

 **CHALLENGE** ®

**POWER TRANSMISSION**

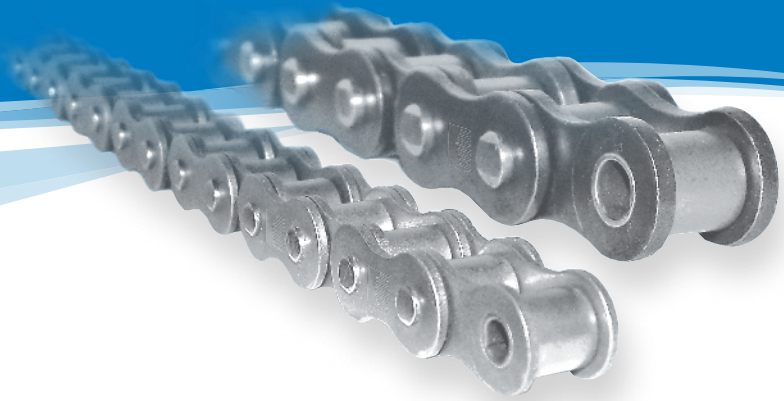
# Technical Catalogue

**CHAIN  
SECTION**



[www.challengept.com](http://www.challengept.com)





## Features

**Challenge offer a large range of various types of chain including – Transmission, Conveyor, Agricultural, Leaf and many types of special chains**

### **Challenge Transmission Roller chain**

Challenge roller chain is supplied in five meter boxes including one connecting link. Some sizes are available on reels or in 10ft boxes.

**The range includes** – ISO, BS, ANSI and many bespoke chains.

**ISO roller chain** – standard, straight side plate, extended pin, hollow pin, stainless steel, nickel plated, zinc plated, double pitch and specials.

**ANSI roller chain** – standard, heavy duty, cottered, cottered heavy duty, straight side plate, extended pin, stainless steel, nickel plated, zinc plated, double pitch (including extended pin, hollow pin) and specials.

**Roller chain attachments** – cover a large range for both ISO and ANSI chain, Timber, Agricultural and Conveyor chain.

### **Challenge transmission chains have a longer life because:**

- **Pins** – manufactured from case hardened chrome manganese molybdenum steel. This increases wear resistance with more shock absorption ability.
- **Pre-stretched** – “fit and forget”.
- **Ball swaged holes** – combats fatigue failure.
- **Shot peened rollers and side plates** – reduces fatigue failure.
- **Deep waisted side plates** – increases breaking load and reduces stress.
- **Solid rollers** – prolongs wear life.



## HERE'S A CHALLENGE ...

# Who's got the **Perfect Spin** to bowl your customers over?

Never a  
problem  
always a ...



## Spin Riveted For Added Strength



### Lock in to:

Secure source of supply • Superior service  
Product quality and reliability • Manufacturers prices  
*Securing more than just your profits*

Never a problem always a ...

# CHALLENGE

www.challengept.com



## Roller Chain

# The Benefits...

## CHALLENGE X Series Transmission Chain

- **Spin Riveted Case Hardened Pins in Alloy Steel**  
- For optimum life
- **Pre-stretched** - Fit and forget
- **Ball swaged holes** - Combats fatigue
- **Shot peened**  
- Produces strong surface and reduced fatigue
- **Deep waisted side plates** - Reduces stress
- **Rollers from seamless tube**  
- For strength and long life



## The X Series Range...

|          |          |
|----------|----------|
| 20B-1X   | 32B-2X   |
| 20B-1XGL | 32B-3X   |
| 20B-2X   | 40B-1X   |
| 20B-2XGL | 40B-1XGL |
| 20B-3X   | 40B-2X   |
| 20B-3XGL | 40B-3X   |
| 24B-1X   | 48B-1X   |
| 24B-1XGL | 48B-1XGL |
| 24B-2X   | 48B-2X   |
| 24B-3X   | 48B-3X   |
| 28B-1X   | 56B-1X   |
| 28B-1XGL | 56B-2X   |
| 28B-2X   | 56B-3X   |
| 28B-3X   | 64B-1X   |
| 32B-1X   | 64B-2X   |
| 32B-1XGL | 64B-3X   |

## Also in the Roller Chain range

### Roller Chain

British Standard Roller Chain  
ANSI Standard Roller Chain  
ANSI Heavy Duty Roller Chain  
ANSI Cottered Series Roller Chain  
ANSI Cottered Heavy Duty Series Roller Chain  
ANSI Straight Side Plate Roller Chain  
British Standard Straight Side Plate Roller Chain  
Chain Breakers  
Timing Chain  
Bush Chain  
Bicycle Chain  
Bicycle Chain/Connecting Links  
Roller Chain with Extended Pins  
Special Transmission Roller Chain  
Hollow Pin Roller Chain  
Special Chain with "U" Elements  
Special Chain with "U" and Rubber Elements  
Transport Chain  
Special Chain with Driver  
Stainless Steel Transmission Roller Chain  
Side Bow Chain  
Nickel & Zinc Plated Transmission Roller Chain  
Roller Chain Attachments

### Double Pitch Chain

Double Pitch Transmission Chain  
Double Pitch Conveyor Chain  
Double Pitch Attachments  
Double Pitch Special Chain  
Double Pitch Extended Pin Chain  
Double Pitch Hollow Pin Chain

### Leaf Chain

LH / BL Series Leaf Chain  
LL Series Leaf Chain  
AL Series Leaf Chain  
FL Series Leaf Chain  
Clevis Pins  
Special Leaf Chain with Hollow Pin

### Timber Chain

Welded Steel Chain  
Welded Steel Chain Attachments (offset sidebar)  
Welded Steel Chain (offset side bar)  
Offset Sidebar Roller Chain  
Straight Sidebar Roller Chain  
Welded Steel Drag Chain  
Drag Chain Attachments

### Agricultural Chain

Steel Agricultural Chain  
Agricultural Chain Attachments

### Conveyor Chain

BS Z Series with Solid Pin Chain  
BS ZC Series with Hollow Pin Chain  
BS Z/ZC Series Attachments Chain  
BS ZE Series Deep Link Chain  
M Series Metric Solid Pin Chain  
M Series Chain Attachments  
MC Series Hollow Pin Chain  
MT/ME Series Deep Link Chain  
FV/C Series Metric Solid Pin Chain  
FV/C Series Metric Hollow Pin Chain  
FV/C Series Chain Attachments  
FVT/CE Series Metric Deep Link Chain  
FV/CR Series Metric Scraper Chain  
Special Conveyor Chain  
Special Conveyor Chain  
Conveyor Chain Attachment Chain Designations

