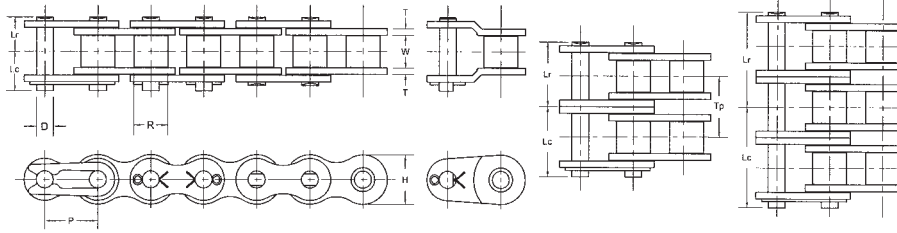


50 ASME/ANSI Roller Chain



Chain Dimensions

Note: Rated Working Load is to be used only in conjunction with "slow speed selection method"

| Common Dimensions (Inches) | | | | | | | | | |
|----------------------------|------------------|-------------------|----------------------|-------------------|---------------------------|-------------------------------|-------------------------|------------------------|--------------|
| ASME/ANSI Chain Number | Chain Pitch P | Inside Width W | Roller Diameter R | Pin Diameter D | Link Plate Thickness T | Roller Link Plate Height H | Number of Links in 10ft | Available Construction | Construction |
| 50 | 5/8 | 0.375 | 0.400 | 0.200 | 0.080 | 0.577 | 192 | No | Yes |

| Pin Lengths and Chain Ratings | | | | | | | | | |
|-------------------------------|-------------------|------------------------------------|------------------------------------|---------------------------------------|-------------------------------------|---|--------------------------|---------------------------------|-------------------------------|
| ASME/ANSI Chain Number | Number of Strands | Riv. Pin End to C/L of Chain Lr | Cot. Pin End to C/L of Chain Lc | Overall Length Riveted Pin Lr + Lr | Overall Length Conn. Pin Lr + Lc | Transverse Pitch for Multi-strand TP | Rated Working Load (lbs) | Average Ultimate Strength (lbs) | Average Chain Weight (lbs/ft) |
| 50 | 1 | 0.400 | 0.463 | 0.800 | 0.863 | - | 1,620 | 7,200 | 0.66 |
| 50-2 | 2 | 0.752 | 0.831 | 1.504 | 1.583 | 0.712 | 2,750 | 14,400 | 1.34 |
| 50-3 | 3 | 1.116 | 1.172 | 2.232 | 2.288 | 0.712 | 4,050 | 21,600 | 2.06 |
| 50-4 | 4 | 1.476 | 1.507 | 2.952 | 2.983 | 0.712 | 5,350 | 28,800 | 2.67 |
| 50-5 | 5 | 1.834 | 1.873 | 3.668 | 3.707 | 0.712 | 6,320 | 36,000 | 3.37 |
| 50-6 | 6 | 2.193 | 2.239 | 4.386 | 4.432 | 0.712 | 7,450 | 43,200 | 4.04 |

Horsepower Ratings

Please consult Hitachi Maxco product engineering for horsepower ratings to the right of the black boundry line.

