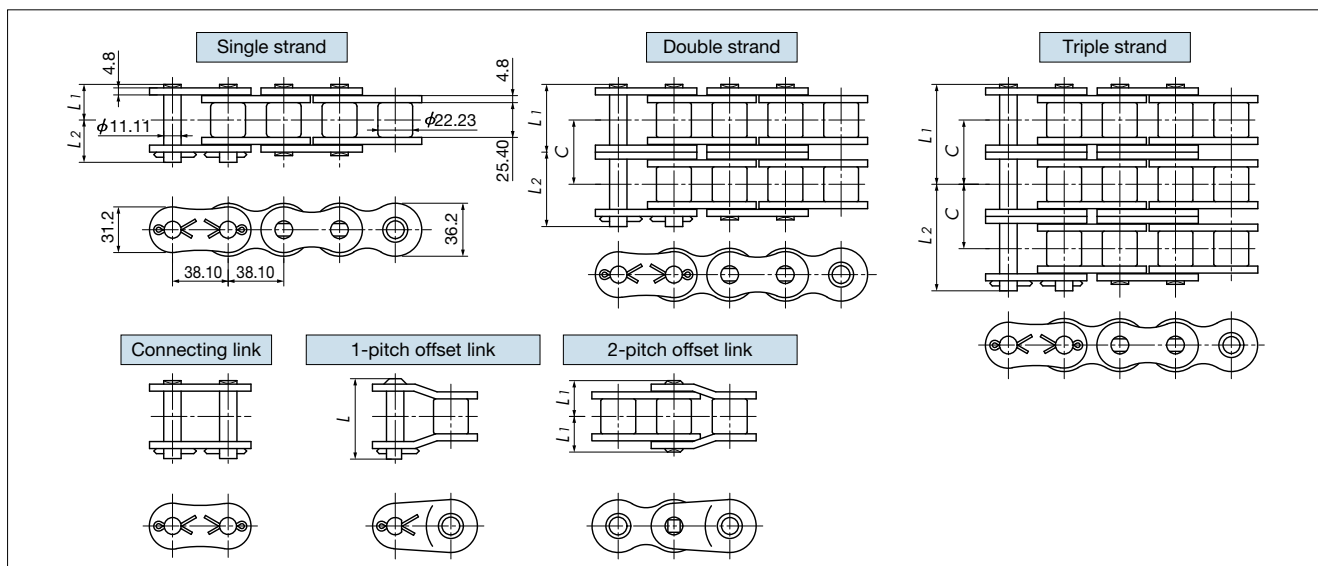




## Specifications

| Size  | Number of strands | Dimensions $L_1$ | Dimensions $L_2$ | Offset pin length $L$ | Transverse pitch $C$ | ASME standard min. tensile strength kN[kgf] | Min. tensile strength kN[kgf] | Max. allowable load kN[kgf] | Approx. mass kg/m |
|-------|-------------------|------------------|------------------|-----------------------|----------------------|---------------------------------------------|-------------------------------|-----------------------------|-------------------|
| RS120 | <b>1</b>          | 24.9             | 28.9             | 55.0                  | 45.4                 | 125.0{12747}                                | 148{15100}                    | 30.4{3100}                  | 5.93              |
|       | <b>2</b>          | 47.6             | 51.6             | 103.2                 |                      | 250.0{25493}                                | 296{30200}                    | 51.7{5270}                  | 11.70             |
|       | 3                 | 70.4             | 74.4             | 148.6                 |                      | 375.0{38240}                                | 444{45300}                    | 76.0{7750}                  | 17.53             |
|       | 4                 | 93.1             | 97.1             | 194.0                 |                      | —                                           | 592{60400}                    | 100 {10230}                 | 23.36             |
|       | 5                 | 115.85           | 119.85           | 239.4                 |                      | —                                           | 740{75500}                    | 119 {12090}                 | 29.16             |
|       | 6                 | 138.55           | 142.55           | 284.8                 |                      | —                                           | 888{90600}                    | 140 {14260}                 | 34.96             |

Note: 1. Maximum allowable load when using a one-pitch offset link is 65% of the above.