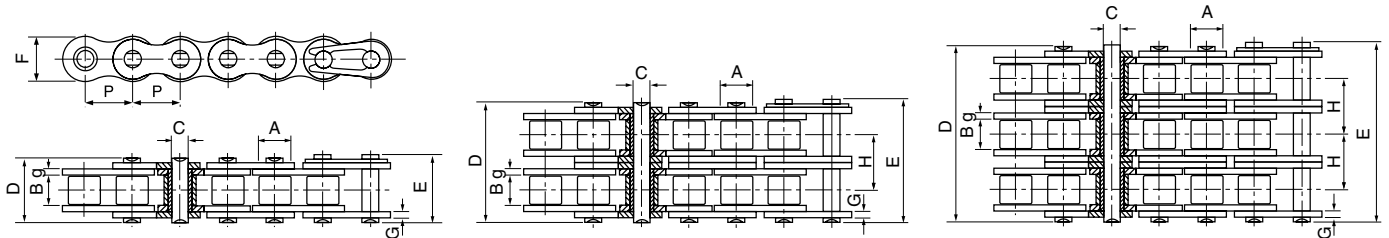


# Roller Chain

## British Standard Roller Chain

## BS228, ISO R606, DIN 8187

BS Roller Chain



| ISO Chain number | Pitch<br>P | Roller diameter<br>A | Width between inner plates<br>B | Pin diameter<br>C | Pin length |        | Inner plate height<br>F | Plate thickness<br>g/G | Transverse pitch<br>H | Minimum tensile strength<br>kN | Average tensile strength<br>kN | Weight<br>kg/m |
|------------------|------------|----------------------|---------------------------------|-------------------|------------|--------|-------------------------|------------------------|-----------------------|--------------------------------|--------------------------------|----------------|
|                  | P          | A                    | B                               | C                 | D          | E      | F                       |                        | H                     |                                |                                |                |
| <b>SIMPLEX</b>   |            |                      |                                 |                   |            |        |                         |                        |                       |                                |                                |                |
| 04B-1            | 6.000      | 4.00                 | 2.80                            | 1.85              | 6.80       | 7.80   | 5.00                    | 0.60                   | -                     | 3.00                           | 3.20                           | 0.11           |
| 05B-1            | 8.000      | 5.00                 | 3.00                            | 2.31              | 8.20       | 8.90   | 7.10                    | 0.80                   | -                     | 5.00                           | 5.90                           | 0.20           |
| 06B-1 SSP        | 9.525      | 6.35                 | 5.72                            | 3.28              | 13.15      | 14.10  | 8.20                    | 1.30                   | -                     | 9.00                           | 10.40                          | 0.41           |
| 08B-1            | 12.700     | 8.51                 | 7.75                            | 4.45              | 16.70      | 18.20  | 11.80                   | 1.60                   | -                     | 18.00                          | 19.40                          | 0.69           |
| 10B-1            | 15.875     | 10.16                | 9.65                            | 5.08              | 19.50      | 20.90  | 14.70                   | 1.70                   | -                     | 22.40                          | 27.50                          | 0.93           |
| 12B-1            | 19.050     | 12.07                | 11.68                           | 5.72              | 22.50      | 24.20  | 16.00                   | 1.85                   | -                     | 29.00                          | 32.20                          | 1.15           |
| 16B-1            | 25.400     | 15.88                | 17.02                           | 8.28              | 36.10      | 37.40  | 21.00                   | 4.15/3.1               | -                     | 60.00                          | 72.80                          | 2.71           |
| *20B-1           | 31.750     | 19.05                | 19.56                           | 10.19             | 41.30      | 45.00  | 26.40                   | 4.5/3.5                | -                     | 95.00                          | 106.70                         | 3.70           |
| *24B-1           | 38.100     | 25.40                | 25.40                           | 14.63             | 53.40      | 57.80  | 33.20                   | 6.0/4.8                | -                     | 160.00                         | 178.00                         | 7.10           |
| *28B-1           | 44.450     | 27.94                | 30.99                           | 15.90             | 65.10      | 69.50  | 36.70                   | 7.5/6.0                | -                     | 200.00                         | 222.00                         | 8.50           |
| *32B-1           | 50.800     | 29.21                | 30.99                           | 17.81             | 66.00      | 71.00  | 42.00                   | 7.0/6.0                | -                     | 250.00                         | 277.50                         | 10.25          |
| *40B-1           | 63.500     | 39.37                | 38.10                           | 22.89             | 82.20      | 89.20  | 52.96                   | 8.5/8.0                | -                     | 355.00                         | 394.00                         | 16.35          |
| *48B-1           | 76.200     | 48.26                | 45.72                           | 29.24             | 99.10      | 107.00 | 63.80                   | 12.0/10.0              | -                     | 560.00                         | 621.60                         | 25.00          |
| *56B-1           | 88.900     | 53.98                | 53.34                           | 34.32             | 114.60     | 123.00 | 77.80                   | 13.5/12.0              | -                     | 850.00                         | 940.00                         | 35.88          |
| *64B-1           | 101.600    | 63.50                | 60.96                           | 39.40             | 130.00     | 138.50 | 90.17                   | 15.0/13.0              | -                     | 1120.00                        | 1240.00                        | 46.50          |
| <b>DUPLEX</b>    |            |                      |                                 |                   |            |        |                         |                        |                       |                                |                                |                |
| 05B-2            | 8.000      | 5.00                 | 3.00                            | 2.31              | 13.90      | 14.50  | 7.10                    | 0.80                   | 5.64                  | 7.80                           | 10.20                          | 0.33           |
| 06B-2 SSP        | 9.525      | 6.35                 | 5.72                            | 3.28              | 23.40      | 24.40  | 8.20                    | 1.30                   | 10.24                 | 16.90                          | 18.70                          | 0.77           |
| 08B-2            | 12.700     | 8.51                 | 7.75                            | 4.45              | 31.20      | 32.20  | 11.80                   | 1.60                   | 13.92                 | 32.00                          | 38.70                          | 1.34           |
| 10B-2            | 15.875     | 10.16                | 9.65                            | 5.08              | 36.10      | 37.50  | 14.70                   | 1.70                   | 16.59                 | 44.50                          | 56.20                          | 1.84           |
