

スパイラルベベルギヤ

SPIRAL BEVEL GEARS

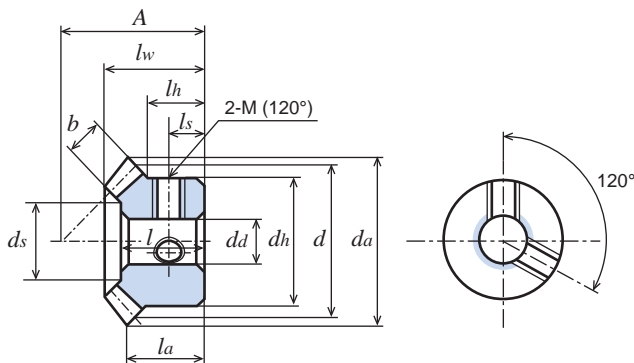
モジュール 1
MODULE

圧力角 20° 歯数比 1:2、1:3 ねじれ角 35°
1:1 and 1:2 Ratio 20° PRESSURE ANGLE 35° SPIRAL ANGLE

JIS B1704 3級 (歯部高周波焼入品:4級)
System of Accuracy: JIS B 1704 Class 3
(Induction hardened products: Class 4)



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.
 d_s の寸法は参考値です。
Dimension of d_s is for reference only.



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 | 歯数比 Ratio u | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 組立距離 Locating Distance A | 穴径 Bore Diameter $d_d(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 穴長さ Bore Length l | 全長 Overall Length l_w | Tip Distance l_a | 歯幅 Face Width b | ねじ Set Screw | | 歯先角 Face Angle δ_a | d_s | 重量 Weight $W(g)$ |
|--------------------------|---------------------|------------------------------|------------------------------------|--------------------------------|----------------------------------|----------------------------------|-------------------------------|---------------------------------|---------------------------|-------------------------------|-----------------------|-------------------------|-----------------|-------|---------------------------------|-------------|------------------------|
| | | | | | | | | | | | | | M | l_s | | | |
| ● B1S 20L - 8 | 2 | 20 | $\phi 20$ | $\phi 21.87$ | 29.6 | $\phi 8$ | $\phi 16$ | 8.6 | 14 | 15 | 10.07 | 5.7 | - | - | 30°13' | $\phi 12.1$ | 18.8 |
| B1S 20L * 8 | 2 | 20 | $\phi 20$ | $\phi 21.87$ | 29.6 | $\phi 8$ | $\phi 16$ | 8.6 | 14 | 15 | 10.07 | 5.7 | 2-M4 | 4 | 30°13' | $\phi 12.1$ | 18.2 |
| B1S 20L * 8H | 2 | 20 | $\phi 20$ | $\phi 21.87$ | 29.6 | $\phi 8(H8)$ | $\phi 16$ | 8.6 | 14 | 15 | 10.07 | 5.7 | 2-M4 | 4 | 30°13' | $\phi 12.1$ | 18.2 |
| ● B1S 40R - 10 | 2 | 40 | $\phi 40$ | $\phi 40.41$ | 21.8 | $\phi 10$ | $\phi 25$ | 8 | 13 | 14.57 | 12.21 | 5.7 | - | - | 65°36' | $\phi 28.4$ | 66.9 |
| B1S 40R * 10 | 2 | 40 | $\phi 40$ | $\phi 40.41$ | 21.8 | $\phi 10$ | $\phi 25$ | 8 | 13 | 14.57 | 12.21 | 5.7 | 2-M5 | 4 | 65°36' | $\phi 28.4$ | 65.1 |
| B1S 40R * 10H | 2 | 40 | $\phi 40$ | $\phi 40.41$ | 21.8 | $\phi 10(H8)$ | $\phi 25$ | 8 | 13 | 14.57 | 12.21 | 5.7 | 2-M5 | 4 | 65°36' | $\phi 28.4$ | 65.1 |
| ● B1S 15L - 6 | 3 | 15 | $\phi 15$ | $\phi 17.07$ | 31 | $\phi 6$ | $\phi 13$ | 8.17 | 14.4 | 15.07 | 8.85 | 6.7 | - | - | 21°53' | $\phi 8.0$ | 12.1 |
| B1S 15L * 6 | 3 | 15 | $\phi 15$ | $\phi 17.07$ | 31 | $\phi 6$ | $\phi 13$ | 8.17 | 14.4 | 15.07 | 8.85 | 6.7 | 2-M4 | 4 | 21°53' | $\phi 8.0$ | 11.5 |
| B1S 15L * 6H | 3 | 15 | $\phi 15$ | $\phi 17.07$ | 31 | $\phi 6(H8)$ | $\phi 13$ | 8.17 | 14.4 | 15.07 | 8.85 | 6.7 | 2-M4 | 4 | 21°53' | $\phi 8.0$ | 11.5 |
| ● B1S 45R - 10 | 3 | 45 | $\phi 45$ | $\phi 45.25$ | 20 | $\phi 10$ | $\phi 25$ | 8 | 12.9 | 14.8 | 12.88 | 6.7 | - | - | 73°21' | $\phi 31.1$ | 80.6 |
| B1S 45R * 10 | 3 | 45 | $\phi 45$ | $\phi 45.25$ | 20 | $\phi 10$ | $\phi 25$ | 8 | 12.9 | 14.8 | 12.88 | 6.7 | 2-M5 | 4 | 73°21' | $\phi 31.1$ | 78.8 |
| B1S 45R * 10H | 3 | 45 | $\phi 45$ | $\phi 45.25$ | 20 | $\phi 10(H8)$ | $\phi 25$ | 8 | 12.9 | 14.8 | 12.88 | 6.7 | 2-M5 | 4 | 73°21' | $\phi 31.1$ | 78.8 |

