

【技术计算】 同步齿形带的选型方法2

传动容量表

表9. MXLの基準伝動容量 Pr 皮带公称宽度025(6.4mm)时 (kW)

| 小带轮 转速(rpm) | 小带轮齿数 节圆 直径(mm) | | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 | 26 | 28 | 30 | 32 | 36 | 40 |
|----------------|-----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| | 7.76 | 9.06 | 9.70 | 10.35 | 11.64 | 12.94 | 14.23 | 15.52 | 16.17 | 16.82 | 18.11 | 19.40 | 20.70 | 23.29 | 25.97 | | |
| 950 | 9.0 | 10.5 | 11.3 | 12.0 | 13.5 | 15.0 | 16.5 | 18.0 | 18.8 | 19.6 | 21.1 | 22.6 | 24.1 | 27.1 | 30.1 | | |
| 1160 | 11.0 | 12.8 | 13.8 | 14.7 | 16.5 | 18.4 | 20.2 | 22.0 | 23.0 | 25.7 | 27.6 | 29.4 | 33.1 | 36.7 | | | |
| 1425 | | 15.8 | 16.9 | 18.0 | 20.3 | 22.6 | 24.8 | 27.1 | 28.2 | 29.3 | 31.6 | 33.9 | 36.1 | 40.6 | 45.1 | | |
| 1750 | | 19.4 | 20.8 | 22.2 | 24.9 | 27.7 | 30.5 | 33.3 | 34.7 | 36.0 | 38.8 | 41.6 | 44.3 | 49.9 | 55.4 | | |
| 2850 | | 33.9 | 36.1 | 40.6 | 45.1 | 49.6 | 54.1 | 58.6 | 63.1 | 67.6 | 72.1 | 81.0 | 90.0 | | | | |
| 3450 | | 41.0 | 43.7 | 49.2 | 54.6 | 60.1 | 65.5 | 68.2 | 70.9 | 76.3 | 81.7 | 87.1 | 97.9 | 108.6 | | | |
| 100 | 0.9 | 1.1 | 1.1 | 1.2 | 1.4 | 1.5 | 1.7 | 1.9 | 1.9 | 2.0 | 2.2 | 2.3 | 2.5 | 2.8 | 3.1 | | |
| 200 | 1.9 | 2.2 | 2.3 | 2.5 | 2.8 | 3.1 | 3.4 | 3.8 | 3.9 | 4.1 | 4.4 | 4.7 | 5.0 | 5.7 | 6.3 | | |
| 300 | 2.8 | 3.3 | 3.5 | 3.8 | 4.2 | 4.7 | 5.2 | 5.7 | 5.9 | 6.1 | 6.6 | 7.1 | 7.6 | 8.5 | 9.5 | | |
| 400 | 3.8 | 4.4 | 4.7 | 5.0 | 5.7 | 6.3 | 6.9 | 7.6 | 7.9 | 8.2 | 8.8 | 9.5 | 10.1 | 11.4 | 12.6 | | |
| 500 | 4.7 | 5.5 | 5.9 | 6.3 | 7.1 | 7.9 | 8.7 | 9.5 | 9.9 | 10.3 | 11.1 | 11.9 | 12.6 | 14.2 | 15.8 | | |
| 600 | 5.7 | 6.6 | 7.1 | 7.6 | 8.5 | 9.5 | 10.4 | 11.4 | 11.9 | 12.3 | 13.3 | 14.2 | 15.2 | 17.1 | 19.0 | | |
| 700 | 6.6 | 7.7 | 8.3 | 8.8 | 10.0 | 11.1 | 12.2 | 13.3 | 13.8 | 14.4 | 15.5 | 16.6 | 17.7 | 19.9 | 22.2 | | |
| 800 | 7.6 | 8.8 | 9.5 | 10.1 | 11.4 | 12.6 | 13.9 | 15.2 | 15.8 | 16.5 | 17.7 | 19.0 | 20.3 | 22.8 | 25.3 | | |
| 900 | 8.5 | 10.0 | 10.7 | 11.4 | 12.8 | 14.2 | 15.7 | 17.1 | 17.8 | 18.5 | 19.9 | 21.4 | 22.8 | 25.7 | 28.5 | | |
| 1000 | 9.5 | 11.1 | 11.9 | 12.6 | 14.2 | 15.8 | 17.4 | 19.0 | 19.8 | 20.6 | 22.2 | 23.8 | 25.3 | 28.5 | 31.7 | | |
| 1100 | 10.4 | 12.2 | 13.0 | 13.9 | 15.7 | 17.4 | 19.2 | 20.9 | 21.8 | 22.6 | 24.4 | 26.1 | 27.9 | 31.4 | 34.8 | | |
| 1200 | 11.4 | 13.3 | 14.2 | 15.2 | 17.1 | 19.0 | 20.9 | 22.8 | 23.8 | 24.7 | 26.6 | 28.5 | 30.4 | 34.2 | 38.0 | | |