| 12B-2            | 19.050     | 12.07                | 11.68                           | 5.72              | 42.00      | 43.60  | 16.00                   | 1.85                   | 19.46                 | 57.80                          | 66.10                          | 2.31           |
| 16B-2            | 25.400     | 15.88                | 17.02                           | 8.28              | 68.00      | 69.30  | 21.00                   | 4.15/3.1               | 31.88                 | 106.00                         | 133.00                         | 5.42           |
| *20B-2           | 31.750     | 19.05                | 19.56                           | 10.19             | 77.80      | 81.50  | 26.40                   | 4.5/3.5                | 36.45                 | 170.00                         | 211.20                         | 7.20           |
| *24B-2           | 38.100     | 25.40                | 25.40                           | 14.63             | 101.70     | 106.20 | 33.20                   | 6.0/4.8                | 48.36                 | 280.00                         | 319.20                         | 13.40          |
| *28B-2           | 44.450     | 27.94                | 30.99                           | 15.90             | 124.60     | 129.10 | 36.70                   | 7.5/6.0                | 59.56                 | 360.00                         | 406.80                         | 16.60          |
| *32B-2           | 50.800     | 29.21                | 30.99                           | 17.81             | 124.60     | 129.60 | 42.00                   | 7.0/6.0                | 58.55                 | 450.00                         | 508.50                         | 21.00          |
| *40B-2           | 63.500     | 39.37                | 38.10                           | 22.89             | 154.50     | 161.50 | 52.96                   | 8.5/8.0                | 72.29                 | 630.00                         | 711.90                         | 32.00          |
| *48B-2           | 76.200     | 48.26                | 45.72                           | 29.24             | 190.40     | 198.20 | 63.80                   | 12.0/10.0              | 91.21                 | 1000.00                        | 1130.00                        | 50.00          |
| *56B-2           | 88.900     | 53.98                | 53.34                           | 34.32             | 221.20     | 229.60 | 77.80                   | 13.5/12.0              | 106.60                | 1600.00                        | 1760.00                        | 71.76          |
| *64B-2           | 101.600    | 63.50                | 60.96                           | 39.40             | 249.90     | 258.40 | 90.17                   | 15.0/13.0              | 119.89                | 2000.00                        | 2200.00                        | 93.00          |
| <b>TRIPLEX</b>   |            |                      |                                 |                   |            |        |                         |                        |                       |                                |                                |                |
| 05B-3            | 8.000      | 5.00                 | 3.00                            | 2.31              | 19.50      | 20.20  | 7.10                    | 0.80                   | 5.64                  | 11.10                          | 13.80                          | 0.48           |
| 06B-3 SSP        | 9.525      | 6.35                 | 5.72                            | 3.28              | 33.50      | 34.60  | 8.20                    | 1.30                   | 10.24                 | 24.90                          | 30.10                          | 1.16           |
| 08B-3            | 12.700     | 8.51                 | 7.75                            | 4.45              | 45.10      | 46.10  | 11.80                   | 1.60                   | 13.92                 | 47.50                          | 57.80                          | 2.03           |
| 10B-3            | 15.875     | 10.16                | 9.65                            | 5.08              | 52.70      | 54.10  | 14.70                   | 1.70                   | 16.59                 | 66.70                          | 84.50                          | 2.77           |
| 12B-3            | 19.050     | 12.07                | 11.68                           | 5.72              | 61.50      | 63.10  | 16.00                   | 1.85                   | 19.46                 | 86.70                          | 101.80                         | 3.46           |
| 16B-3            | 25.400     | 15.88                | 17.02                           | 8.28              | 99.80      | 101.20 | 21.00                   | 4.15/3.1               | 31.88                 | 160.00                         | 203.70                         | 8.13           |
| *20B-3           | 31.750     | 19.05                | 19.56                           | 10.19             | 114.20     | 117.90 | 26.40                   | 4.5/3.5                | 36.45                 | 250.00                         | 290.00                         | 10.82          |
| *24B-3           | 38.100     | 25.40                | 25.40                           | 14.63             | 150.10     | 154.60 | 33.20                   | 6.0/4.8                | 48.36                 | 425.00                         | 493.00                         | 20.10          |
| *28B-3           | 44.450     | 27.94                | 30.99                           | 15.90             | 184.20     | 188.70 | 36.70                   | 7.5/6.0                | 59.56                 | 530.00                         | 609.50                         | 24.92          |
| *32B-3           | 50.800     | 29.21                | 30.99                           | 17.81             | 183.20     | 188.20 | 42.00                   | 7.0/6.0                | 58.55                 | 670.00                         | 770.50                         | 31.56          |
| *40B-3           | 63.500     | 39.37                | 38.10                           | 22.89             | 226.80     | 233.80 | 52.96                   | 8.5/8.0                | 72.29                 | 950.00                         | 1092.50                        | 48.10          |
| *48B-3           | 76.200     | 48.26                | 45.72                           | 29.24             | 281.60     | 289.40 | 63.80                   | 12.0/10.0              | 91.21                 | 1500.00                        | 1710.00                        | 75.00          |
| *56B-3           | 88.900     | 53.98                | 53.34                           | 34.32             | 327.80     | 336.20 | 77.80                   | 13.5/12.0              | 106.60                | 2240.00                        | 2240.00                        | 107.64         |
| *64B-3           | 101.600    | 63.50                | 60.96                           | 39.40             | 369.80     | 378.30 | 90.17                   | 15.0/13.0              | 119.89                | 3000.00                        | 3300.00                        | 139.50         |