● 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。【H】: Gear tooth surface completed with induction hardening, Hardness HRC 47 to 53.
【*】(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 (W) 曲げ強さ

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|-------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B1S 20L * 8 | 46.5 | 93.0 | 139.5 | 179.1 | 214.1 | 246.3 | 266.3 |
| B1S 20L * 8H | 40.6 | 81.2 | 121.8 | 157.3 | 189.4 | 219.3 | 238.0 |
| B1S 15L * 6 | 35.7 | 71.5 | 107.3 | 143.1 | 174.2 | 202.1 | 219.7 |
| B1S 15L * 6H | 31.2 | 62.4 | 93.7 | 124.9 | 152.8 | 178.2 | 194.4 |

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 (W) 歯面強さ

Allowable transfer capability table (W) Surface Durability

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|------|------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B1S 20L * 8 | 7.9 | 16.0 | 24.2 | 31.3 | 36.4 | 42.7 | 47.5 |
| B1S 20L * 8H | 21.8 | 44.9 | 68.6 | 89.8 | 109.2 | 127.4 | 139.0 |
| B1S 15L * 6 | 5.0 | 10.1 | 15.2 | 20.4 | 25.0 | 29.2 | 31.8 |
| B1S 15L * 6H | 13.8 | 28.6 | 43.7 | 59.0 | 72.9 | 85.7 | 93.9 |

目次 CONTENTS
インフォメーション INFORMATION
ギヤボックス GEAR BOXES
ノーバッキングスピリヤ ANTI BACKLASH SPIRAL GEAR
歯研削歯車 GROUND SPUR GEARS
平歯車 SPUR GEARS
内歯車 INTERNAL GEARS
歯研削ラック GROUND RACKS
ラック RACKS
ヘリカル・スピリヤ HEILICAL GEAR AND SCREW GEARS
ワーム・ワームギヤ WORMS AND WORM GEAR
かなめ歯車 BEVEL GEARS
スプロケット SPROCKETS
技術資料 REFERENCE DATA

スパイラルベベルギヤ SPIRAL BEVEL GEARS

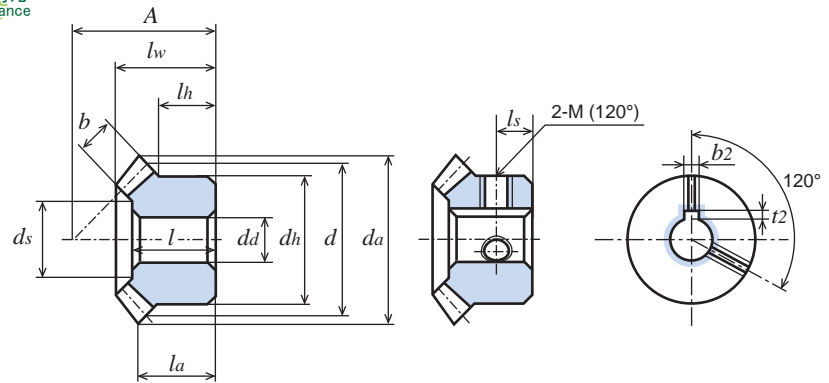
モジュール **1.5**
MODULE

圧力角 20° 歯数比 1:2、1:3 ねじれ角 35°
1:2 and 1:3 Ratio 20° PRESSURE ANGLE 35° SPIRAL ANGLE

