------------------|---------------------------------|-----------|-----------------------|-------------------------------|----------------------------|------------------------------|---------------------------|-----------------------------|-----------------|------|--------------------------------|---------------------------------|-----------------------|
| | | | | | | | | | | | M | ls | | | |
| S3S 64A - 2022F | 64 | φ192 | φ198 | A1 | 20 | φ22 | - | - | 20 | - | - | - | - | 4.49 | |
| S3S 64A = 2030 | 64 | φ192 | φ198 | A2 | 20 | φ30 | φ60 | - | 20 | 8 × 3.3 | - | φ164 | 10 | 3.05 | |
| S3S 64A - 3222F | 64 | φ192 | φ198 | A1 | 32 | φ22 | - | - | 32 | - | - | - | - | 7.18 | |
| S3S 64A = 3230 | 64 | φ192 | φ198 | A2 | 32 | φ30 | φ60 | - | 32 | 8 × 3.3 | - | φ164 | 16 | 4.94 | |
| S3S 64A = 3235 | 64 | φ192 | φ198 | A2 | 32 | φ35 | φ70 | - | 32 | 10 × 3.3 | - | φ164 | 16 | 5.00 | |
| S3S 64B - 2022 | 64 | φ192 | φ198 | B1 | 20 | φ22 | φ60 | 13 | 33 | - | - | - | - | 4.74 | |
| S3S 64B # 2030 | 64 | φ192 | φ198 | B3 | 20 | φ30 | φ60 | 13 | 33 | 8 × 3.3 | M6 | 6.5 | φ164 | 10 | 3.27 |
| S3S 64B - 3225 | 64 | φ192 | φ198 | B1 | 32 | φ25 | φ70 | 13 | 45 | - | - | - | - | 7.50 | |
| S3S 64B # 3230 | 64 | φ192 | φ198 | B3 | 32 | φ30 | φ70 | 13 | 45 | 8 × 3.3 | M6 | 6.5 | φ164 | 16 | 5.38 |
| S3S 64B # 3235 | 64 | φ192 | φ198 | B3 | 32 | φ35 | φ70 | 13 | 45 | 10 × 3.3 | M8 | 6.5 | φ164 | 16 | 5.29 |
| ● S3S 70BF - 3020 | 70 | φ210 | φ216 | B1 | 30 | φ20 | φ150 | 20 | 50 | - | - | - | - | 10.78 | |
| ● S3S 70B - 3020H | 70 | φ210 | φ216 | B1 | 30 | φ20(H※) | φ150 | 20 | 50 | - | - | - | - | 10.78 | |
| ● S3S 80BF - 3020 | 80 | φ240 | φ246 | B1 | 30 | φ20 | φ170 | 20 | 50 | - | - | - | - | 14.06 | |
| ● S3S 80B - 3020H | 80 | φ240 | φ246 | B1 | 30 | φ20(H※) | φ170 | 20 | 50 | - | - | - | - | 14.06 | |

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【=】(イコール)にはキー材が付いております。【=】: Gear with key way / with key

【#】(シャープ)にはキー材とセットスクリューが付いております。【#】: Gear with key way and threaded hole / with key and screw.

カタログ記号の末尾に【H】を付した商品は歯部高周波焼入済です。Gear tooth surface completed with induction hardening, Hardness HRC47 to 53.

※ 歯部高周波焼入後の穴修正は行っていません。Bore correcting after induction hardening is not completed.

追加加工の際は、追加加工時の注意をご参照ください。Please refer to Precaution for additional process when additional process.

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 焼入 H | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------|---------|---------|---|--------|--------|--------|--------|-------|-------|
| | | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| 64 | 20 | - | 0.65 | 6.45 | 11.21 | 19.11 | 34.42 | - | - |
| 64 | 32 | - | 1.03 | 10.32 | 17.93 | 30.57 | 55.07 | - | - |
| 70 | 30 | - | 1.070 | 10.540 | 18.120 | 31.220 | 57.030 | - | - |
| 70 | 30 | ○ | 1.134 | 11.184 | 19.485 | 33.932 | 66.503 | - | - |
| 80 | 30 | - | 1.250 | 12.020 | 20.350 | 35.640 | 66.580 | - | - |
| 80 | 30 | ○ | 1.323 | 12.787 | 21.941 | 38.821 | 77.641 | - | - |

The above references are JGMA standard.

