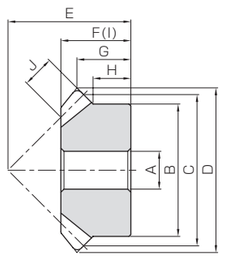
# SM 模数 1～8 等径锥齿轮 NEW

| 共通规格 | |
|---|---|
| 精度等级 | JIS B 1704：1978 3级 |
| 齿形 | 格里森 |
| 压力角 | 20° |
| 材料 | S45C |
| 热处理 | — |
| 齿面硬度 | (194HB 以下) |
| 表面处理 | 黑色表面氧化 |

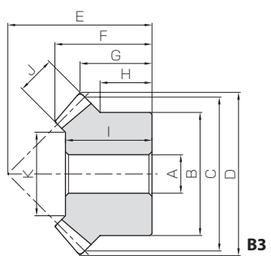
＊J 系列产品的精度相当于表记精度。

J 淬

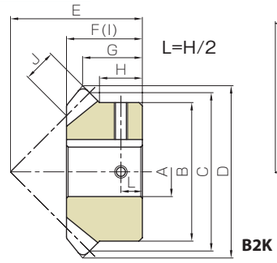


B2

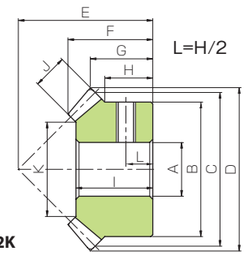
J 系列



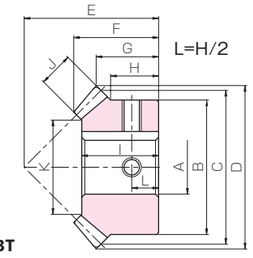
B3



B2K



B3T



B3K

H 淬火＋产品型号为标准品型号 +H。　　例：SM2-16H

| 产品型号 | | 齿数比 | 齿数 | 形状 | 孔径 | 轮毂径 | 分度圆直径 | 齿顶圆直径 | 组装距离 | 全长 | 齿顶距离 | 轮毂长 | 孔长 | 齿宽 | 支撑面直径 | 容许转矩 弯曲强度 | | 齿面强度 | | 齿面强度 H | | 质量 (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | $A_{H7}$ | B | C | D | E | F | G | H | I | J | K | N・m | kgf・m | N・m | kgf・m | N・m | kgf・m | |
| SM2-16 | H | 1 | 16 | B2 | 10 | 27 | 32 | 34.83 | 30 | 19 | 15.41 | 11.5 | 19 | 7 | — | 3.84 | 0.39 | 0.33 | 0.034 | 1.42 | 0.15 | 0.076 |
| SM2.5-16 | H | | | | 12 | 34 | 40 | 43.53 | 35 | 21 | 16.77 | 12 | 21 | 9 | | 7.63 | 0.78 | 0.68 | 0.069 | 2.86 | 0.29 | 0.14 |
| SM3-16 | H | | | | 14 | 42 | 48 | 52.24 | 40 | 23 | 18.12 | 13 | 23 | 11 | | 13.3 | 1.36 | 1.21 | 0.12 | 5.06 | 0.52 | 0.22 |
| SM1-20 | H | 1 | 20 | B3 | 6 | 16 | 20 | 21.41 | 20 | 13.94 | 10.71 | 8 | 12 | 5 | 9.86 | 0.89 | 0.091 | 0.084 | 0.0086 | 0.37 | 0.038 | 0.019 |
| SM1.25-20 | H | | | | 8 | 22 | 25 | 26.77 | 23 | 15.27 | 11.38 | 9 | 13 | 6 | 13.03 | 1.70 | 0.17 | 0.16 | 0.017 | 0.71 | 0.072 | 0.036 |
| SM1.5-20 | H | | | | 8 | 26 | 30 | 32.12 | 30 | 21.24 | 16.06 | 13 | 19 | 8 | 15.37 | 3.12 | 0.32 | 0.30 | 0.031 | 1.31 | 0.13 | 0.074 |
| SM2-20 | H | | | | 12 | 34 | 40 | 42.83 | 37 | 24.89 | 18.41 | 14 | 22 | 10 | 21.72 | 7.13 | 0.73 | 0.72 | 0.073 | 3.05 | 0.31 | 0.15 |
| SM2.5-20 | H | | | | 14 | 42 | 50 | 53.54 | 48 | 32.54 | 24.77 | 19 | 29 | 12 | 28.06 | 13.6 | 1.39 | 1.41 | 0.14 | 5.90 | 0.60 | 0.30 |
| SM3-20 | H | | | | 16 | 50 | 60 | 64.24 | 58 | 39.84 | 30.12 | 23 | 35 | 15 | 31.57 | 24.1 | 2.45 | 2.54 | 0.26 | 10.5 | 1.08 | 0.53 |
| SM3.5-20 | H | | | | 20 | 60 | 70 | 74.95 | 65 | 44.13 | 32.47 | 25 | 40 | 18 | 39.09 | 38.8 | 3.96 | 4.15 | 0.42 | 17.2 | 1.75 | 0.82 |
| SM4-20 | H | | | | 20 | 64 | 80 | 85.65 | 75 | 50.78 | 37.83 | 27 | 45 | 20 | 43.43 | 57.0 | 5.82 | 6.19 | 0.63 | 25.4 | 2.59 | 1.15 |
| SM5-20 | H | | | | 25 | 80 | 100 | 107.07 | 90 | 60.38 | 43.54 | 30 | 54 | 26 | 54.46 | 114 | 11.6 | 12.6 | 1.29 | 51.3 | 5.23 | 2.15 |
| SM6-20 | H | | | | 28 | 100 | 120 | 128.48 | 104 | 67.67 | 48.24 | 34 | 60 | 30 | 67.15 | 191 | 19.4 | 21.8 | 2.22 | 87.5 | 8.92 | 3.68 |
| SM8-20 | H | | | | 30 | 130 | 160 | 171.31 | 125 | 73.33 | 50.66 | 30 | 62 | 35 | 95 | 413 | 42.1 | 49.6 | 5.06 | 194 | 19.8 | 7.05 |