JIS B1704 3級 (歯部高周波焼入品:4級)
System of Accuracy: JIS B 1704 Class 3
(Induction hardened products: Class 4)



New 仕様変更 締結加工不要。
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 | 歯数比 Ratio | 歯数 Number of Teeth | 基準円直径 Reference Diameter | 歯先円直径 Tip Diameter | 組立距離 Locating Distance | 穴径 Bore Diameter | ハブ外径 Hub Diameter | ハブ長さ Hub Projection | 穴長さ Bore Length | 全長 Overall Length | 歯先距離 Tip Distance | 歯幅 Face Width | キーみぞ Key Way | | ねじ Set Screw | | 歯先角 Face Angle | ねじれ角 Shaft Angle | 重量 Weight | |
|--------------------------|--------------|-----------------------|-----------------------------|-----------------------|---------------------------|---------------------|----------------------|------------------------|--------------------|----------------------|----------------------|------------------|------------------|------|-----------------|------------|-------------------|---------------------|--------------|-------|
| | | | | | | | | | | | | | $b_2 \times t_2$ | 2-M | ls | δ_a | | | | d_s |
| B1.5S 18L - 8 | 2 | 18 | $\phi 27$ | $\phi 30.09$ | 40.74 | $\phi 8$ | $\phi 22$ | 12.49 | 21 | 22.96 | 14.51 | 9.8 | - | - | - | - | 30°44' | 35° | $\phi 12.2$ | 59.6 |
| B1.5S 18L - 8H | 2 | 18 | $\phi 27$ | $\phi 30.09$ | 40.74 | $\phi 8$ (H8) | $\phi 22$ | 12.49 | 21 | 22.96 | 14.51 | 9.8 | - | - | - | - | 30°44' | 35° | $\phi 12.2$ | 59.6 |
| B1.5S 18L # 10H | 2 | 18 | $\phi 27$ | $\phi 30.09$ | 40.74 | $\phi 10$ (H8) | $\phi 22$ | 12.49 | 21 | 22.96 | 14.51 | 9.8 | 3 × 1.4 | 2-M4 | 6.5 | - | 30°44' | 35° | $\phi 12.2$ | 54.2 |
| B1.5S 36R - 10 | 2 | 36 | $\phi 54$ | $\phi 54.76$ | 26.75 | $\phi 10$ | $\phi 30$ | 9 | 15.5 | 18.01 | 14.01 | 9.8 | - | - | - | - | 65°57' | 35° | $\phi 34.3$ | 143.0 |
| B1.5S 36R - 10H | 2 | 36 | $\phi 54$ | $\phi 54.76$ | 26.75 | $\phi 10$ (H8) | $\phi 30$ | 9 | 15.5 | 18.01 | 14.01 | 9.8 | - | - | - | - | 65°57' | 35° | $\phi 34.3$ | 143.0 |
| B1.5S 36R # 15H | 2 | 36 | $\phi 54$ | $\phi 54.76$ | 26.75 | $\phi 15$ (H8) | $\phi 30$ | 9 | 15.5 | 18.01 | 14.01 | 9.8 | 5 × 2.3 | 2-M4 | 4.5 | - | 65°57' | 35° | $\phi 34.3$ | 130.6 |
| B1.5S 15L - 8 | 3 | 15 | $\phi 22.5$ | $\phi 25.99$ | 46 | $\phi 8$ | $\phi 19.5$ | 11.75 | 21.1 | 22.19 | 12.83 | 10.1 | - | - | - | - | 22°28' | 35° | $\phi 11.7$ | 41.9 |
| B1.5S 15L - 8H | 3 | 15 | $\phi 22.5$ | $\phi 25.99$ | 46 | $\phi 8$ (H8) | $\phi 19.5$ | 11.75 | 21.1 | 22.19 | 12.83 | 10.1 | - | - | - | - | 22°28' | 35° | $\phi 11.7$ | 41.9 |
| B1.5S 45R - 12 | 3 | 45 | $\phi 67.5$ | $\phi 68.01$ | 30 | $\phi 12$ | $\phi 37.5$ | 12 | 19.4 | 22.31 | 19.51 | 10.1 | - | - | - | - | 73°56' | 35° | $\phi 46.6$ | 283.0 |
| B1.5S 45R - 12H | 3 | 45 | $\phi 67.5$ | $\phi 68.01$ | 30 | $\phi 12$ (H8) | $\phi 37.5$ | 12 | 19.4 | 22.31 | 19.51 | 10.1 | - | - | - | - | 73°56' | 35° | $\phi 46.6$ | 283.0 |