\* X-Series chains with spin riveted pins also available in these sizes.  
SSP = Straight Side Plate Chain

Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

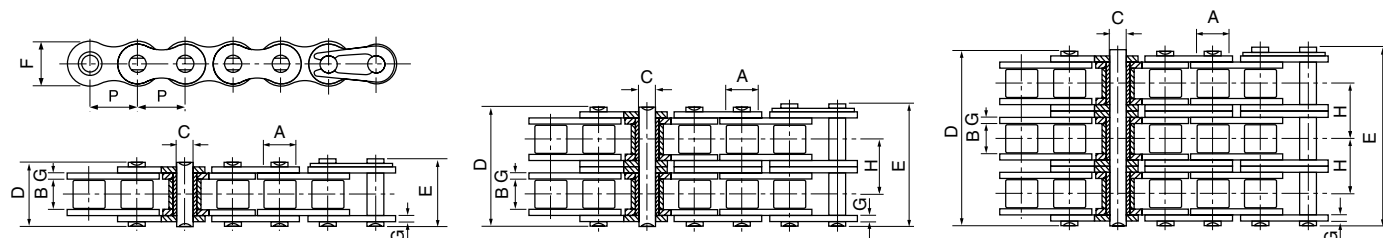
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Roller Chain

## ANSI Standard Roller Chain

## ANSI B29.1, ISO R606, DIN 8188

### ANSI Roller Chain



| ANSI Chain number | Pitch<br>P | Roller diameter<br>A | Width between inner plates<br>B | Pin diameter<br>C | Pin length |        | Inner plate height<br>F | Plate thickness<br>g/G | Transverse pitch<br>H | Minimum tensile strength<br>kN | Average tensile strength<br>kN | Weight<br>kg/m |
|-------------------|------------|----------------------|---------------------------------|-------------------|------------|--------|-------------------------|------------------------|-----------------------|--------------------------------|--------------------------------|----------------|
|                   | P          | A                    | B                               | C                 | D          | E      | F                       | g/G                    | H                     |                                |                                |                |
| <b>SIMPLEX</b>    |            |                      |                                 |                   |            |        |                         |                        |                       |                                |                                |                |
| *15-1R            | 4.763      | 2.48                 | 2.38                            | 1.62              | 6.10       | 6.90   | 4.30                    | 0.60                   | -                     | 1.8                            | 2.0                            | 0.08           |
| *25-1R            | 6.350      | 3.30                 | 3.18                            | 2.31              | 7.90       | 8.40   | 6.00                    | 0.80                   | -                     | 3.5                            | 4.6                            | 0.15           |
| *35-1R            | 9.525      | 5.08                 | 4.77                            | 3.58              | 12.40      | 13.17  | 9.00                    | 1.30                   | -                     | 7.9                            | 10.8                           | 0.33           |
| 41-1R             | 12.700     | 7.77                 | 6.25                            | 3.58              | 13.75      | 15.00  | 9.91                    | 1.30                   | -                     | 6.7                            | 12.6                           | 0.41           |
| 40-1R             | 12.700     | 7.95                 | 7.85                            | 3.96              | 16.60      | 17.80  | 12.00                   | 1.50                   | -                     | 14.1                           | 17.5                           | 0.62           |
| 50-1R             | 15.875     | 10.16                | 9.40                            | 5.08              | 20.70      | 22.20  | 15.09                   | 2.03                   | -                     | 22.2                           | 29.4                           | 1.02           |
| 60-1R             | 19.050     | 11.91                | 12.57                           | 5.94              | 25.90      | 27.70  | 18.00                   | 2.42                   | -                     | 31.8                           | 41.5                           | 1.50           |
| 80-1R             | 25.400     | 15.88                | 15.75                           | 7.92              | 32.70      | 35.00  | 24.00                   | 3.25                   | -                     | 56.7                           | 69.4                           | 2.60           |
| 100-1R            | 31.750     | 19.05                | 18.90                           | 9.53              | 40.40      | 44.70  | 30.00                   | 4.00                   | -                     | 88.5                           | 109.2                          | 3.91           |
| 120-1R            | 38.100     | 22.23                | 25.22                           | 11.10             | 50.30      | 54.30  | 35.70                   | 4.80                   | -                     | 127.0                          | 156.3                          | 5.62           |
| 140-1R            | 44.450     | 25.40                | 25.22                           | 12.70             | 54.40      | 59.00  | 41.00                   | 5.60                   | -                     | 172.4                          | 212.0                          | 7.50           |
| 160-1R            | 50.800     | 28.58                | 31.55                           | 14.27             | 64.80      | 69.60  | 47.80                   | 6.40                   | -                     | 226.8                          | 278.9                          | 10.10          |
| 180-1R            | 57.150     | 35.71                | 35.48                           | 17.46             | 72.80      | 78.60  | 53.60                   | 7.20                   | -                     | 280.2                          | 341.8                          | 13.45          |
| 200-1R            | 63.500     | 39.68                | 37.85                           | 19.85             | 80.30      | 87.20  | 60.00                   | 8.00                   | -                     | 353.8                          | 431.6                          | 16.15          |
| 240-1R            | 76.200     | 47.63                | 47.35                           | 23.81             | 95.50      | 103.00 | 72.39                   | 9.50                   | -                     | 510.3                          | 622.5                          | 23.20          |
| <b>DUPLEX</b>     |            |                      |                                 |                   |            |        |                         |                        |                       |                                |                                |                |
| *25-2R            | 6.350      | 3.30                 | 3.18                            | 2.31              | 14.50      | 15.00  | 6.00                    | 0.80                   | 6.40                  | 7.0                            | 8.6                            | 0.28           |
| *35-2R            | 9.525      | 5.08                 | 4.77                            | 3.58              | 22.50      | 23.30  | 9.00                    | 1.30                   | 10.13                 | 15.8                           | 19.7                           | 0.63           |
| 41-2R             | 12.700     | 7.77                 | 6.25                            | 3.58              | 25.70      | 26.90  | 9.91                    | 1.30                   | 11.95                 | 13.3                           | 16.9                           | 0.81           |
| 40-2R             | 12.700     | 7.95                 | 7.85                            | 3.96              | 31.00      | 32.20  | 12.00                   | 1.50                   | 14.38                 | 28.2                           | 35.9                           | 1.12           |
| 50-2R             | 15.875     | 10.16                | 9.40                            | 5.08              | 38.90      | 40.40  | 15.09                   | 2.03                   | 18.11                 | 44.4                           | 58.1                           | 2.00           |
| 60-2R             | 19.050     | 11.91                | 12.57                           | 5.94              | 48.80      | 50.50  | 18.00                   | 2.42                   | 22.78                 | 63.6                           | 82.1                           | 2.92           |
| 80-2R             | 25.400     | 15.88                | 15.75                           | 7.92              | 62.70      | 64.30  | 24.00                   | 3.25                   | 29.29                 | 113.4                          | 141.8                          | 5.15           |
| 100-2R            | 31.750     | 19.05                | 18.90                           | 9.53              | 76.40      | 80.50  | 30.00                   | 4.00                   | 35.76                 | 177.0                          | 219.4                          | 7.80           |
| 120-2R            | 38.100     | 22.23                | 25.22                           | 11.10             | 95.80      | 99.70  | 35.70                   | 4.80                   | 45.44                 | 254.0                          | 314.9                          | 11.70          |
| 140-2R            | 44.450     | 25.40                | 25.22                           | 12.70             | 103.30     | 107.90 | 41.00                   | 5.60                   | 48.87                 | 344.8                          | 427.5                          | 15.14          |
| 160-2R            | 50.800     | 28.58                | 31.55                           | 14.27             | 123.30     | 128.10 | 47.80                   | 6.40                   | 58.55                 | 453.6                          | 562.4                          | 20.14          |
| 180-2R            | 57.150     | 35.71                | 35.48                           | 17.46             | 138.60     | 144.40 | 53.60                   | 7.20                   | 65.84                 | 560.5                          | 695.0                          | 29.22          |
| 200-2R            | 63.500     | 39.68                | 37.85                           | 19.85             | 151.90     | 158.80 | 60.00                   | 8.00                   | 71.55                 | 707.6                          | 877.4                          | 32.24          |
| 240-2R            | 76.200     | 47.63                | 47.35                           | 23.81             | 183.40     | 190.80 | 72.39                   | 9.50                   | 87.83                 | 1020.6                         | 1255.3                         | 45.23          |
| <b>TRIPLEX</b>    |            |                      |                                 |                   |            |        |                         |                        |                       |                                |                                |                |
| *25-3R            | 6.350      | 3.30                 | 3.18                            | 2.31              | 21.00      | 21.50  | 6.00                    | 0.80                   | 6.40                  | 10.5                           | 12.6                           | 0.44           |
| *35-3R            | 9.525      | 5.08                 | 4.77                            | 3.58              | 32.70      | 33.50  | 9.00                    | 1.30                   | 10.13                 | 23.7                           | 28.6                           | 1.05           |
| 40-3R             | 12.700     | 7.95                 | 7.85                            | 3.96              | 45.40      | 46.60  | 12.00                   | 1.50                   | 14.38                 | 42.3                           | 50.0                           | 1.90           |
| 50-3R             | 15.875     | 10.16                | 9.40                            | 5.08              | 57.00      | 58.50  | 15.09                   | 2.03                   | 18.11                 | 66.6                           | 77.8                           | 3.09           |
| 60-3R             | 19.050     | 11.91                | 12.57                           | 5.94              | 71.50      | 73.30  | 18.00                   | 2.42                   | 22.78                 | 95.4                           | 111.1                          | 4.54           |
| 80-3R             | 25.400     | 15.88                | 15.75                           | 7.92              | 91.70      | 93.60  | 24.00                   | 3.25                   | 29.29                 | 170.1                          | 198.4                          | 7.89           |
| 100-3R            | 31.750     | 19.05                | 18.90                           | 9.53              | 112.20     | 116.30 | 30.00                   | 4.00                   | 35.76                 | 265.5                          | 309.6                          | 11.77          |
| 120-3R            | 38.100     | 22.23                | 25.22                           | 11.10             | 141.40     | 145.20 | 35.70                   | 4.80                   | 45.44                 | 381.0                          | 437.2                          | 17.53          |
| 140-3R            | 44.450     | 25.40                | 25.22                           | 12.70             | 152.20     | 156.80 | 41.00                   | 5.60                   | 48.87                 | 517.2                          | 593.3                          | 22.20          |
| 160-3R            | 50.800     | 28.58                | 31.55                           | 14.27             | 181.80     | 186.60 | 47.80                   | 6.40                   | 58.55                 | 680.4                          | 780.6                          | 30.02          |
| 180-3R            | 57.150     | 35.71                | 35.48                           | 17.46             | 204.40     | 210.20 | 53.60                   | 7.20                   | 65.84                 | 840.7                          | 983.6                          | 38.22          |
| 200-3R            | 63.500     | 39.68                | 37.85                           | 19.85             | 223.50     | 230.40 | 60.00                   | 8.00                   | 71.55                 | 1061.4                         | 1217.8                         | 49.03          |
| 240-3R            | 76.200     | 47.63                | 47.35                           | 23.81             | 271.30     | 278.60 | 72.39                   | 9.50                   | 87.83                 | 1530.9                         | 1756.5                         | 71.60          |

\* Bush chain: A in the table indicates the external diameter of the bush

Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.