動力の換算式はP26をご参照ください。Please refer to the conversion formulas of power on page P26.

許容伝達動力表 歯面強さ (kW)

Allowable transfer capability table (kW) Surface Durability

| 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---|-------|--------|--------|--------|-------|-------|
| 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 |
| - | - | - | - | - | - | - |
| 0.137 | 1.380 | 2.430 | 4.420 | 8.950 | - | - |
| 0.600 | 6.552 | 11.768 | 21.126 | 42.681 | - | - |
| 0.181 | 1.790 | 3.120 | 5.840 | 12.180 | - | - |
| 0.794 | 8.488 | 15.014 | 27.385 | 56.459 | - | - |

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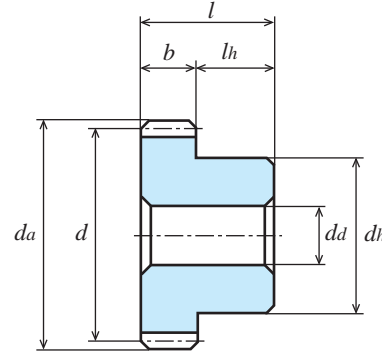
4

圧力角 20° (並歯)
20° PRESSURE ANGLE FULL DEPTH TOOTH

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



New 仕様変更 省スペース・軽量化。
Specification change Space-saving and weight saving.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $d_d(H8)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 全長 Overall Length l | 重量 Weight $W(kg)$ |
|--------------------------|------------------------------|------------------------------------|--------------------------------|-----------|-------------------------|----------------------------------|-------------------------------|---------------------------------|-----------------------------|-------------------------|
| S4S 14B - 4018N | 14 | φ56 | φ64 | B1 | 40 | φ18 | φ44 | 15 | 55 | 0.84 |
| S4S 15B - 4020N | 15 | φ60 | φ68 | B1 | 40 | φ20 | φ48 | 15 | 55 | 0.97 |
| S4S 16B - 4020N | 16 | φ64 | φ72 | B1 | 40 | φ20 | φ52 | 15 | 55 | 1.13 |
| S4S 18B - 4025N | 18 | φ72 | φ80 | B1 | 40 | φ25 | φ60 | 15 | 55 | 1.40 |
| S4S 20B - 4025N | 20 | φ80 | φ88 | B1 | 40 | φ25 | φ68 | 15 | 55 | 1.80 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

T (N · m)

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|------|------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 14 | 40 | 0.28 | 2.83 | 5.67 | 11.04 | 18.86 | 25.64 | 31.02 | 270.25 |
| 15 | 40 | 0.32 | 3.17 | 6.35 | 12.23 | 20.70 | 28.46 | 34.37 | 302.72 |
| 16 | 40 | 0.35 | 3.52 | 7.05 | 13.41 | 22.51 | 31.29 | 37.72 | 336.14 |
| 18 | 40 | 0.42 | 4.24 | 8.47 | 15.74 | 26.05 | 36.93 | 44.68 | 404.90 |
| 20 | 40 | 0.50 | 4.97 | 9.95 | 18.06 | 30.19 | 42.60 | 51.70 | 474.62 |

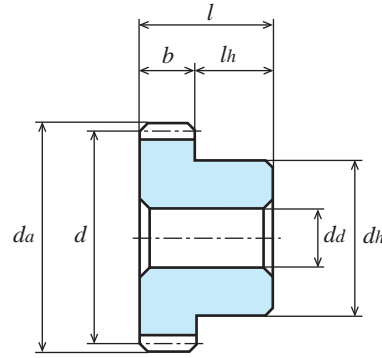
The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion formulas of power on page P26.