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。【H】: Gear tooth surface completed with induction hardening, Hardness HRC 47 to 53.
【#】 (シャープ) にはキー材とセットスクリーンが付いております。【#】: Gear with key way and threaded hole / with key and screw.

| | 歯数比 Ratio | ピッチ角 Pitch Angle | | 軸角 Shaft Angle |
|---------------------|--------------|------------------------------|--------------------|-------------------|
| マイタギヤ Miter gear | 1:1 | 45° | | 90° |
| ベベルギヤ Bevel gear | 1:2 | ピニオン ギヤ Pinion Gear | 26° 34' 63° 26' | 90° |
| | 1:3 | ピニオン ギヤ Pinion Gear | 18° 26' 71° 34' | 90° |

許容伝達動力表 (W) 曲げ強さ

Allowable transfer capability table (W) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B1.5S 18L - 8 | 149.1 | 298.3 | 430.0 | 540.3 | 638.6 | 726.7 | 780.6 |
| B1.5S 18L - 8H | 130.2 | 260.4 | 377.8 | 479.2 | 571.2 | 654.9 | 706.8 |
| B1.5S 15L - 8 | 126.2 | 252.5 | 375.3 | 475.5 | 566.1 | 648.5 | 699.4 |
| B1.5S 15L - 8H | 110.2 | 220.4 | 328.2 | 419.2 | 502.9 | 580.1 | 628.3 |

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 (W) 歯面強さ

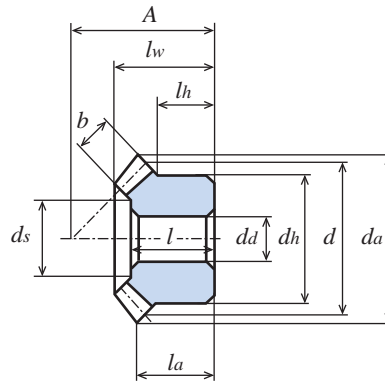
Allowable transfer capability table (W) Surface Durability

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B1.5S 18L - 8 | 23.5 | 47.4 | 69.0 | 87.5 | 104.5 | 120.3 | 130.2 |
| B1.5S 18L - 8H | 63.9 | 131.8 | 194.6 | 232.5 | 300.9 | 347.8 | 377.1 |
| B1.5S 15L - 8 | 17.8 | 36.0 | 53.9 | 68.9 | 82.6 | 95.5 | 103.6 |
| B1.5S 15L - 8H | 48.7 | 100.5 | 152.4 | 197.1 | 238.5 | 277.7 | 302.2 |

JIS B1704 3級 (歯部高周波焼入品:4級)
System of Accuracy: JIS B 1704 Class 3
(Induction hardened products: Class 4)



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 d_s の寸法は参考値です。
Dimension of d_s is for reference only.