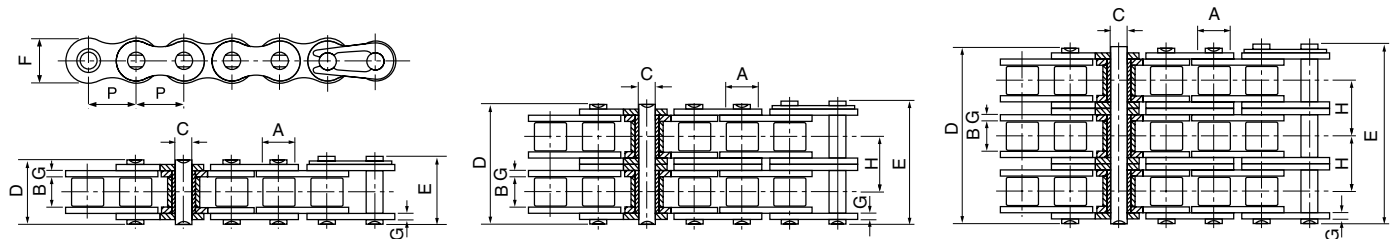


# Roller Chain

## ANSI Heavy Duty Roller Chain

## ANSI B29.1, ISO R606, DIN 8188

ANSI Heavy Duty Roller Chain



| ANSI Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter | Pin length |        | Inner plate height | Plate thickness | Transverse pitch | Minimum tensile strength kN | Average tensile strength kN | Weight |
|-------------------|--------|-----------------|----------------------------|--------------|------------|--------|--------------------|-----------------|------------------|-----------------------------|-----------------------------|--------|
|                   | P      | A               | B                          | C            | D          | E      | F                  | G               | H                |                             |                             | kg/m   |
| <b>SIMPLEX</b>    |        |                 |                            |              |            |        |                    |                 |                  |                             |                             |        |
| 40H-1R            | 12.700 | 7.95            | 7.85                       | 3.96         | 18.80      | 19.90  | 12.00              | 2.03            | -                | 14.10                       | 19.10                       | 0.82   |
| 50H-1R            | 15.875 | 10.16           | 9.40                       | 5.08         | 22.10      | 23.40  | 15.09              | 2.42            | -                | 22.20                       | 30.20                       | 1.25   |
| 60H-1R            | 19.050 | 11.91           | 12.57                      | 5.94         | 29.20      | 31.00  | 18.00              | 3.25            | -                | 31.80                       | 42.70                       | 1.87   |
| 80H-1R            | 25.400 | 15.88           | 15.75                      | 7.92         | 36.20      | 37.70  | 24.00              | 4.00            | -                | 56.70                       | 71.40                       | 3.10   |
| 100H-1R           | 31.750 | 19.05           | 18.90                      | 9.53         | 43.60      | 46.90  | 30.00              | 4.80            | -                | 88.50                       | 112.40                      | 4.52   |
| 120H-1R           | 38.100 | 22.23           | 25.22                      | 11.10        | 53.50      | 57.50  | 35.70              | 5.60            | -                | 127.00                      | 160.90                      | 6.60   |
| 140H-1R           | 44.450 | 25.40           | 25.22                      | 12.70        | 57.60      | 62.20  | 41.00              | 6.40            | -                | 172.40                      | 217.30                      | 8.30   |
| 160H-1R           | 50.800 | 28.58           | 31.55                      | 14.27        | 68.20      | 73.00  | 47.80              | 7.20            | -                | 226.80                      | 285.80                      | 10.30  |
| 200H-1R           | 63.500 | 39.68           | 37.85                      | 19.85        | 86.60      | 93.50  | 60.00              | 9.50            | -                | 353.80                      | 444.50                      | 19.16  |
| <b>DUPLEX</b>     |        |                 |                            |              |            |        |                    |                 |                  |                             |                             |        |
| 60H-2R            | 19.050 | 11.91           | 12.57                      | 5.94         | 55.30      | 57.10  | 18.00              | 3.25            | 26.11            | 63.60                       | 84.50                       | 3.71   |
| 80H-2R            | 25.400 | 15.88           | 15.75                      | 7.92         | 68.80      | 70.30  | 24.00              | 4.00            | 32.59            | 113.40                      | 145.30                      | 6.15   |
| 100H-2R           | 31.750 | 19.05           | 18.90                      | 9.53         | 82.70      | 86.00  | 30.00              | 4.80            | 39.09            | 177.00                      | 225.90                      | 9.03   |
| 120H-2R           | 38.100 | 22.23           | 25.22                      | 11.10        | 102.40     | 106.40 | 35.70              | 5.60            | 48.87            | 254.00                      | 322.70                      | 13.13  |
| 140H-2R           | 44.450 | 25.40           | 25.22                      | 12.70        | 109.80     | 114.40 | 41.00              | 6.40            | 52.20            | 344.80                      | 437.70                      | 16.60  |
| 160H-2R           | 50.800 | 28.58           | 31.55                      | 14.27        | 130.10     | 134.90 | 47.80              | 7.20            | 61.90            | 453.60                      | 571.60                      | 20.20  |
| 200H-2R           | 63.500 | 39.68           | 37.85                      | 19.85        | 164.90     | 171.80 | 60.00              | 9.50            | 78.31            | 707.60                      | 894.90                      | 38.11  |
| <b>TRIPLEX</b>    |        |                 |                            |              |            |        |                    |                 |                  |                             |                             |        |
| 60H-3R            | 19.050 | 11.91           | 12.57                      | 5.94         | 81.40      | 83.20  | 18.00              | 3.25            | 26.11            | 95.40                       | 113.90                      | 5.54   |
| 80H-3R            | 25.400 | 15.88           | 15.75                      | 7.92         | 101.40     | 102.90 | 24.00              | 4.00            | 32.59            | 170.10                      | 203.50                      | 9.42   |
| 100H-3R           | 31.750 | 19.05           | 18.90                      | 9.53         | 121.80     | 125.10 | 30.00              | 4.80            | 39.09            | 265.50                      | 314.80                      | 12.96  |
| 120H-3R           | 38.100 | 22.23           | 25.22                      | 11.10        | 151.20     | 155.20 | 35.70              | 5.60            | 48.87            | 381.00                      | 444.70                      | 19.64  |
| 140H-3R           | 44.450 | 25.40           | 25.22                      | 12.70        | 162.00     | 166.60 | 41.00              | 6.40            | 52.20            | 517.20                      | 598.40                      | 24.90  |
| 160H-3R           | 50.800 | 28.58           | 31.55                      | 14.27        | 192.00     | 196.80 | 47.80              | 7.20            | 61.90            | 680.40                      | 787.30                      | 30.10  |
| 200H-3R           | 63.500 | 39.68           | 37.85                      | 19.85        | 243.20     | 250.10 | 60.00              | 9.50            | 78.31            | 1061.40                     | 1228.20                     | 57.06  |

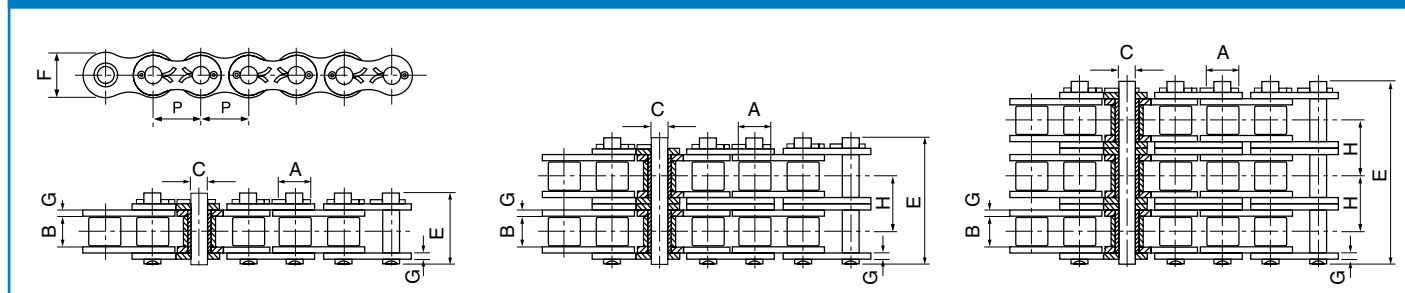
Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