JIS B 1702-1 (ISO) 8 級
System of accuracy : JIS B 1702-1(ISO) class 8



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



B1形
TYPE B1

S45C 機械構造用炭素鋼 (JIS G 4051) Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter da | 形 Type | 歯幅 Face Width b | 穴径 Bore Diameter $da(H8)$ | ハブ外径 Hub Diameter dh | ハブ長さ Hub Projection lh | 全長 Overall Length l | 重量 Weight $W(kg)$ |
|--------------------------|------------------------------|------------------------------------|-------------------------------|-----------|-------------------------|---------------------------------|------------------------------|--------------------------------|-----------------------------|-------------------------|
| S5S 14B - 5020N | 14 | φ 70 | φ 80 | B1 | 50 | φ20 | φ55 | 15 | 65 | 1.63 |
| S5S 15B - 5025N | 15 | φ 75 | φ 85 | B1 | 50 | φ25 | φ60 | 15 | 65 | 1.82 |
| S5S 16B - 5025N | 16 | φ 80 | φ 90 | B1 | 50 | φ25 | φ65 | 15 | 65 | 2.11 |
| S5S 18B - 5025N | 18 | φ 90 | φ100 | B1 | 50 | φ25 | φ75 | 15 | 65 | 2.77 |
| S5S 20B - 5030N | 20 | φ100 | φ110 | B1 | 50 | φ30 | φ85 | 15 | 65 | 3.39 |

許容伝達動力表 曲げ強さ (kW)

Allowable transfer capability table (W) Bending Strength

| 歯数 z | 歯幅 b | 回転速度 (min ⁻¹) revolution/min | | | | | | | 回転速度 (min ⁻¹) revolution/min |
|-----------|-----------|---|------|-------|-------|-------|-------|-------|---|
| | | 10 | 100 | 200 | 400 | 800 | 1,200 | 1,500 | 100 |
| 14 | 50 | 0.55 | 5.48 | 10.96 | 20.48 | 33.97 | 47.98 | 58.00 | 523.32 |
| 15 | 50 | 0.61 | 6.14 | 12.28 | 22.62 | 37.57 | 53.16 | 64.40 | 586.35 |
| 16 | 50 | 0.68 | 6.81 | 13.62 | 24.74 | 41.36 | 58.36 | 70.83 | 650.33 |
| 18 | 50 | 0.82 | 8.19 | 16.38 | 28.92 | 48.95 | 69.12 | 83.62 | 782.12 |
| 20 | 50 | 0.96 | 9.62 | 19.10 | 33.04 | 56.58 | 79.97 | 96.47 | 918.68 |

The above numerical values are equivalent to JGMA formulas as reference only.

動力の換算式は P26 をご参照ください。Please refer to the conversion fomulas of power on page P26.

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内歯車 (インターナルギヤ)

Internal Gears

商品記号の読み方 Reference of Catalogue Number

IS 50 B 60 A - 03 50
IS 80 B 100 A - 07 05
IS 1 S 120 A - 10 50

| 歯車の種類 Kind of Gear | モジュールの大きさ Module | 材質 Material | 歯数 Number of Teeth | 形状 Type | - | 歯幅 Face Width | 外形 Outside Diameter of ring |
|---------------------------------|--|---|---|--------------------|---|-----------------------------------|---|
| IS: インターナルスパー internal Gears | モジュールが1未満の場合表示は100倍の数値です。 例 m0.5 → 50 Expressed the unit of module's size. Module 0.5 and 0.8 as multiple of 100. Example m0.5 → 50 m0.8 → 80 | B: 黄銅 C3713P C3604B Brass S: S45C Carbon Steel | 60～120Tまで、主として12の公倍数が揃っています。 As for the number of teeth, we have the varieties from 60z to 120 z as 12 of common multiple. | A: ハブ無し hubless | 内歯車の場合全て“-”です。 Gear without Key Way / without Thread hole. | 単位: (mm) Dimension: millimeter | 単位: (mm) 例 φ100 → 00 φ105 → 05 φ150 → 50 Dimension: millimeter |