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 | 歯数比 Ratio | 歯数 Number of Teeth | 基準円直径 Reference Diameter | 歯先円直径 Tip Diameter | 組立距離 Locating Distance | 穴径 Bore Diameter | ハブ外径 Hub Diameter | ハブ長さ Hub Projection | 穴長さ Bore Length | 全長 Overall Length | 歯幅 Face Width | ねじ Set Screw | 歯先角 Face Angle | 重量 Weight | | | |
|--------------------------|--------------|-----------------------|-----------------------------|-------------------------------|---------------------------|---------------------|----------------------|------------------------|--------------------|----------------------|------------------|-----------------|-------------------|--------------|--------|-------|-------|
| | | | | | | | | | | | | | | | ねじ | 歯先角 | |
| B2S 18L - 10 | 2 | 18 | φ36 | ^(φ40.20) φ38.35 | 53.12 | φ10 | φ28 | 15.12 | 27 | 29.36 | 18.17 | - | 30°53' | φ17.4 | 130.3 | | |
| B2S 18L - 10H | 2 | 18 | φ36 | ^(φ40.20) φ38.35 | 53.12 | φ10(H8) | φ28 | 15.12 | 27 | 29.36 | 18.17 | - | 30°53' | φ17.4 | 130.3 | | |
| B2S 18L # 12H | 2 | 18 | φ36 | ^(φ40.20) φ38.35 | 53.12 | φ12(H8) | φ28 | 15.12 | 27 | 29.36 | 18.17 | 4 × 1.8 | 2-M5 | 7.5 | 30°53' | φ17.4 | 122.0 |
| B2S 36R - 12 | 2 | 36 | φ72 | ^(φ73.05) φ71.41 | 35.21 | φ12 | φ36 | 12 | 21 | 23.54 | 18.26 | - | 66° 6' | φ46.7 | 318.4 | | |
| B2S 36R - 12H | 2 | 36 | φ72 | ^(φ73.05) φ71.41 | 35.21 | φ12(H8) | φ36 | 12 | 21 | 23.54 | 18.26 | - | 66° 6' | φ46.7 | 318.4 | | |
| B2S 36R # 20H | 2 | 36 | φ72 | ^(φ73.05) φ71.41 | 35.21 | φ20(H8) | φ36 | 12 | 21 | 23.54 | 18.26 | 6 × 2.8 | 2-M5 | 6 | 66° 6' | φ46.7 | 284.0 |
| B2S 15L - 10 | 3 | 15 | φ30 | ^(φ34.66) φ33.35 | 62 | φ10 | φ26 | 16.33 | 28.9 | 30.2 | 17.78 | - | 22°19' | φ16.6 | 104.0 | | |
| B2S 15L - 10H | 3 | 15 | φ30 | ^(φ34.66) φ33.35 | 62 | φ10(H8) | φ26 | 16.33 | 28.9 | 30.2 | 17.78 | - | 22°19' | φ16.6 | 104.0 | | |
| B2S 45R - 14 | 3 | 45 | φ90 | ^(φ90.68) φ89.16 | 40 | φ14 | φ50 | 16 | 25.9 | 29.76 | 26.02 | - | 73°47' | φ62.3 | 680.6 | | |
| B2S 45R - 14H | 3 | 45 | φ90 | ^(φ90.68) φ89.16 | 40 | φ14(H8) | φ50 | 16 | 25.9 | 29.76 | 26.02 | - | 73°47' | φ62.3 | 680.6 | | |

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。【H】: Gear tooth surface completed with induction hardening, Hardness HRC 47 to 53.
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許容伝達動力表 (kW) 曲げ強さ

Allowable transfer capability table (kW) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B2S 18L - 10 | 0.355 | 0.697 | 0.966 | 1.196 | 1.396 | 1.617 | 1.771 |
| B2S 18L - 10H | 0.310 | 0.611 | 0.857 | 1.073 | 1.264 | 1.452 | 1.575 |
| B2S 15L - 10 | 0.304 | 0.608 | 0.859 | 1.074 | 1.264 | 1.433 | 1.552 |
| B2S 15L - 10H | 0.265 | 0.531 | 0.757 | 0.956 | 1.135 | 1.297 | 1.403 |

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 (kW) 歯面強さ

Allowable transfer capability table (kW) Surface Durability

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B2S 18L - 10 | 0.057 | 0.114 | 0.160 | 0.200 | 0.238 | 0.280 | 0.309 |
| B2S 18L - 10H | 0.155 | 0.314 | 0.448 | 0.569 | 0.677 | 0.784 | 0.854 |
| B2S 15L - 10 | 0.043 | 0.088 | 0.125 | 0.159 | 0.189 | 0.217 | 0.237 |
| B2S 15L - 10H | 0.118 | 0.243 | 0.353 | 0.452 | 0.542 | 0.624 | 0.679 |

スパイラルベベルギヤ SPIRAL BEVEL GEARS

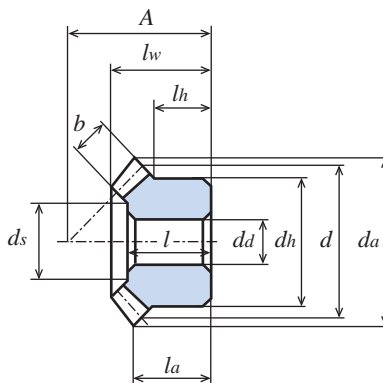
モジュール **2.5**
MODULE

圧力角 20° 歯数比 1:2, 1:3 ねじれ角 35°
1:2 and 1:2 Ratio 20° PRESSURE ANGLE 35° SPIRAL ANGLE