# Roller Chain

## ANSI Cottered Series Roller Chain

## ANSI B29.1, ISO R606, DIN 8188

### ANSI Cottered A Series Roller Chain



| ANSI Chain number | Pitch<br>P | Roller diameter<br>A | Width between inner plates<br>B | Pin diameter<br>C | Pin length<br>E | Inner plate height<br>F | Plate thickness<br>G | Transverse pitch<br>H | Minimum tensile strength<br>kN | Average tensile strength<br>kN | Weight<br>kg/m |
|-------------------|------------|----------------------|---------------------------------|-------------------|-----------------|-------------------------|----------------------|-----------------------|--------------------------------|--------------------------------|----------------|
| <b>SIMPLEX</b>    |            |                      |                                 |                   |                 |                         |                      |                       |                                |                                |                |
| 50-1C             | 15.875     | 10.16                | 9.40                            | 5.08              | 23.00           | 15.09                   | 2.03                 | -                     | 22.20                          | 29.40                          | 1.02           |
| 60-1C             | 19.050     | 11.91                | 12.57                           | 5.94              | 28.30           | 18.00                   | 2.42                 | -                     | 31.80                          | 41.50                          | 1.50           |
| 80-1C             | 25.400     | 15.88                | 15.75                           | 7.92              | 36.50           | 24.00                   | 3.25                 | -                     | 56.70                          | 69.40                          | 2.60           |
| 100-1C            | 31.750     | 19.05                | 18.90                           | 9.53              | 44.70           | 30.00                   | 4.00                 | -                     | 88.50                          | 109.20                         | 3.91           |
| 120-1C            | 38.100     | 22.23                | 25.22                           | 11.10             | 54.30           | 35.70                   | 4.80                 | -                     | 127.00                         | 156.30                         | 5.62           |
| 140-1C            | 44.450     | 25.40                | 25.22                           | 12.70             | 59.00           | 41.00                   | 5.60                 | -                     | 172.40                         | 212.00                         | 7.50           |
| 160-1C            | 50.800     | 28.58                | 31.55                           | 14.27             | 69.60           | 47.80                   | 6.40                 | -                     | 226.80                         | 278.90                         | 10.10          |
| 180-1C            | 57.150     | 35.71                | 35.48                           | 17.46             | 78.60           | 53.60                   | 7.20                 | -                     | 280.20                         | 341.80                         | 13.45          |
| 200-1C            | 63.500     | 39.68                | 37.85                           | 19.85             | 87.20           | 60.00                   | 8.00                 | -                     | 353.80                         | 431.60                         | 16.15          |
| 240-1C            | 76.200     | 47.63                | 47.35                           | 23.81             | 103.00          | 72.39                   | 9.50                 | -                     | 510.30                         | 622.50                         | 23.20          |
| <b>DUPLEX</b>     |            |                      |                                 |                   |                 |                         |                      |                       |                                |                                |                |
| 50-2C             | 15.875     | 10.16                | 9.40                            | 5.08              | 41.20           | 15.09                   | 2.03                 | 18.11                 | 44.40                          | 58.10                          | 2.00           |
| 60-2C             | 19.050     | 11.91                | 12.57                           | 5.94              | 51.10           | 18.00                   | 2.42                 | 22.78                 | 63.60                          | 82.10                          | 2.92           |
| 80-2C             | 25.400     | 15.88                | 15.75                           | 7.92              | 65.80           | 24.00                   | 3.25                 | 29.29                 | 113.40                         | 141.80                         | 5.15           |
| 100-2C            | 31.750     | 19.05                | 18.90                           | 9.53              | 80.50           | 30.00                   | 4.00                 | 35.76                 | 177.00                         | 219.40                         | 7.80           |
| 120-2C            | 38.100     | 22.23                | 25.22                           | 11.10             | 99.70           | 35.70                   | 4.80                 | 45.44                 | 254.00                         | 314.90                         | 11.70          |
| 140-2C            | 44.450     | 25.40                | 25.22                           | 12.70             | 107.90          | 41.00                   | 5.60                 | 48.87                 | 344.80                         | 427.50                         | 15.14          |
| 160-2C            | 50.800     | 28.58                | 31.55                           | 14.27             | 128.10          | 47.80                   | 6.40                 | 58.55                 | 453.60                         | 562.40                         | 20.14          |
| 180-2C            | 57.150     | 35.71                | 35.48                           | 17.46             | 144.40          | 53.60                   | 7.20                 | 65.84                 | 560.50                         | 695.00                         | 29.22          |
| 200-2C            | 63.500     | 39.68                | 37.85                           | 19.85             | 158.80          | 60.00                   | 8.00                 | 71.55                 | 707.60                         | 877.40                         | 32.24          |
| 240-2C            | 76.200     | 47.63                | 47.35                           | 23.81             | 190.80          | 72.39                   | 9.50                 | 87.83                 | 1020.60                        | 1255.30                        | 45.23          |
| <b>TRIPLEX</b>    |            |                      |                                 |                   |                 |                         |                      |                       |                                |                                |                |
| 50-3C             | 15.875     | 10.16                | 9.40                            | 5.08              | 59.30           | 15.09                   | 2.03                 | 18.11                 | 66.60                          | 77.80                          | 3.09           |
| 60-3C             | 19.050     | 11.91                | 12.57                           | 5.94              | 73.90           | 18.00                   | 2.42                 | 22.78                 | 95.40                          | 111.10                         | 4.54           |
| 80-3C             | 25.400     | 15.88                | 15.75                           | 7.92              | 93.60           | 24.00                   | 3.25                 | 29.29                 | 170.10                         | 198.40                         | 7.89           |
| 100-3C            | 31.750     | 19.05                | 18.90                           | 9.53              | 116.30          | 30.00                   | 4.00                 | 35.76                 | 265.50                         | 309.60                         | 11.77          |
| 120-3C            | 38.100     | 22.23                | 25.22                           | 11.10             | 145.20          | 35.70                   | 4.80                 | 45.44                 | 381.00                         | 437.20                         | 17.53          |
| 140-3C            | 44.450     | 25.40                | 25.22                           | 12.70             | 156.80          | 41.00                   | 5.60                 | 48.87                 | 517.20                         | 593.30                         | 22.20          |
| 160-3C            | 50.800     | 28.58                | 31.55                           | 14.27             | 186.60          | 47.80                   | 6.40                 | 58.55                 | 680.40                         | 780.60                         | 30.02          |
| 180-3C            | 57.150     | 35.71                | 35.48                           | 17.46             | 210.20          | 53.60                   | 7.20                 | 65.84                 | 840.70                         | 983.60                         | 38.22          |
| 200-3C            | 63.500     | 39.68                | 37.85                           | 19.85             | 230.40          | 60.00                   | 8.00                 | 71.55                 | 1061.40                        | 1217.80                        | 49.03          |
| 240-3C            | 76.200     | 47.63                | 47.35                           | 23.81             | 278.60          | 72.39                   | 9.50                 | 87.83                 | 1530.90                        | 1756.50                        | 71.60          |

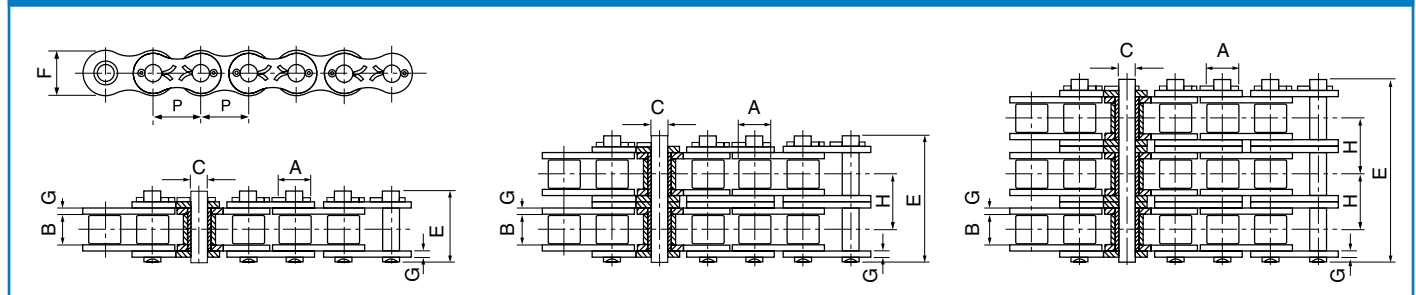
Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