| SM1-25 | H | 1 | 25 | B3 | 6 | 20 | 25 | 26.41 | 23 | 15.16 | 11.21 | 8 | 14 | 6 | 15.03 | 1.47 | 0.15 | 0.16 | 0.017 | 0.71 | 0.072 | 0.035 |
| SM1.25-25 | H | | | | 8 | 25 | 31.25 | 33.02 | 28 | 17.88 | 13.26 | 9.25 | 16 | 7 | 18.7 | 2.75 | 0.28 | 0.31 | 0.032 | 1.35 | 0.14 | 0.063 |
| SM1.5-25 | H | | | | 10 | 30 | 37.5 | 39.62 | 34 | 22.25 | 16.31 | 11.5 | 19 | 9 | 19.54 | 4.96 | 0.51 | 0.57 | 0.059 | 2.44 | 0.25 | 0.11 |
| SM2-25 | H | | | | 12 | 40 | 50 | 52.83 | 40 | 24.33 | 16.41 | 10 | 20 | 12 | 26.06 | 11.8 | 1.20 | 1.41 | 0.14 | 5.90 | 0.60 | 0.22 |
| SM2.5-25 | H | | | | 16 | 50 | 62.5 | 66.04 | 50 | 30.41 | 20.52 | 12.5 | 26 | 15 | 34.57 | 23.0 | 2.34 | 2.81 | 0.29 | 11.7 | 1.19 | 0.42 |
| SM3-25 | H | | | | 20 | 60 | 75 | 79.24 | 60 | 37.81 | 24.62 | 15 | 32 | 20 | 37.43 | 42.1 | 4.29 | 5.24 | 0.53 | 21.6 | 2.20 | 0.74 |
| SM3.5-25 | H | | | | 25 | 70 | 87.5 | 92.45 | 70 | 43.23 | 28.72 | 17.5 | 37 | 22 | 46.77 | 64.7 | 6.60 | 8.19 | 0.83 | 33.5 | 3.42 | 1.15 |
| SM4-25 | H | | | | 28 | 80 | 100 | 105.66 | 80 | 49.32 | 32.83 | 20 | 43 | 25 | 55.29 | 96.3 | 9.82 | 12.4 | 1.26 | 50.2 | 5.12 | 1.73 |
| SM5-25 | H | | | | 28 | 100 | 125 | 132.07 | 100 | 60.82 | 41.04 | 25 | 50 | 30 | 65.15 | 184 | 18.7 | 24.2 | 2.47 | 96.8 | 9.87 | 3.41 |
| SM6-25 | H | | | | 28 | 120 | 150 | 158.48 | 120 | 72.32 | 49.24 | 30 | 61 | 35 | 83 | 309 | 31.5 | 42.1 | 4.29 | 166 | 16.9 | 6.03 |
| SM1-30 | H | 1 | 30 | B3 | 8 | 24 | 30 | 31.41 | 28 | 17.71 | 13.71 | 10 | 16 | 6 | 19.03 | 1.99 | 0.20 | 0.26 | 0.026 | 1.11 | 0.11 | 0.057 |
| SM1.25-30 | H | | | | 10 | 30 | 37.5 | 39.27 | 36 | 23.47 | 18.13 | 13.5 | 21 | 8 | 22.37 | 4.05 | 0.41 | 0.54 | 0.055 | 2.28 | 0.23 | 0.12 |
| SM1.5-30 | H | | | | 10 | 36 | 45 | 47.12 | 43 | 28.24 | 21.56 | 16 | 25 | 10 | 25.71 | 7.19 | 0.73 | 0.97 | 0.099 | 4.08 | 0.42 | 0.21 |
| SM2-30 | H | | | | 12 | 45 | 60 | 62.83 | 50 | 29.42 | 21.41 | 12.5 | 25 | 12 | 36.06 | 15.9 | 1.62 | 2.22 | 0.23 | 9.20 | 0.94 | 0.37 |
| SM2.5-30 | H | | | | 16 | 60 | 75 | 78.54 | 62 | 36.28 | 26.27 | 17 | 32 | 15 | 47.57 | 31.1 | 3.17 | 4.43 | 0.45 | 18.2 | 1.86 | 0.76 |
| SM3-30 | H | | | | 20 | 70 | 90 | 94.24 | 75 | 45.47 | 32.12 | 20 | 40 | 20 | 53.43 | 57.5 | 5.87 | 8.33 | 0.85 | 34.0 | 3.46 | 1.32 |
| SM3.5-30 | H | | | | 25 | 90 | 105 | 109.95 | 85 | 49.66 | 34.97 | 25 | 45 | 22 | 67.77 | 88.0 | 8.97 | 13.0 | 1.32 | 52.3 | 5.34 | 2.20 |
| SM4-30 | H | | | | 28 | 100 | 120 | 125.66 | 95 | 54.52 | 37.83 | 25 | 50 | 25 | 79.29 | 131 | 13.3 | 19.6 | 2.00 | 78.3 | 7.99 | 3.09 |
| SM5-30 | H | | | | 28 | 130 | 150 | 157.07 | 120 | 68.56 | 48.54 | 35 | 62 | 30 | 99.15 | 249 | 25.4 | 38.3 | 3.91 | 150 | 15.3 | 6.47 |