| 1300 | | 14.4 | 15.4 | 16.5 | 18.5 | 20.6 | 22.6 | 24.7 | 25.7 | 26.8 | 28.8 | 30.9 | 32.9 | 37.1 | 41.2 | | |
| 1400 | | 15.5 | 16.6 | 17.7 | 19.9 | 22.2 | 24.4 | 26.6 | 27.7 | 28.8 | 31.0 | 33.3 | 35.5 | 39.9 | 44.3 | | |
| 1500 | | 16.6 | 17.8 | 19.0 | 21.4 | 23.8 | 26.1 | 28.5 | 29.7 | 30.9 | 33.3 | 35.6 | 38.0 | 42.8 | 47.5 | | |
| 1600 | | 17.7 | 19.0 | 20.3 | 22.8 | 25.3 | 27.9 | 30.4 | 31.7 | 32.9 | 35.5 | 38.0 | 40.5 | 45.6 | 50.7 | | |
| 1700 | | 18.8 | 20.2 | 21.5 | 24.2 | 26.9 | 29.6 | 32.3 | 33.7 | 35.0 | 37.7 | 40.4 | 43.1 | 48.5 | 53.8 | | |
| 1800 | | 19.9 | 21.4 | 22.8 | 25.7 | 28.5 | 31.4 | 34.2 | 35.6 | 37.1 | 39.9 | 42.8 | 45.6 | 51.3 | 57.0 | | |
| 1900 | | | 23.8 | 25.3 | 28.5 | 31.7 | 34.8 | 38.0 | 39.6 | 41.2 | 44.3 | 47.5 | 50.7 | 57.0 | 63.3 | | |
| 2000 | | | 26.1 | 27.9 | 31.4 | 34.8 | 38.3 | 41.8 | 43.6 | 45.3 | 48.8 | 52.2 | 55.7 | 62.7 | 69.6 | | |
| 2200 | | | | 28.5 | 30.4 | 34.2 | 38.0 | 41.8 | 45.6 | 47.5 | 49.4 | 53.2 | 57.0 | 60.8 | 68.3 | 75.9 | |
| 2400 | | | | 30.9 | 32.9 | 37.1 | 41.2 | 45.3 | 49.4 | 51.5 | 53.5 | 57.6 | 61.7 | 65.8 | 74.0 | 82.1 | |
| 2600 | | | | | 35.5 | 39.9 | 44.3 | 48.8 | 53.2 | 55.4 | 57.6 | 62.0 | 66.4 | 70.8 | 79.6 | 88.4 | |
| 2800 | | | | | 38.0 | 42.8 | 47.5 | 52.2 | 57.0 | 59.3 | 61.7 | 66.4 | 71.2 | 75.9 | 85.3 | 94.6 | |
| 3000 | | | | | 40.5 | 45.6 | 50.7 | 55.7 | 60.8 | 63.3 | 65.8 | 70.8 | 75.9 | 80.9 | 90.9 | 100.9 | |
| 3200 | | | | | 43.1 | 48.5 | 53.8 | 59.2 | 64.5 | 67.2 | 69.9 | 75.2 | 80.6 | 85.9 | 96.5 | 107.1 | |
| 3400 | | | | | 45.6 | 51.3 | 57.0 | 62.7 | 68.3 | 71.2 | 74.0 | 79.6 | 85.3 | 90.9 | 102.1 | 113.3 | |
| 3600 | | | | | | 54.1 | 60.1 | 66.1 | 72.1 | 75.1 | 78.1 | 84.0 | 90.0 | 95.9 | 107.7 | 119.5 | |
| 3800 | | | | | | 57.0 | 63.3 | 69.6 | 75.9 | 79.0 | 82.1 | 88.4 | 94.6 | 100.9 | 113.3 | 125.6 | |
| 4000 | | | | | | 59.8 | 66.4 | 73.0 | 79.6 | 82.9 | 86.2 | 92.8 | 99.3 | 105.8 | 118.8 | 131.8 | |
| 4200 | | | | | | 62.7 | 69.6 | 76.5 | 83.4 | 86.8 | 90.3 | 97.1 | 104.0 | 110.8 | 124.4 | 137.9 | |
| 4400 | | | | | | 65.5 | 72.7 | 79.9 | 87.1 | 90.7 | 94.3 | 101.5 | 108.6 | 115.8 | 129.9 | 144.0 | |
| 4600 | | | | | | 68.3 | 75.9 | 83.4 | 90.9 | 94.6 | 98.4 | 105.8 | 113.3 | 120.7 | 135.4 | 150.0 | |
| 4800 | | | | | | | | | | | | | | | | | |