※ m0.8 以上で外径 D が 100 以上の商品は下 2 桁の数値の表示になります。

内歯車 (インターナルギヤ) インフォメーション

○ KG 内歯車の特徴

1. モジュールは m0.5, m0.8, m1 の 3 種類で小モジュール中心に規格を充実しました。
2. 外輪のはめあい公差を h8 とし、ハウジング等の穴にそのままはめあう様加工しています。
3. 相手ピニオンは、KG 平歯車の中からお選び下さい。

The Feature of Internal Gears

- 1) Range: Module 0.5, 0.8 and 1.0
- 2) Fit tolerance of the Outer Rim has tolerance of H8, this can be installed at hole of housing without modification.
- 3) Please refer to the KG-catalogue of Spur gear for the sun and planet gears.

○ ご使用上の注意

1. 内歯車の中に入る外歯車の歯数には、制約がありますので注意して下さい。(詳しくは「内歯車の干渉」をご覧ください。)
2. 遊星歯車機構を設計される場合、遊星歯車及び太陽歯車には、歯数の制約と組立条件とがありますので、注意して下さい。

Usage of Precaution

- 1) Note that planet gear has limited number of teeth, refer to the range of number of teeth (see table 1)
- 2) Refer to the interference for planet and sun gears assembly, it has a limited number of teeth for your design.

内歯車 (インターナルギヤ) INTERNAL GEARS

モジュール
MODULE

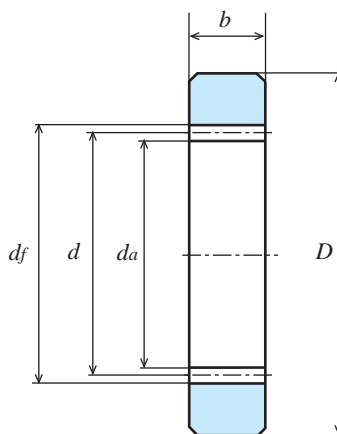
0.5/0.8

圧力角 20° (並歯)

20° PRESSURE ANGLE FULL DEPTH TOOTH



御注文には必ず“フルネームで商品記号”を明記してください。
Please refer to the catalogue reference while ordering.



RoHS 対応

2006年11月生産開始分より欧州 RoHS 指令に対応できる商品を提供しています。

We supplied the KG-products with RoHS compliance of EU to all our valued customers since November 2006

C3713P 快削黄銅板、C3604B 快削黄銅棒

Material : Brass (ISO CuZn38Pb2,CuZn39Pb3)

単位 : mm
Dimensions : mm

| モジュール Module | 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 歯底円直径 Root Diameter d_f | 歯幅 Face Width b | 外径 Outside Diameter of Ring D | 重量 Weight $W(g)$ |
|-----------------|--------------------------|------------------------------|------------------------------------|--------------------------------|---------------------------------|-------------------------|---------------------------------------|------------------------|
| 0.5 | IS50B 60A - 0350 | 60 | $\phi 30.0$ | $\phi 29.0$ | $\phi 31.25$ | 3 | $\phi 50$ | 32.0 |
| 0.5 | IS50B 80A - 0360 | 80 | $\phi 40.0$ | $\phi 39.0$ | $\phi 41.25$ | 3 | $\phi 60$ | 40.1 |
| 0.5 | IS50B 90A - 0370 | 90 | $\phi 45.0$ | $\phi 44.0$ | $\phi 46.25$ | 3 | $\phi 70$ | 57.6 |
| 0.5 | IS50B 100A - 0375 | 100 | $\phi 50.0$ | $\phi 49.0$ | $\phi 51.25$ | 3 | $\phi 75$ | 62.6 |
| 0.5 | IS50B 120A - 0380 | 120 | $\phi 60.0$ | $\phi 59.0$ | $\phi 61.25$ | 3 | $\phi 80$ | 56.1 |