JIS B1704 3級 (歯部高周波焼入品:4級)
System of Accuracy: JIS B 1704 Class 3
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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 | 歯数比 Ratio u | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 組立距離 Locating Distance A | 穴径 Bore Diameter $d_i(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 穴長さ Bore Length l | 全長 Overall Length l_w | Tip Distance l_a | 歯幅 Face Width b | キ み ぞ Key Way $b_2 \times t_2$ | ねじ Set Screw | | 歯先角 Face Angle δ_a | d_s | 重量 Weight $W(kg)$ |
|--------------------------|---------------------|------------------------------|------------------------------------|--|----------------------------------|----------------------------------|-------------------------------|---------------------------------|---------------------------|-------------------------------|-----------------------|-------------------------|--|-----------------|-----|---------------------------------|-------------|-------------------------|
| | | | | | | | | | | | | | | 2-M | ls | | | |
| B2.5S 18L - 12 | 2 | 18 | $\phi 45$ | $\phi^{(\phi 50.25)}$ $\phi 48.63$ | 64.29 | $\phi 12$ | $\phi 36$ | 17.04 | 32 | 34.98 | 20.6 | 16.7 | - | - | - | 30°53' | $\phi 21.2$ | 0.25 |
| B2.5S 18L - 12H | 2 | 18 | $\phi 45$ | $\phi^{(\phi 50.25)}$ $\phi 48.63$ | 64.29 | $\phi 12(H8)$ | $\phi 36$ | 17.04 | 32 | 34.98 | 20.6 | 16.7 | - | - | - | 30°53' | $\phi 21.2$ | 0.25 |
| B2.5S 18L # 15H | 2 | 18 | $\phi 45$ | $\phi^{(\phi 50.25)}$ $\phi 48.63$ | 64.29 | $\phi 15(H8)$ | $\phi 36$ | 17.04 | 32 | 34.98 | 20.6 | 16.7 | 5 × 2.3 | 2-M5 | 8.5 | 30°53' | $\phi 21.2$ | 0.24 |
| B2.5S 36R - 14 | 2 | 36 | $\phi 90$ | $\phi^{(\phi 91.32)}$ $\phi 89.88$ | 42.55 | $\phi 14$ | $\phi 50$ | 14 | 25 | 28.14 | 21.37 | 16.7 | - | - | - | 66° 6' | $\phi 57.6$ | 0.64 |
| B2.5S 36R - 14H | 2 | 36 | $\phi 90$ | $\phi^{(\phi 91.32)}$ $\phi 89.88$ | 42.55 | $\phi 14(H8)$ | $\phi 50$ | 14 | 25 | 28.14 | 21.37 | 16.7 | - | - | - | 66° 6' | $\phi 57.6$ | 0.64 |
| B2.5S 36R # 25H | 2 | 36 | $\phi 90$ | $\phi^{(\phi 91.32)}$ $\phi 89.88$ | 42.55 | $\phi 25(H8)$ | $\phi 50$ | 14 | 25 | 28.14 | 21.37 | 16.7 | 8 × 3.3 | 2-M6 | 7 | 66° 6' | $\phi 57.6$ | 0.58 |
| B2.5S 15L - 10 | 3 | 15 | $\phi 37.5$ | $\phi^{(\phi 43.13)}$ $\phi 41.90$ | 77.93 | $\phi 10(H8)$ | $\phi 32$ | 20.76 | 36.5 | 38.45 | 22.62 | 17 | - | - | - | 21°36' | $\phi 18.9$ | 0.21 |
| B2.5S 15L - 10H | 3 | 15 | $\phi 37.5$ | $\phi^{(\phi 43.13)}$ $\phi 41.90$ | 77.93 | $\phi 10(H8)$ | $\phi 32$ | 20.76 | 36.5 | 38.45 | 22.62 | 17 | - | - | - | 21°36' | $\phi 18.9$ | 0.21 |
| B2.5S 45R - 16 | 3 | 45 | $\phi 112.5$ | $\phi^{(\phi 113.28)}$ $\phi 112.2$ | 40.67 | $\phi 16$ | $\phi 60$ | 14 | 24.5 | 28.05 | 23.09 | 17 | - | - | - | 73° 3' | $\phi 78.3$ | 1.01 |
| B2.5S 45R - 16H | 3 | 45 | $\phi 112.5$ | $\phi^{(\phi 113.28)}$ $\phi 112.2$ | 40.67 | $\phi 16(H8)$ | $\phi 60$ | 14 | 24.5 | 28.05 | 23.09 | 17 | - | - | - | 73° 3' | $\phi 78.3$ | 1.01 |

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。【H】: Gear tooth surface completed with induction hardening, Hardness HRC 47 to 53.
【#】(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.

歯先円直径 d_a の () 内は理論値です。最大外径は軸心と平行に面取りしてありますので、理論値より小さくなっています。

The numeric indicated in the bracket () under the column. Outside diameter d_a has been machined flat. With this process, the outer diameter is smaller than the theory with respect to shaft center to parallel.