## Roller Chain

### ANSI Cottered Heavy Duty Roller Chain

### ANSI B29.1, ISO R606, DIN 8188

ANSI Cottered Heavy Duty Roller Chain

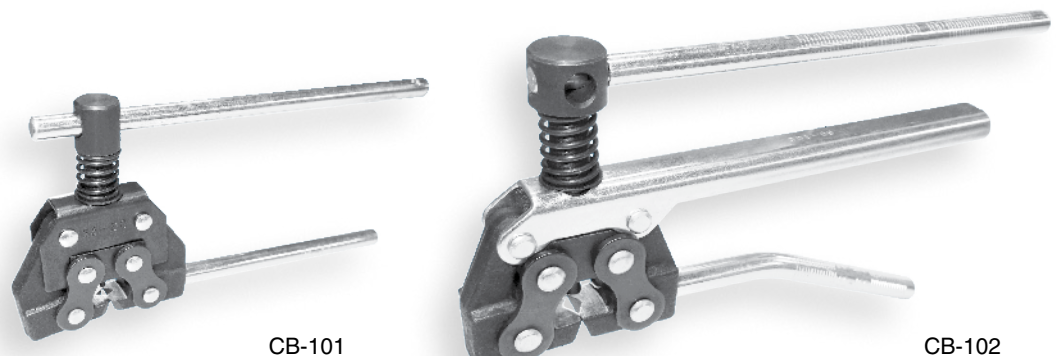


| ANSI Chain number | Pitch<br>P | Roller diameter<br>A | Width between inner plates<br>B | Pin diameter<br>C | Pin length<br>E | Inner plate height<br>F | Plate thickness<br>G | Transverse pitch<br>H | Minimum tensile strength<br>kN | Average tensile strength<br>kN | Weight<br>kg/m |
|-------------------|------------|----------------------|---------------------------------|-------------------|-----------------|-------------------------|----------------------|-----------------------|--------------------------------|--------------------------------|----------------|
| <b>SIMPLEX</b>    |            |                      |                                 |                   |                 |                         |                      |                       |                                |                                |                |
| 50H-1C            | 15.875     | 10.16                | 9.40                            | 5.08              | 24.40           | 15.09                   | 2.42                 | -                     | 22.20                          | 30.20                          | 1.25           |
| 60H-1C            | 19.050     | 11.91                | 12.57                           | 5.94              | 31.60           | 18.00                   | 3.25                 | -                     | 31.80                          | 42.70                          | 1.87           |
| 80H-1C            | 25.400     | 15.88                | 15.75                           | 7.92              | 39.40           | 24.00                   | 4.00                 | -                     | 56.70                          | 71.40                          | 3.10           |
| 100H-1C           | 31.750     | 19.05                | 18.90                           | 9.53              | 46.90           | 30.00                   | 4.80                 | -                     | 88.50                          | 112.40                         | 4.52           |
| 120H-1C           | 38.100     | 22.23                | 25.22                           | 11.10             | 57.50           | 35.70                   | 5.60                 | -                     | 127.00                         | 160.90                         | 6.60           |
| 140H-1C           | 44.450     | 25.40                | 25.22                           | 12.70             | 62.20           | 41.00                   | 6.40                 | -                     | 172.40                         | 217.30                         | 8.30           |
| 160H-1C           | 50.800     | 28.58                | 31.55                           | 14.27             | 73.00           | 47.80                   | 7.20                 | -                     | 226.80                         | 285.80                         | 10.30          |
| 200H-1C           | 63.500     | 39.68                | 37.85                           | 19.85             | 93.50           | 60.00                   | 9.50                 | -                     | 353.80                         | 444.50                         | 19.16          |
| <b>DUPLEX</b>     |            |                      |                                 |                   |                 |                         |                      |                       |                                |                                |                |
| 60H-2C            | 19.050     | 11.91                | 12.57                           | 5.94              | 57.70           | 18.00                   | 3.25                 | 26.11                 | 63.60                          | 84.50                          | 3.71           |
| 80H-2C            | 25.400     | 15.88                | 15.75                           | 7.92              | 72.00           | 24.00                   | 4.00                 | 32.59                 | 113.40                         | 145.30                         | 6.15           |
| 100H-2C           | 31.750     | 19.05                | 18.90                           | 9.53              | 86.00           | 30.00                   | 4.80                 | 39.09                 | 177.00                         | 225.90                         | 9.03           |
| 120H-2C           | 38.100     | 22.23                | 25.22                           | 11.10             | 106.40          | 35.70                   | 5.60                 | 48.87                 | 254.00                         | 322.70                         | 13.13          |
| 140H-2C           | 44.450     | 25.40                | 25.22                           | 12.70             | 114.40          | 41.00                   | 6.40                 | 52.20                 | 344.80                         | 437.70                         | 16.60          |
| 160H-2C           | 50.800     | 28.58                | 31.55                           | 14.27             | 134.90          | 47.80                   | 7.20                 | 61.90                 | 453.60                         | 571.60                         | 20.20          |
| 200H-2C           | 63.500     | 39.68                | 37.85                           | 19.85             | 171.80          | 60.00                   | 9.50                 | 78.31                 | 707.60                         | 894.90                         | 31.11          |
| <b>TRIPLEX</b>    |            |                      |                                 |                   |                 |                         |                      |                       |                                |                                |                |
| 60H-3C            | 19.050     | 11.91                | 12.57                           | 5.94              | 83.80           | 18.00                   | 3.25                 | 26.11                 | 95.40                          | 113.90                         | 5.54           |
| 80H-3C            | 25.400     | 15.88                | 15.75                           | 7.92              | 104.60          | 24.00                   | 4.00                 | 32.59                 | 170.10                         | 203.50                         | 9.42           |
| 100H-3C           | 31.750     | 19.05                | 18.90                           | 9.53              | 125.10          | 30.00                   | 4.80                 | 39.09                 | 265.50                         | 314.80                         | 12.96          |
| 120H-3C           | 38.100     | 22.23                | 25.22                           | 11.10             | 155.20          | 35.70                   | 5.60                 | 48.87                 | 381.00                         | 444.70                         | 19.64          |
| 140H-3C           | 44.450     | 25.40                | 25.22                           | 12.70             | 166.60          | 41.00                   | 6.40                 | 52.20                 | 517.20                         | 598.40                         | 24.90          |
| 160H-3C           | 50.800     | 28.58                | 31.55                           | 14.27             | 196.80          | 47.80                   | 7.20                 | 61.90                 | 680.40                         | 787.30                         | 30.10          |
| 200H-3C           | 63.500     | 39.68                | 37.85                           | 19.85             | 250.10          | 60.00                   | 9.50                 | 78.31                 | 1061.40                        | 1228.20                        | 57.06          |

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

### Chain Breakers

| Model          | Range     |         |
|----------------|-----------|---------|
|                | From inch | To inch |
| CB-101 (Small) | 3/8"      | 3/4"    |
| CB-102 (Large) | 3/4"      | 1.1/4"  |