C3713P 快削黄銅板、C3604B 快削黄銅棒

Material : Brass (ISO CuZn38Pb2,CuZn39Pb3)

単位 : mm
Dimensions : mm

| モジュール Module | 商品記号 Catalogue Number | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 歯底円直径 Root Diameter d_f | 歯幅 Face Width b | 外径 Outside Diameter of Ring D | 重量 Weight $W(g)$ |
|-----------------|--------------------------|------------------------------|------------------------------------|--------------------------------|---------------------------------|-------------------------|---------------------------------------|------------------------|
| 0.8 | IS80B 60A - 0780 | 60 | $\phi 48.0$ | $\phi 46.4$ | $\phi 50.0$ | 7 | $\phi 80$ | 191.4 |
| 0.8 | IS80B 80A - 0790 | 80 | $\phi 64.0$ | $\phi 62.4$ | $\phi 66.0$ | 7 | $\phi 90$ | 187.1 |
| 0.8 | IS80B 90A - 0700 | 90 | $\phi 72.0$ | $\phi 70.4$ | $\phi 74.0$ | 7 | $\phi 100$ | 225.1 |
| 0.8 | IS80B 100A - 0705 | 100 | $\phi 80.0$ | $\phi 78.4$ | $\phi 82.0$ | 7 | $\phi 105$ | 216.1 |
| 0.8 | IS80B 120A - 0720 | 120 | $\phi 96.0$ | $\phi 94.4$ | $\phi 98.0$ | 7 | $\phi 120$ | 242.3 |

S45C 機械構造用炭素鋼 (JIS G 4051)

Material : Carbon Steel (ISO C45)

単位 : mm
Dimensions : mm

| モジュール Module | 商品記号 Catalogue Number | 歯数 Number of Teeth <i>z</i> | 基準円直径 Reference Diameter <i>d</i> | 歯先円直径 Tip Diameter <i>d_a</i> | 歯底円直径 Root Diameter <i>d_f</i> | 歯幅 Face Width <i>b</i> | 外径 Outside Diameter of Ring <i>D</i> | 重量 Weight <i>W(g)</i> |
|-----------------|--------------------------|-----------------------------------|---|---|--|------------------------------|--|-----------------------------|
| 1 | IS1S 60A - 1090 | 60 | φ 60.0 | φ 58.0 | φ 62.5 | 10 | φ 90 | 277.4 |
| 1 | IS1S 80A - 1010 | 80 | φ 80.0 | φ 78.0 | φ 82.5 | 10 | φ 110 | 351.4 |
| 1 | IS1S 90A - 1020 | 90 | φ 90.0 | φ 88.0 | φ 92.5 | 10 | φ 120 | 388.4 |
| 1 | IS1S 100A - 1030 | 100 | φ 100.0 | φ 98.0 | φ 102.5 | 10 | φ 130 | 425.4 |
| 1 | IS1S 120A - 1050 | 120 | φ 120.0 | φ 118.0 | φ 122.5 | 10 | φ 150 | 499.4 |

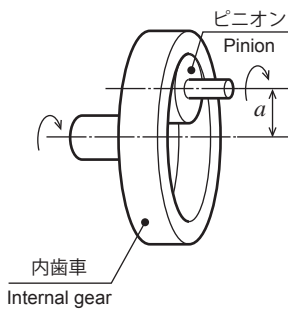
内歯車の干渉

内歯車とピニオン (外歯車) とをかみ合わせるとき、内歯車の歯数が少なかったり、内歯車とピニオンの歯数差が少なかったりすると、組み立てできないことがあります。これらの不都合を、「内歯車の干渉」といい、次表に干渉の種類とその現象と原因を示します。

Interference will occur when design provides insufficient Number of teeth between Internal and Planet gears (External gear) during assembly.

主な使用例 For example

1. 内歯車と外歯車のかみ合い
Engagement between Internal and Pinion.