許容伝達動力表 (kW) 曲げ強さ

Allowable transfer capability table (kW) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B2.5S 18L - 12 | 0.710 | 1.337 | 1.824 | 2.230 | 2.677 | 3.129 | 3.417 |
| B2.5S 18L - 12H | 0.620 | 1.179 | 1.631 | 2.019 | 2.395 | 2.749 | 2.968 |
| B2.5S 15L - 10 | 0.607 | 1.183 | 1.634 | 2.019 | 2.351 | 2.748 | 3.008 |
| B2.5S 15L - 10H | 0.530 | 1.037 | 1.452 | 1.814 | 2.133 | 2.458 | 2.664 |

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 (kW) 歯面強さ

Allowable transfer capability table (kW) Surface Durability

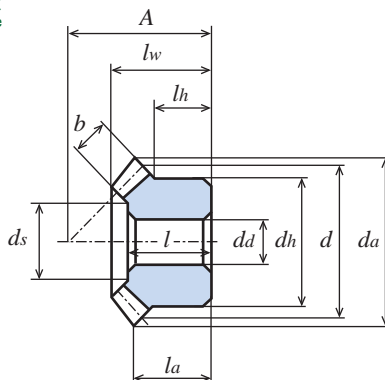
| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B2.5S 18L - 12 | 0.117 | 0.224 | 0.310 | 0.387 | 0.473 | 0.561 | 0.623 |
| B2.5S 18L - 12H | 0.314 | 0.615 | 0.867 | 1.086 | 1.301 | 1.505 | 1.633 |
| B2.5S 15L - 10 | 0.088 | 0.174 | 0.244 | 0.306 | 0.362 | 0.430 | 0.475 |
| B2.5S 15L - 10H | 0.237 | 0.479 | 0.683 | 0.864 | 1.027 | 1.193 | 1.298 |

目次
CONTENTS
インフォメーション
INFORMATION
ギヤボックス
GEAR BOXES
ノーバッキングスピギヤ
ANTI BACKLASH SPIR GEAR
歯研削歯車
GROUND SPUR GEARS
平歯車
SPUR GEARS
内歯車
INTERNAL GEARS
歯研削歯車
GROUND RACKS
ラック
RACKS
へリカル・スクリューギヤ
HELICAL GEARS AND SCREW GEARS
ワームとワームギヤ
WORMS AND WORM GEARS
かなん歯車
BEVEL GEARS
スプロケット
SPROCKETS
技術資料
REFERENCE DATA

JIS B1704 3級 (歯部高周波焼入品:4級)
System of Accuracy: JIS B 1704 Class 3
(Induction hardened products: Class 4)



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.
 d_s の寸法は参考値です。
Dimension of d_s is for reference only.