※由于上表所示为皮带公称宽度025(6.4mm)时的情况，因此，皮带宽度不同时，请乘以表7的补偿系数Kb。

表10. XLの基準伝動容量 Pr 皮带公称宽度100(25.4mm)时 (kW)

| 小带轮 转速(rpm) | 小带轮齿数 节圆 直径(mm) | | 10 | 11 | 12 | 14 | 15 | 16 | 18 | 19 | 20 | 21 | 22 | 24 | 25 | 26 | 28 | 30 |
|----------------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|----|
| | 16.17 | 17.79 | 19.40 | 22.64 | 24.26 | 25.87 | 29.11 | 30.72 | 32.34 | 33.96 | 35.57 | 38.81 | 40.43 | 42.04 | 45.28 | 48.51 | | |
| 950 | 0.14 | 0.16 | 0.17 | 0.20 | 0.21 | 0.23 | 0.26 | 0.27 | 0.29 | 0.30 | 0.32 | 0.35 | 0.36 | 0.38 | 0.41 | 0.43 | | |
| 1160 | 0.17 | 0.19 | 0.21 | 0.25 | 0.26 | 0.28 | 0.32 | 0.33 | 0.35 | 0.37 | 0.39 | 0.42 | 0.44 | 0.46 | 0.50 | 0.53 | | |
| 1425 | | | 0.26 | 0.30 | 0.32 | 0.35 | 0.39 | 0.41 | 0.43 | 0.46 | 0.48 | 0.52 | 0.54 | 0.57 | 0.61 | 0.65 | | |
| 1750 | | | 0.32 | 0.37 | 0.40 | 0.43 | 0.48 | 0.51 | 0.53 | 0.56 | 0.59 | 0.64 | 0.67 | 0.69 | 0.75 | 0.80 | | |
| 2850 | | | 0.52 | 0.61 | 0.65 | 0.67 | 0.78 | 0.82 | 0.87 | 0.91 | 0.95 | 1.04 | 1.08 | 1.12 | 1.21 | 1.29 | | |
| 3450 | | | 0.63 | 0.74 | 0.79 | 0.84 | 0.94 | 1.00 | 1.05 | 1.10 | 1.15 | 1.25 | 1.30 | 1.35 | 1.45 | 1.55 | | |
| 100 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | | |
| 200 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.08 | 0.08 | 0.09 | | |
| 300 | 0.04 | 0.05 | 0.05 | 0.06 | 0.06 | 0.07 | 0.08 | 0.08 | 0.09 | 0.09 | 0.10 | 0.11 | 0.11 | 0.12 | 0.12 | 0.13 | | |
| 400 | 0.06 | 0.06 | 0.07 | 0.08 | 0.09 | 0.09 | 0.11 | 0.11 | 0.12 | 0.12 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | | |
| 500 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.14 | 0.15 | 0.16 | 0.16 | 0.18 | 0.19 | 0.20 | 0.21 | 0.23 | | |
| 600 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.14 | 0.16 | 0.17 | 0.18 | 0.19 | 0.20 | 0.22 | 0.23 | 0.24 | 0.25 | 0.27 | | |
| 700 | 0.10 | 0.11 | 0.12 | 0.15 | 0.16 | 0.17 | 0.19 | 0.20 | 0.21 | 0.22 | 0.23 | 0.25 | 0.27 | 0.28 | 0.30 | 0.32 | | |
| 800 | 0.12 | 0.13 | 0.14 | 0.17 | 0.18 | 0.19 | 0.22 | 0.23 | 0.24 | 0.25 | 0.27 | 0.29 | 0.30 | 0.32 | 0.34 | 0.37 | | |
| 900 | 0.13 | 0.15 | 0.16 | 0.19 | 0.20 | 0.22 | 0.25 | 0.26 | 0.27 | 0.29 | 0.30 | 0.33 | 0.34 | 0.36 | 0.38 | 0.41 | | |