外歯車同士のかみ合いに比べ、中心距離 *a* が短くなり、互いに同じ方向の回転が得られません。

伝達比 *u* は

- a) ピニオンが駆動車となる場合
Pinion is driver gear.

$$u = \frac{\text{ピニオンの歯数}}{\text{内歯車の歯数}} \text{ (減速)}$$

$$u = \frac{\text{No. of teeth of pinion}}{\text{No. of teeth of Internal gear}} \text{ (Speed Reducer)}$$

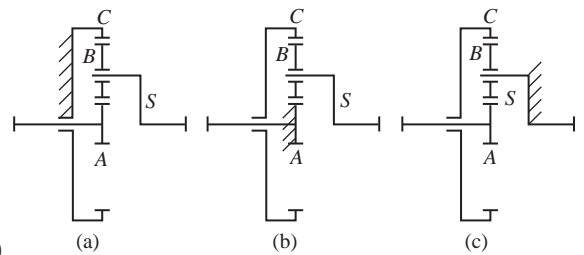
- b) 内歯車が駆動車となる場合
Internal gear is driver gear.

$$u = \frac{\text{内歯車の歯数}}{\text{ピニオンの歯数}} \text{ (増速)}$$

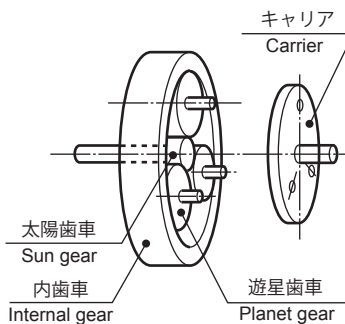
$$u = \frac{\text{No. of teeth of Internal gear}}{\text{No. of teeth of pinion}} \text{ (Speed increaser)}$$

となります。

- 単列遊星歯車機構の基本軸 (2K-H)
Basic gear axis for Planetary gear train mechanism (2K-H).



2. 遊星歯車機構
Planetary gear mechanism



遊星歯車機構は、太陽歯車、遊星歯車、内歯車、キャリア (腕) から構成され、コンパクトで大きな減速比がえられます。

Most mechanism of Planetary gear comes with compact design and high reductive gear ratio consisting of Sun, Planet, Internal gears and Planet carrier.

| 種類 Type of mechanism | 固定要素 Fixed factor | 入力 Input | 出力 Output | 減速比の計算式 Formula of gear ratio | 減速比の範囲 Ratio |
|---------------------------------|----------------------|----------------------|----------------------|---|-----------------|
| (a) プラネタリ型 Type of planetary | 内歯車 Internal gear | 太陽歯車 Sun gear | キャリア Carrier | $\frac{1}{\frac{zC}{zA} + 1}$ (<i>z</i> : Number of teeth) | 1/3 ~ 1/12 |
| (b) ソーラ型 Type of solar | 太陽歯車 Sun gear | 内歯車 Internal gear | キャリア Carrier | $\frac{1}{\frac{zA}{zC} + 1}$ | 1/1.2 ~ 1/1.7 |
| (c) スター型 Type of star | キャリア (腕) Carrier | 太陽歯車 Sun gear | 内歯車 Internal gear | $-\frac{1}{\frac{zC}{zA}}$ Input and output axis have opposite rotation | 1/2 ~ 1/11 |

・ *z* は歯数を示し、添付の A、C は各々太陽歯車、内歯車を示す。

・ 負記号は、入力回転と反対の出力回転方向を示す。

z: Number of teeth, A&C: Sun and internal Gears.

[-]: Expressed output rotated direction against input rotation.

内歯車 (インターナルギヤ)

INTERNAL GEARS

Please refer to the causes and types of interference as follows.