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 | 歯数比 Ratio u | 歯数 Number of Teeth z | 基準円直径 Reference Diameter d | 歯先円直径 Tip Diameter d_a | 組立距離 Locating Distance A | 穴径 Bore Diameter $d_a(H7)$ | ハブ外径 Hub Diameter d_h | ハブ長さ Hub Projection l_h | 穴長さ Bore Length l | 全長 Overall Length l_w | 歯幅 Face Width b | キーみぞ Key Way $b_2 \times t_2$ | ねじ Set Screw | | 歯先角 Face Angle δ_a | ねじれ角 Spiral Angle d_s | 重量 Weight $W(kg)$ |
|--------------------------|---------------------|------------------------------|------------------------------------|---|----------------------------------|----------------------------------|-------------------------------|---------------------------------|---------------------------|-------------------------------|-------------------------|-------------------------------------|-----------------|-------|---------------------------------|-------------------------------|-------------------------|
| | | | | | | | | | | | | | 2-M | l_s | | | |
| B3S 18L - 15 | 2 | 18 | $\phi 54$ | $\phi 57.37$ <small>($\phi 60.07$)</small> | 75.27 | $\phi 15$ | $\phi 41$ | 18.02 | 37 | 40.12 | 22.79 | - | - | - | 30° 9' | $\phi 27.5$ | 0.39 |
| B3S 18L - 15H | 2 | 18 | $\phi 54$ | $\phi 57.37$ <small>($\phi 60.07$)</small> | 75.27 | $\phi 15(H8)$ | $\phi 41$ | 18.02 | 37 | 40.12 | 22.79 | - | - | - | 30° 9' | $\phi 27.5$ | 0.39 |
| B3S 18L # 20H | 2 | 18 | $\phi 54$ | $\phi 57.37$ <small>($\phi 60.07$)</small> | 75.27 | $\phi 20(H8)$ | $\phi 41$ | 18.02 | 37 | 40.12 | 22.79 | 6 × 2.8 | 2-M6 | 9 | 30° 9' | $\phi 27.5$ | 0.35 |
| B3S 36R - 16 | 2 | 36 | $\phi 108$ | $\phi 107.0$ <small>($\phi 109.47$)</small> | 52.32 | $\phi 16$ | $\phi 60$ | 18 | 31 | 35.13 | 26.79 | - | - | - | 65° 22' | $\phi 68.9$ | 1.13 |
| B3S 36R - 16H | 2 | 36 | $\phi 108$ | $\phi 107.0$ <small>($\phi 109.47$)</small> | 52.32 | $\phi 16(H8)$ | $\phi 60$ | 18 | 31 | 35.13 | 26.79 | - | - | - | 65° 22' | $\phi 68.9$ | 1.13 |
| B3S 36R # 30H | 2 | 36 | $\phi 108$ | $\phi 107.0$ <small>($\phi 109.47$)</small> | 52.32 | $\phi 30(H8)$ | $\phi 60$ | 18 | 31 | 35.13 | 26.79 | 8 × 3.3 | 2-M6 | 9 | 65° 22' | $\phi 68.9$ | 1.01 |
| B3S 15L - 12 | 3 | 15 | $\phi 45$ | $\phi 50.39$ <small>($\phi 52.16$)</small> | 89.36 | $\phi 12(H8)$ | $\phi 36$ | 20.36 | 42 | 43.40 | 23.05 | - | - | - | 22° 44' | $\phi 26.7$ | 0.33 |
| B3S 15L - 12H | 3 | 15 | $\phi 45$ | $\phi 50.39$ <small>($\phi 52.16$)</small> | 89.36 | $\phi 12(H8)$ | $\phi 36$ | 20.36 | 42 | 43.40 | 23.05 | - | - | - | 22° 44' | $\phi 26.7$ | 0.33 |
| B3S 45R - 18 | 3 | 45 | $\phi 135$ | $\phi 133.9$ <small>($\phi 136.07$)</small> | 50.95 | $\phi 18$ | $\phi 70$ | 18 | 31 | 36.06 | 30.06 | - | - | - | 74° 12' | $\phi 90.3$ | 1.85 |
| B3S 45R - 18H | 3 | 45 | $\phi 135$ | $\phi 133.9$ <small>($\phi 136.07$)</small> | 50.95 | $\phi 18(H8)$ | $\phi 70$ | 18 | 31 | 36.06 | 30.06 | - | - | - | 74° 12' | $\phi 90.3$ | 1.85 |

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。【H】: Gear tooth surface completed with induction hardening, Hardness HRC 47 to 53.
【#】(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 (kW) 曲げ強さ

Allowable transfer capability table (kW) Bending Strength

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B3S 18L - 15 | 1.230 | 2.228 | 2.997 | 3.729 | 4.517 | 5.262 | 5.769 |
| B3S 18L - 15H | 1.074 | 1.976 | 2.701 | 3.349 | 3.968 | 4.549 | - |
| B3S 15L - 12 | 1.111 | 2.093 | 2.855 | 3.490 | 4.190 | 4.897 | 5.349 |
| B3S 15L - 12H | 0.970 | 1.845 | 2.554 | 3.160 | 3.748 | 4.302 | 4.646 |

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 (kW) 歯面強さ

Allowable transfer capability table (kW) Surface Durability

| 商品記号 Catalogue Numbers | 回転速度 (min ⁻¹) revolution/min | | | | | | |
|---------------------------|---|-------|-------|-------|-------|-------|-------|
| | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 | 2,000 |
| B3S 18L - 15 | 0.206 | 0.381 | 0.524 | 0.668 | 0.808 | 0.986 | 1.098 |
| B3S 18L - 15H | 0.550 | 1.044 | 1.453 | 1.825 | 2.183 | 2.523 | - |
| B3S 15L - 12 | 0.163 | 0.313 | 0.434 | 0.541 | 0.662 | 0.785 | 0.871 |
| B3S 15L - 12H | 0.438 | 0.860 | 1.211 | 1.518 | 1.818 | 2.103 | 2.282 |

- 目次 CONTENTS
- インフォメーション INFORMATION
- ギヤボックス GEAR BOXES
- ノーバッキングスピリギヤ ANTI BACKLASH SPIR GEAR
- 歯研歯車 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
- ウォーム・ウォームギヤ WORMS AND WORM GEARS
- かな歯車 BEVEL GEARS
- スプロケット SPROCKETS
- 技術資料 REFERENCE DATA