| 1000 | 0.15 | 0.16 | 0.18 | 0.21 | 0.23 | 0.24 | 0.27 | 0.29 | 0.30 | 0.32 | 0.33 | 0.37 | 0.38 | 0.40 | 0.43 | 0.46 | | |
| 1100 | 0.16 | 0.18 | 0.20 | 0.23 | 0.25 | 0.27 | 0.30 | 0.32 | 0.33 | 0.35 | 0.37 | 0.40 | 0.42 | 0.44 | 0.47 | 0.50 | | |
| 1200 | 0.18 | 0.20 | 0.22 | 0.25 | 0.27 | 0.29 | 0.33 | 0.35 | 0.37 | 0.38 | 0.40 | 0.44 | 0.46 | 0.48 | 0.51 | 0.55 | | |
| 1300 | | | 0.24 | 0.28 | 0.30 | 0.32 | 0.36 | 0.38 | 0.40 | 0.42 | 0.44 | 0.48 | 0.50 | 0.52 | 0.56 | 0.59 | | |
| 1400 | | | 0.25 | 0.30 | 0.32 | 0.34 | 0.38 | 0.41 | 0.43 | 0.45 | 0.47 | 0.51 | 0.53 | 0.56 | 0.60 | 0.64 | | |
| 1500 | | | 0.27 | 0.32 | 0.34 | 0.37 | 0.41 | 0.43 | 0.46 | 0.48 | 0.50 | 0.55 | 0.57 | 0.59 | 0.64 | 0.69 | | |
| 1600 | | | 0.29 | 0.34 | 0.37 | 0.39 | 0.44 | 0.46 | 0.49 | 0.51 | 0.54 | 0.59 | 0.61 | 0.63 | 0.68 | 0.73 | | |
| 1700 | | | 0.31 | 0.36 | 0.39 | 0.41 | 0.47 | 0.49 | 0.52 | 0.54 | 0.57 | 0.62 | 0.65 | 0.67 | 0.73 | 0.78 | | |
| 1800 | | | 0.33 | 0.38 | 0.41 | 0.44 | 0.49 | 0.52 | 0.55 | 0.58 | 0.60 | 0.66 | 0.69 | 0.71 | 0.77 | 0.82 | | |
| 1900 | | | 0.37 | 0.43 | 0.46 | 0.49 | 0.55 | 0.58 | 0.61 | 0.64 | 0.67 | 0.73 | 0.76 | 0.79 | 0.85 | 0.91 | | |
| 2000 | | | 0.40 | 0.47 | 0.50 | 0.54 | 0.60 | 0.64 | 0.67 | 0.70 | 0.74 | 0.80 | 0.84 | 0.87 | 0.94 | 1.00 | | |
| 2200 | | | 0.44 | 0.51 | 0.55 | 0.59 | 0.66 | 0.70 | 0.73 | 0.77 | 0.80 | 0.88 | 0.91 | 0.95 | 1.02 | 1.09 | | |
| 2400 | | | 0.48 | 0.56 | 0.59 | 0.63 | 0.71 | 0.75 | 0.79 | 0.83 | 0.87 | 0.95 | 0.99 | 1.03 | 1.10 | 1.18 | | |
| 2600 | | | 0.51 | 0.60 | 0.64 | 0.68 | 0.77 | 0.81 | 0.85 | 0.89 | 0.94 | 1.02 | 1.06 | 1.10 | 1.19 | 1.27 | | |
| 2800 | | | 0.55 | 0.64 | 0.69 | 0.73 | 0.82 | 0.87 | 0.91 | 0.96 | 1.00 | 1.09 | 1.14 | 1.18 | 1.27 | 1.35 | | |
| 3000 | | | 0.59 | 0.68 | 0.73 | 0.78 | 0.88 | 0.92 | 0.97 | 1.02 | 1.07 | 1.16 | 1.21 | 1.26 | 1.35 | 1.44 | | |
| 3200 | | | 0.62 | 0.73 | 0.78 | 0.83 | 0.93 | 0.98 | 1.03 | 1.08 | 1.13 | 1.23 | 1.28 | 1.33 | 1.43 | 1.53 | | |
| 3400 | | | 0.66 | 0.77 | 0.82 | 0.88 | 0.98 | 1.04 | 1.09 | 1.14 | 1.20 | 1.30 | 1.35 | 1.41 | 1.51 | 1.61 | | |
| 3600 | | | | | 0.87 | 0.92 | 1.04 | 1.09 | 1.15 | 1.21 | 1.26 | 1.37 | 1.43 | 1.48 | 1.59 | 1.69 | | |
| 3800 | | | | | 0.91 | 0.97 | 1.09 | 1 | | | | | | | | | | |