Interference of Internal Gear (Table 1)

There are restriction of the number of teeth for the planet gear and the sun gear when the planetary gear mechanism is designed.

| 干渉 Interference | 現象 Phenomenon | 原因 Cause | 干渉 Interference | 現象 Phenomenon | 原因 Cause |
|------------------------------------|---|---|----------------------------------|---|---|
| インボリュート干渉 Involute interference | ピニオンの歯元に内歯車の歯先が食い込んで、回転できない。 Unworkable conditions when a Tooth tip of Internal gear cuts into Dedendum of pinion during operations. | ピニオンの歯数が少ない。 Insufficient of Number of Teeth for Pinion gear. | トリミング干渉 Trimming interference | 組付けの際、ピニオンは、軸方向に入れる事はできても、半径方向に出入れできない。 During assembling, pinion can be assembled to axial direction but not to radius direction. | トロコイド干渉と同じ Same as Trochoid interference. |
| トロコイド干渉 Trochoid interference | 噛合を終えたピニオン歯先がふたたび内歯車の歯先と接触し、回転できない。 Tip of pinion after engaging with Sun gear interferes to Tooth tip of Internal gear causing unworkable conditions. | 内・外歯車の歯数差が少ない。 Difference in No. of teeth between Internal and Planet is insufficient. | 隅肉干渉 Fillet interference | 内歯車の歯元隅肉部にピニオン歯先が接触し、回転できない。 Tooth tip of pinion touched Dedendum fillet of Internal gear causing unworkable condition. | ピニオンの歯数が少ない (ピニオンの歯たけが低い) Insufficient No. of teeth for pinion. (insufficient Tooth depth of pinion.) |

遊星歯車の組立条件 Relationship among the gears in a planetary gear mechanism

遊星歯車を設計する場合、次の条件を満足するような歯数構成としてください。

When designing Planet gear, please achieve following conditions.

- ① 内歯車の歯数 = 太陽歯車の歯数 + 2 × (遊星歯車の歯数)
No of teeth of Internal gear = (No. of teeth of Sun gear + 2) × No. of teeth of Planet gear.
- ②
$$\frac{\text{内歯車の歯数} + \text{太陽歯車の歯数}}{\text{遊星歯車の使用個数}} = \text{整数であること}$$

$$\frac{\text{No. of teeth of (Internal gear + Sun gear)}}{\text{The number of Planet gear}} = \text{Should be Integer number}$$
- ③ 遊星歯車同志の歯先干渉を起こさないこと
Prevent the Tip interference among Planet gears.
 $m(ZB+2) < m(ZA+ZB) \sin(\pi/n)$ (n: 遊星歯車の個数 The number of Planet gear π [rad])

KG 内歯車とかみ合う遊星歯車の歯数範囲 Range of number of teeth for pinion and KG-Internal gears

| 内歯車の歯数 Number of teeth of Internal gear | 遊星歯車の歯数範囲 Range of number of teeth for pinion | 内歯車の歯数 Number of teeth of Internal gear | 遊星歯車の歯数範囲 Range of number of teeth for pinion |
|--|--|--|--|
| 60 | 21 ~ 44 | 100 | 19 ~ 84 |
| 80 | 20 ~ 64 | 120 | 19 ~ 104 |
| 90 | 19 ~ 74 | | |

内歯車 (インターナルギヤ)