2. Number of links per unit = 80. Items in bold are stocked in units.

## RS120 Maximum kilowatt ratings table (kW ratings for single strand chain)

| Small sprocket no. of teeth | Small sprocket max rpm |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                             | 10                     | 25   | 50   | 100  | 150  | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 |
| Lubrication                 | AI                     |      |      | AII  |      |      | B    |      |      |      |      | C    |      |      |      |      |      |      |      |      |
|                             | 10                     | 25   | 50   | 100  | 150  | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 |
| 9                           | 1.65                   | 3.75 | 7.00 | 13.1 | 18.8 | 24.4 | 35.1 | 41.1 | 41.1 | 32.2 | 25.6 | 20.9 | 17.5 | 15.0 | 13.0 | 11.4 | 10.1 | 9.04 | 8.15 | 7.40 |
| 10                          | 1.84                   | 4.21 | 7.85 | 14.6 | 21.1 | 27.3 | 39.4 | 46.1 | 46.0 | 37.7 | 30.0 | 24.5 | 20.5 | 17.5 | 15.2 | 13.3 | 11.8 | 10.6 | 9.55 | 8.67 |
| 11                          | 2.04                   | 4.66 | 8.70 | 16.2 | 23.4 | 30.3 | 43.6 | 51.0 | 51.0 | 43.5 | 34.6 | 28.3 | 23.7 | 20.2 | 17.5 | 15.4 | 13.7 | 12.2 | 11.0 | 10.0 |
| 12                          | 2.24                   | 5.12 | 9.56 | 17.8 | 25.7 | 33.3 | 47.9 | 56.1 | 56.1 | 49.6 | 39.4 | 32.2 | 27.0 | 23.1 | 20.0 | 17.5 | 15.6 | 13.9 | 12.6 | 11.4 |
| 13                          | 2.45                   | 5.58 | 10.4 | 19.4 | 28.0 | 36.3 | 52.3 | 61.1 | 61.1 | 55.9 | 44.4 | 36.3 | 30.5 | 26.0 | 22.5 | 19.8 | 17.5 | 15.7 | 14.2 | 12.8 |
| 14                          | 2.65                   | 6.05 | 11.3 | 21.1 | 30.3 | 39.3 | 56.6 | 66.2 | 66.2 | 62.5 | 49.6 | 40.6 | 34.0 | 29.1 | 25.2 | 22.1 | 19.6 | 17.5 | 15.8 | 14.4 |
| 15                          | 2.86                   | 6.52 | 12.2 | 22.7 | 32.7 | 42.3 | 61.0 | 71.3 | 71.3 | 69.3 | 55.0 | 45.0 | 37.7 | 32.2 | 27.9 | 24.5 | 21.7 | 19.5 | 17.5 | 15.9 |
| 16                          | 3.06                   | 6.99 | 13.0 | 24.3 | 35.0 | 45.4 | 65.4 | 76.5 | 76.5 | 76.4 | 60.6 | 49.6 | 41.6 | 35.5 | 30.8 | 27.0 | 24.0 | 21.4 | 19.3 | 17.5 |
| 17                          | 3.27                   | 7.46 | 13.9 | 26.0 | 37.4 | 48.5 | 69.8 | 83.7 | 83.7 | 83.7 | 66.4 | 54.3 | 45.5 | 38.9 | 33.7 | 29.6 | 26.2 | 23.5 | 21.2 | 19.2 |
| 18                          | 3.47                   | 7.93 | 14.8 | 27.6 | 39.8 | 51.6 | 74.3 | 91.2 | 91.2 | 91.2 | 72.3 | 59.2 | 49.6 | 42.4 | 36.7 | 32.2 | 28.6 | 25.6 | 23.1 | 20.9 |
| 19                          | 3.67                   | 8.41 | 15.7 | 29.3 | 42.2 | 54.7 | 78.7 | 98.9 | 98.9 | 98.9 | 78.4 | 64.2 | 53.8 | 45.9 | 39.8 | 35.0 | 31.0 | 27.7 | 25.0 | 22.7 |
| 20                          | 3.86                   | 8.89 | 16.6 | 31.0 | 44.6 | 57.8 | 83.2 | 107  | 107  | 107  | 84.7 | 69.3 | 58.1 | 49.6 | 43.0 | 37.7 | 33.5 | 30.0 | 27.0 | 24.5 |
| 21                          | 4.05                   | 9.37 | 17.5 | 32.6 | 47.0 | 60.9 | 87.7 | 114  | 115  | 115  | 91.2 | 74.6 | 62.5 | 53.4 | 46.3 | 40.6 | 36.0 | 32.2 | 29.1 | 26.4 |