〔追加工注意事项〕 ①淬火＋(H 系列和 HJ 系列) 的详细内容请参考第 22 页。

J 系列产品型号为标准品型号 + J + 孔径

＊表中颜色与 J 系列形状图的截面颜色相对应。

| 孔径 H7 | | | 10 | 12 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 25 | 28 | 30 | 32 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 键槽 Js9 | 6 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 螺孔尺寸 | — | | 4×1.8 | | 5×2.3 | | | | 6×2.8 | | | | 8×3.3 | | | 10×3.3 | | 12×33 | 14×3.8 | | 16×4.3 | 18×4.4 | | 20×4.9 | | 22×5.4 | |
| 产品型号 | M4 | M5 | M4 | | | | | | M5 | | | | M6 | | | M8 | | | M10 | | M12 | | | M16 | | | |
| SM2-16 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM2.5-16 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM3-16 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM1-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM1.25-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM1.5-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM2-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM2.5-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM3-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM3.5-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM4-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM5-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM6-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM8-20 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM1-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM1.25-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM1.5-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM2-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM2.5-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM3-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM3.5-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM4-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM5-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM6-25 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM1-30 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM1.25-30 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM1.5-30 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM2-30 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM2.5-30 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM3-30 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM3.5-30 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM4-30 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SM5-30 J 孔径 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

〔J 系列注意事项〕 ①因为是接受订货后投产，因此不可取消。交货期、订购个数请参考第 38 页。其他注意事项请参考第 40 页。
② J 系列产品阵容中记载的产品不属于淬火＋对象。