INTERNAL GEARS

組み合わせの例 The combination of KG STOCK GEARS

| 内歯車歯数 No. of teeth of Internal gear | プラネット 個 数 The number of Planet gears. | 太陽歯車 歯 数 No. of teeth of Sun gears | 遊星歯車 歯 数 No. of teeth of Planet gear | プラネタリ型 減速比 Gear ratio of planetary type | スター型 減速比 Gear ratio of star type | ソーラ型 減速比 Gear ratio of solar. |
|---|--|---|---|--|---|--|
| 60 | 3 | 12 | 24 | 1/6.00 | 1/5.00 | 1/1.20 |
| 60 | 4 | 16 | 22 | 1/4.75 | 1/3.75 | 1/1.26 |
| 80 | 3 | 16 | 32 | 1/6.00 | 1/5.00 | 1/1.20 |
| 80 | 3 | 40 | 20 | 1/3.00 | 1/2.00 | 1/1.50 |
| 80 | 4 | 20 | 30 | 1/5.00 | 1/4.00 | 1/1.25 |
| 80 | 4 | 32 | 24 | 1/3.50 | 1/2.50 | 1/1.40 |
| 80 | 4 | 40 | 20 | 1/3.00 | 1/2.00 | 1/1.50 |
| 80 | 5 | 40 | 20 | 1/3.00 | 1/2.00 | 1/1.50 |
| 90 | 3 | 18 | 36 | 1/6.00 | 1/5.00 | 1/1.20 |
| 90 | 3 | 30 | 30 | 1/4.00 | 1/3.00 | 1/1.33 |
| 90 | 4 | 18 | 36 | 1/6.00 | 1/5.00 | 1/1.20 |
| 90 | 4 | 30 | 30 | 1/4.00 | 1/3.00 | 1/1.33 |
| 90 | 4 | 50 | 20 | 1/2.80 | 1/1.80 | 1/1.55 |
| 90 | 5 | 30 | 30 | 1/4.00 | 1/3.00 | 1/1.33 |
| 90 | 5 | 50 | 20 | 1/2.80 | 1/1.80 | 1/1.55 |

| 内歯車歯数 No. of teeth of Internal gear | プラネット 個 数 The number of Planet gears. | 太陽歯車 歯 数 No. of teeth of Sun gears | 遊星歯車 歯 数 No. of teeth of Planet gear | プラネタリ型 減速比 Gear ratio of planetary type | スター型 減速比 Gear ratio of star type | ソーラ型 減速比 Gear ratio of solar. |
|---|--|---|---|--|---|--|
| 100 | 3 | 20 | 40 | 1/ 6.00 | 1/ 5.00 | 1/1.20 |
| 100 | 3 | 50 | 25 | 1/ 3.00 | 1/ 2.00 | 1/1.50 |
| 100 | 4 | 20 | 40 | 1/ 6.00 | 1/ 5.00 | 1/1.20 |
| 100 | 4 | 40 | 30 | 1/ 3.50 | 1/ 2.50 | 1/1.40 |
| 100 | 5 | 40 | 30 | 1/ 3.50 | 1/ 2.50 | 1/1.40 |
| 100 | 5 | 50 | 25 | 1/ 3.00 | 1/ 2.00 | 1/1.50 |
| 120 | 3 | 12 | 54 | 1/11.00 | 1/10.00 | 1/1.10 |
| 120 | 3 | 24 | 48 | 1/ 6.00 | 1/ 5.00 | 1/1.20 |
| 120 | 3 | 30 | 45 | 1/ 5.00 | 1/ 4.00 | 1/1.25 |
| 120 | 3 | 48 | 36 | 1/ 3.50 | 1/ 2.50 | 1/1.40 |
| 120 | 3 | 60 | 30 | 1/ 3.00 | 1/ 2.00 | 1/1.50 |
| 120 | 4 | 24 | 48 | 1/ 6.00 | 1/ 5.00 | 1/1.20 |
| 120 | 4 | 40 | 40 | 1/ 4.00 | 1/ 3.00 | 1/1.33 |
| 120 | 4 | 80 | 20 | 1/ 2.50 | 1/ 1.50 | 1/1.66 |

The above variety of Sun, Planet and Internal gear are KG-STOCK GEARS series.

この表の太陽歯車、遊星歯車はほとんど規格歯車で揃っています。

※この他にも太陽歯車、遊星歯車をいろいろ組合せれば多くの減速比が求められます。(減速比の計算式参照のこと)

※組合せを 2 重にすれば減速比は (1 段目の比率) × (2 段目の比率) となり高比率の減速になります。

High ratio can be obtained by doubly jointing the planetary gear boxes.

To obtain the variety of gear ratio when combining with another Sun and Planet gears, please refer to the calculation of gear ratio.

To obtain high gear ratio when assembling the double and triple combinations.

Memo

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