| Number Teeth Small Sprocket | Maximum Speed of Small Sprocket (rpm) | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---------------------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|--|
| | 10 | 25 | 50 | 100 | 200 | 300 | 400 | 500 | 700 | 900 | 1000 | 1200 | 1400 | 1600 | 1800 | 2100 | 2400 | 2700 | 3000 | 3500 | 4000 | 4500 | 5000 | 5500 | 6000 | |
| 9 | 0.12 | 0.28 | 0.52 | 0.97 | 1.81 | 2.61 | 3.38 | 4.13 | 5.59 | 7.01 | 7.71 | 7.58 | 6.02 | 4.92 | 4.13 | 3.27 | 2.68 | 2.25 | 1.92 | 1.52 | | | | | | |
| 10 | 0.14 | 0.31 | 0.58 | 1.09 | 2.03 | 2.92 | 3.79 | 4.63 | 6.26 | 7.85 | 8.63 | 8.88 | 7.05 | 5.77 | 4.83 | 3.84 | 3.14 | 2.63 | 2.25 | 1.78 | | | | | | |
| 11 | 0.15 | 0.35 | 0.65 | 1.20 | 2.25 | 3.24 | 4.20 | 5.13 | 6.94 | 8.70 | 9.57 | 10.24 | 8.13 | 6.65 | 5.58 | 4.42 | 3.62 | 3.04 | 2.59 | 2.06 | 1.68 | 1.41 | 1.20 | 1.04 | 0.92 | |
| 12 | 0.17 | 0.38 | 0.71 | 1.32 | 2.47 | 3.56 | 4.61 | 5.63 | 7.63 | 9.56 | 10.51 | 11.67 | 9.26 | 7.58 | 6.35 | 5.04 | 4.13 | 3.46 | 2.95 | 2.34 | 1.92 | 1.61 | 1.37 | 1.19 | 1.04 | |
| 13 | 0.18 | 0.41 | 0.77 | 1.44 | 2.69 | 3.88 | 5.03 | 6.14 | 8.32 | 10.43 | 11.46 | 13.16 | 10.44 | 8.55 | 7.16 | 5.69 | 4.65 | 3.90 | 3.33 | 2.64 | 2.16 | 1.81 | 1.55 | 1.34 | | |
| 14 | 0.20 | 0.45 | 0.84 | 1.56 | 2.92 | 4.20 | 5.44 | 6.65 | 9.01 | 11.29 | 12.42 | 14.63 | 11.67 | 9.55 | 8.01 | 6.35 | 5.20 | 4.36 | 3.72 | 2.95 | 2.42 | 2.03 | 1.73 | 1.50 | | |
| 15 | 0.21 | 0.48 | 0.90 | 1.68 | 3.14 | 4.53 | 5.87 | 7.17 | 9.71 | 12.17 | 13.38 | 15.76 | 12.94 | 10.60 | 8.88 | 7.05 | 5.77 | 4.83 | 4.13 | 3.27 | 2.68 | 2.25 | 1.92 | 1.66 | | |
| 16 | 0.23 | 0.52 | 0.97 | 1.81 | 3.37 | 4.85 | 6.29 | 7.69 | 10.41 | 13.05 | 14.34 | 16.90 | 14.26 | 11.67 | 9.78 | 7.76 | 6.35 | 5.32 | 4.55 | 3.61 | 2.95 | 2.47 | 2.11 | 1.83 | | |
| 17 | 0.24 | 0.55 | 1.03 | 1.93 | 3.60 | 5.18 | 6.71 | 8.21 | 11.11 | 13.93 | 15.32 | 18.05 | 15.62 | 12.78 | 10.71 | 8.50 | 6.96 | 5.83 | 4.98 | 3.95 | 3.23 | 2.71 | 2.31 | 2.01 | | |
| 18 | 0.26 | 0.59 | 1.10 | 2.05 | 3.83 | 5.51 | 7.14 | 8.73 | 11.82 | 14.82 | 16.29 | 19.20 | 17.02 | 13.93 | 11.67 | 9.26 | 7.58 | 6.35 | 5.42 | 4.30 | 3.52 | 2.95 | 2.52 | | | |
| 19 | 0.27 | 0.62 | 1.17 | 2.17 | 4.06 | 5.84 | 7.57 | 9.25 | 12.53 | 15.71 | 17.27 | 20.35 | 18.45 | 15.10 | 12.66 | 10.05 | 8.22 | 6.89 | 5.88 | 4.67 | 3.82 | 3.20 | 2.73 | | | |
| 20 | 0.29 | 0.66 | 1.23 | 2.30 | 4.29 | 6.18 | 8.00 | 9.78 | 13.24 | 16.60 | 18.25 | 21.51 | 19.93 | 16.31 | 13.67 | 10.85 | 8.88 | 7.44 | 6.35 | 5.04 | 4.13 | 3.46 | 2.95 | | | |