| 22                          | 4.25                   | 9.85 | 18.4 | 34.3 | 49.4 | 64.0 | 92.2 | 119  | 123  | 123  | 97.7 | 80.0 | 67.0 | 57.2 | 49.6 | 43.5 | 38.6 | 34.6 | 31.2 | 28.3 |
| 23                          | 4.44                   | 10.3 | 19.3 | 36.0 | 51.9 | 67.2 | 96.8 | 125  | 132  | 132  | 104  | 85.5 | 71.7 | 61.2 | 53.0 | 46.6 | 41.3 | 36.9 | 33.3 | 30.2 |
| 24                          | 4.63                   | 10.8 | 20.2 | 37.7 | 54.3 | 70.3 | 101  | 131  | 140  | 140  | 111  | 91.2 | 76.4 | 65.2 | 56.5 | 49.6 | 44.0 | 39.4 | 35.5 | 32.2 |
| 25                          | 4.83                   | 11.3 | 21.1 | 39.4 | 56.7 | 73.5 | 106  | 137  | 146  | 146  | 118  | 96.9 | 81.2 | 69.3 | 60.1 | 52.8 | 46.8 | 41.9 | 37.7 | 34.3 |
| 26                          | 5.02                   | 11.8 | 22.0 | 41.1 | 59.2 | 76.7 | 110  | 143  | 152  | 152  | 126  | 103  | 86.1 | 73.5 | 63.7 | 55.9 | 49.6 | 44.4 | 40.0 | 36.3 |
| 28                          | 5.41                   | 12.8 | 23.9 | 44.5 | 64.1 | 83.1 | 120  | 155  | 165  | 165  | 140  | 115  | 96.3 | 82.2 | 71.2 | 62.5 | 55.5 | 49.6 | 44.7 | 40.6 |
| 30                          | 5.79                   | 13.8 | 25.7 | 48.0 | 69.1 | 89.5 | 129  | 167  | 178  | 178  | 156  | 127  | 107  | 91.2 | 79.0 | 69.3 | 61.5 | 55.0 | 49.6 | 46.7 |
| 32                          | 6.18                   | 14.8 | 27.6 | 51.4 | 74.1 | 96.0 | 138  | 179  | 191  | 191  | 171  | 140  | 118  | 100  | 87.0 | 76.4 | 67.8 | 60.6 | 54.7 |      |
| 35                          | 6.76                   | 16.3 | 30.4 | 56.7 | 81.6 | 106  | 152  | 197  | 210  | 210  | 196  | 161  | 135  | 115  | 99.6 | 87.4 | 77.5 | 69.3 | 35.6 |      |
| 40                          | 7.72                   | 18.8 | 35.1 | 65.4 | 94.3 | 122  | 176  | 228  | 242  | 242  | 240  | 196  | 164  | 140  | 122  | 107  | 94.7 | 44.4 |      |      |
| 45                          | 8.69                   | 21.3 | 39.8 | 74.3 | 107  | 139  | 200  | 259  | 286  | 286  | 286  | 234  | 196  | 167  | 145  | 127  | 59.7 |      |      |      |

Note: 1. kW ratings when using one-pitch offset links are 65% of the above.

2. Please contact a Tsubaki representative prior to use of kW ratings in the shaded area of the table.

## Multi-strand factors

| Number of chain strands | Two strands | Three strands | Four strands | Five strands | Six strands |
|-------------------------|-------------|---------------|--------------|--------------|-------------|
| Multi-strand factor     | 1.7         | 2.5           | 3.3          | 3.9          | 4.6         |

## Lubrication systems and methods

| Lubrication system | AI                 | AII              | B                                    | C                       |
|--------------------|--------------------|------------------|--------------------------------------|-------------------------|
| Method             | Manual lubrication | Drip lubrication | Oil bath or slinger disc lubrication | Forced pump lubrication |

Details on pg. 218

## Model numbering example

**RS120 -1 -RP + 70L -MWJR**

Size      Number of strands      Pin type      Number of links      End link

Note: Standard roller chains do not require series selection.