| 21 | 0.30 | 0.70 | 1.30 | 2.42 | 4.52 | 6.51 | 8.44 | 10.31 | 13.96 | 17.50 | 19.24 | 22.67 | 21.44 | 17.55 | 14.71 | 11.67 | 9.55 | 8.01 | 6.84 | 5.42 | 4.44 | 3.72 | 3.18 | | | |
| 22 | 0.32 | 0.73 | 1.36 | 2.55 | 4.75 | 6.85 | 8.87 | 10.84 | 14.68 | 18.40 | 20.23 | 23.84 | 22.99 | 18.82 | 15.77 | 12.52 | 10.24 | 8.59 | 7.33 | 5.82 | 4.76 | 3.99 | 3.41 | | | |
| 23 | 0.34 | 0.77 | 1.43 | 2.67 | 4.99 | 7.18 | 9.31 | 11.38 | 15.40 | 19.31 | 21.23 | 25.01 | 24.58 | 20.12 | 16.86 | 13.38 | 10.95 | 9.18 | 7.84 | 6.22 | 5.09 | 4.27 | | | | |
| 24 | 0.35 | 0.80 | 1.50 | 2.80 | 5.22 | 7.52 | 9.74 | 11.91 | 16.12 | 20.22 | 22.23 | 26.19 | 26.20 | 21.44 | 17.97 | 14.26 | 11.67 | 9.78 | 8.35 | 6.63 | 5.42 | 4.55 | | | | |
| 25 | 0.37 | 0.84 | 1.57 | 2.92 | 5.46 | 7.86 | 10.18 | 12.45 | 16.85 | 21.13 | 23.23 | 27.37 | 27.85 | 22.80 | 19.11 | 15.16 | 12.41 | 10.40 | 8.88 | 7.05 | 5.77 | 4.83 | | | | |
| 26 | 0.38 | 0.88 | 1.63 | 3.05 | 5.69 | 8.20 | 10.62 | 12.99 | 17.58 | 22.04 | 24.23 | 28.55 | 29.54 | 24.18 | 20.26 | 16.08 | 13.16 | 11.03 | 9.42 | 7.47 | 6.12 | 5.13 | | | | |
| 28 | 0.42 | 0.95 | 1.77 | 3.30 | 6.17 | 8.88 | 11.51 | 14.07 | 19.04 | 23.88 | 26.25 | 30.93 | 33.01 | 27.02 | 22.65 | 17.97 | 14.71 | 12.33 | 10.52 | 8.35 | 6.84 | 5.73 | | | | |
| 30 | 0.45 | 1.02 | 1.91 | 3.56 | 6.64 | 9.57 | 12.40 | 15.16 | 20.52 | 25.72 | 28.28 | 33.33 | 36.61 | 29.97 | 25.11 | 19.93 | 16.31 | 13.67 | 11.67 | 9.26 | 7.58 | | | | | |
| 32 | 0.48 | 1.10 | 2.05 | 3.82 | 7.12 | 10.26 | 13.29 | 16.25 | 22.00 | 27.58 | 30.32 | 35.73 | 40.34 | 33.01 | 27.67 | 21.96 | 17.97 | 15.06 | 12.86 | 10.20 | 8.35 | | | | | |
| 35 | 0.53 | 1.21 | 2.25 | 4.21 | 7.85 | 11.30 | 14.64 | 17.90 | 24.23 | 30.38 | 33.41 | 39.36 | 45.22 | 37.76 | 31.65 | 25.11 | 20.56 | 17.23 | 14.71 | 11.67 | 9.55 | | | | | |
| 40 | 0.61 | 1.40 | 2.60 | 4.86 | 9.07 | 13.06 | 16.92 | 20.68 | 27.99 | 35.10 | 38.59 | 45.47 | 52.24 | 46.14 | 38.67 | 30.68 | 25.11 | 21.05 | 17.97 | 14.26 | | | | | | |
| 45 | 0.69 | 1.58 | 2.96 | 5.52 | 10.30 | 14.83 | 19.21 | 23.48 | 31.79 | 39.86 | 43.82 | 51.64 | 59.32 | 55.05 | 46.14 | 36.61 | 29.97 | 25.11 | 21.44 | 17.02 | | | | | | |

- Type A: Manual or Drip Lubrication
- Type B: Bath or Sliger Disc Lubrication
- Type C: Oil Stream or Pressure Spray Lubrication

Horsepower values given in the tables are for single strand chains. For multiple strand chains use the "Multi-Strand Factors" below.

| Number of Strands Factor | Multi-Strand Factors | | | | |
|-----------------------------|----------------------|-----|-----|-----|-----|
| | 2 | 3 | 4 | 5 | 6 |
| | 1.7 | 2.5 | 3.3 | 3.9 | 4.6 |