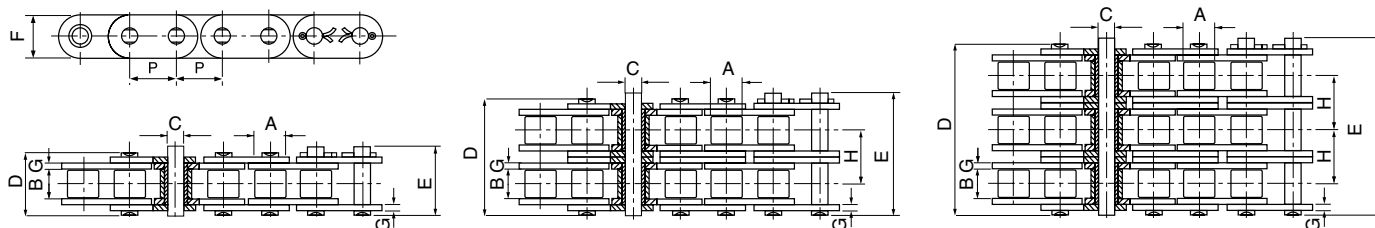


# Roller Chain

## ANSI Straight Side Plate Roller Chain

## ANSI B29.1, ISO R606, DIN 8188

ANSI Straight Side Plate Roller Chain



| ANSI Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter | Pin length |        | Inner plate height | Plate thickness | Transverse pitch | Minimum tensile strength | Average tensile strength | Weight    |
|-------------------|--------|-----------------|----------------------------|--------------|------------|--------|--------------------|-----------------|------------------|--------------------------|--------------------------|-----------|
|                   | P      | A               | B                          | C            | D          | E      | F                  | G               | H                | kN                       | kN                       | kg/m      |
| SIMPLEX           |        |                 |                            |              |            |        |                    |                 |                  |                          |                          |           |
| C40-1R            | 12.700 | 7.95            | 7.85                       | 3.96         | 16.60      | 18.80  | 12.00              | 1.50            | -                | 14.10                    | 17.50                    | 0.73      |
| C50-1R            | 15.875 | 10.16           | 9.40                       | 5.08         | 20.70      | 23.30  | 15.09              | 2.03            | -                | 22.20                    | 29.40                    | 1.23      |
| C60-1R            | 19.050 | 11.91           | 12.57                      | 5.94         | 25.90      | 28.30  | 18.0/18.2          | 2.42            | -                | 31.80                    | 41.50                    | 1.81/1.83 |
| C80-1R            | 25.400 | 15.88           | 15.75                      | 7.92         | 32.70      | 36.50  | 24.00              | 3.25            | -                | 56.70                    | 69.40                    | 3.09      |
| C100-1R           | 31.750 | 19.05           | 18.90                      | 9.53         | 40.40      | 44.70  | 30.00              | 4.00            | -                | 88.50                    | 109.20                   | 4.56      |
| C120-1R           | 38.100 | 22.23           | 25.22                      | 11.10        | 50.30      | 54.30  | 35.70              | 4.80            | -                | 127.00                   | 156.30                   | 6.86      |
| C140-1R           | 44.450 | 25.40           | 25.22                      | 12.70        | 54.40      | 59.00  | 41.00              | 5.60            | -                | 172.40                   | 212.00                   | 8.49      |
| C160-1R           | 50.800 | 28.58           | 31.55                      | 14.27        | 64.80      | 69.60  | 47.80              | 6.40            | -                | 226.80                   | 278.90                   | 11.50     |
| DUPLEX            |        |                 |                            |              |            |        |                    |                 |                  |                          |                          |           |
| C40-2R            | 12.700 | 7.95            | 7.85                       | 3.96         | 31.00      | 33.20  | 12.00              | 1.50            | 14.38            | 28.20                    | 35.90                    | 1.43      |
| C50-2R            | 15.875 | 10.16           | 9.40                       | 5.08         | 38.90      | 41.40  | 15.09              | 2.03            | 18.11            | 44.40                    | 58.10                    | 2.42      |
| C60-2R            | 19.050 | 11.91           | 12.57                      | 5.94         | 48.80      | 51.10  | 18.0/18.2          | 2.42            | 22.78            | 63.60                    | 82.10                    | 3.58/3.62 |
| C80-2R            | 25.400 | 15.88           | 15.75                      | 7.92         | 62.70      | 65.80  | 24.00              | 3.25            | 29.29            | 113.40                   | 141.80                   | 6.12      |
| C100-2R           | 31.750 | 19.05           | 18.90                      | 9.53         | 76.40      | 80.50  | 30.00              | 4.00            | 35.76            | 177.00                   | 219.40                   | 9.08      |
| C120-2R           | 38.100 | 22.23           | 25.22                      | 11.10        | 95.80      | 99.70  | 35.70              | 4.80            | 45.44            | 254.00                   | 314.90                   | 13.60     |
| C140-2R           | 44.450 | 25.40           | 25.22                      | 12.70        | 103.30     | 107.90 | 41.00              | 5.60            | 48.87            | 344.80                   | 427.50                   | 16.86     |
| C160-2R           | 50.800 | 28.58           | 31.55                      | 14.27        | 123.30     | 128.10 | 47.80              | 6.40            | 58.55            | 453.60                   | 562.40                   | 22.90     |
| TRIPLEX           |        |                 |                            |              |            |        |                    |                 |                  |                          |                          |           |
| C40-3R            | 12.700 | 7.95            | 7.85                       | 3.96         | 45.40      | 47.60  | 12.00              | 1.50            | 14.38            | 42.30                    | 50.00                    | 2.14      |
| C50-3R            | 15.875 | 10.16           | 9.40                       | 5.08         | 57.00      | 59.50  | 15.09              | 2.03            | 18.11            | 66.60                    | 77.80                    | 3.62      |
| C60-3R            | 19.050 | 11.91           | 12.57                      | 5.94         | 71.50      | 73.90  | 18.0/18.2          | 2.42            | 22.78            | 95.40                    | 111.10                   | 5.36/5.41 |
| C80-3R            | 25.400 | 15.88           | 15.75                      | 7.92         | 91.70      | 95.10  | 24.00              | 3.25            | 29.29            | 170.10                   | 198.40                   | 9.10      |
| C100-3R           | 31.750 | 19.05           | 18.90                      | 9.53         | 112.20     | 116.30 | 30.00              | 4.00            | 35.76            | 265.50                   | 309.60                   | 13.60     |
| C120-3R           | 38.100 | 22.23           | 25.22                      | 11.10        | 141.40     | 145.20 | 35.70              | 4.80            | 45.44            | 381.00                   | 437.20                   | 20.43     |
| C140-3R           | 44.450 | 25.40           | 25.22                      | 12.70        | 152.20     | 156.80 | 41.00              | 5.60            | 48.87            | 517.20                   | 593.30                   | 25.23     |
| C160-3R           | 50.800 | 28.58           | 31.55                      | 14.27        | 181.80     | 186.60 | 47.80              | 6.40            | 58.55            | 680.40                   | 780.60                   | 34.19     |

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

## Chain Pullers

| Model          | Range     |         |
|----------------|-----------|---------|
|                | From inch | To inch |
| CB-105 (Small) | 1/4"      | 3/4"    |
| CB-106 (Large) | 3/4"      | 1.1/4"  |

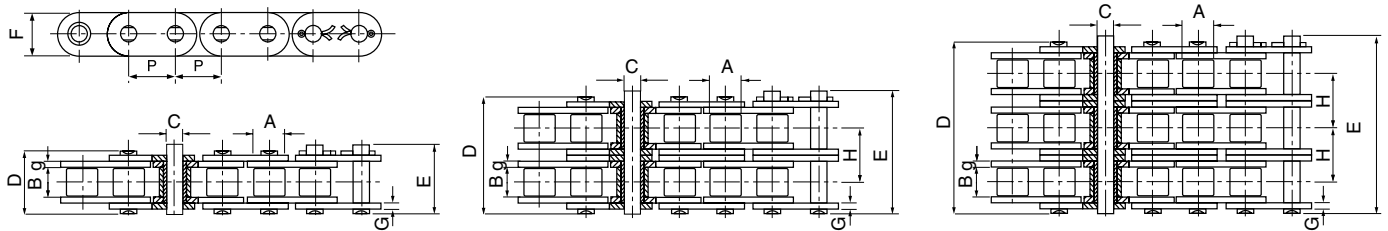


# Roller Chain

## BS Straight Side Plate Roller Chain

## ANSI B29.1, ISO R606, DIN 8187

BS Straight Side Plate Roller Chain



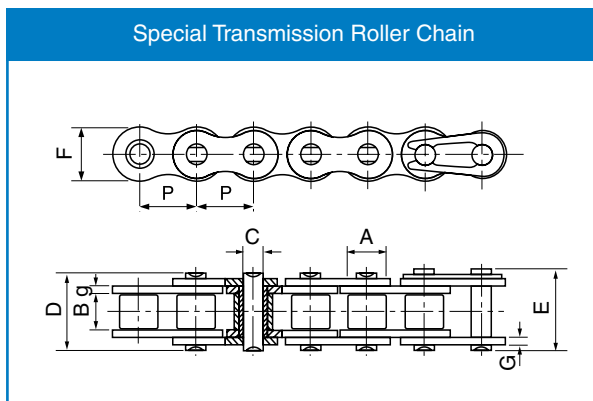
| ISO Chain number | Pitch<br>P | Roller diameter<br>A | Width between inner plates<br>B | Pin diameter<br>C | Pin length<br>D E |        | Inner plate height<br>F | Plate thickness<br>g/G | Transverse pitch<br>H | Minimum tensile strength<br>kN | Average tensile strength<br>kN | Weight<br>kg/m |
|------------------|------------|----------------------|---------------------------------|-------------------|-------------------|--------|-------------------------|------------------------|-----------------------|--------------------------------|--------------------------------|----------------|
| <b>SIMPLEX</b>   |            |                      |                                 |                   |                   |        |                         |                        |                       |                                |                                |                |
| 08B-1 GL         | 12.700     | 8.51                 | 7.75                            | 4.45              | 16.70             | 18.20  | 11.80                   | 1.60                   | -                     | 18.00                          | 19.50                          | 0.80           |
| 10B-1 GL         | 15.875     | 10.16                | 9.65                            | 5.08              | 19.50             | 20.90  | 14.70                   | 1.70                   | -                     | 22.40                          | 27.90                          | 1.06           |
| 12B-1 GL         | 19.050     | 12.07                | 11.68                           | 5.72              | 22.50             | 25.20  | 16.00                   | 1.85                   | -                     | 29.00                          | 32.20                          | 1.32           |
| 16B-1 GL         | 25.400     | 15.88                | 17.02                           | 8.28              | 36.10             | 39.10  | 21.0/24.0               | 4.15/3.1               | -                     | 60.00                          | 72.80                          | 3.08/3.49      |
| *20B-1 GL        | 31.750     | 19.05                | 19.56                           | 10.19             | 41.30             | 45.00  | 26.40                   | 4.5/3.5                | -                     | 95.00                          | 106.70                         | 4.16           |
| *24B-1 GL        | 38.100     | 25.40                | 25.40                           | 14.63             | 53.40             | 57.80  | 33.20                   | 6.0/4.8                | -                     | 160.00                         | 178.00                         | 7.47           |
| *28B-1 GL        | 44.450     | 27.94                | 30.99                           | 15.90             | 65.10             | 69.50  | 36.70                   | 7.5/6.0                | -                     | 200.00                         | 222.00                         | 9.90           |
| *32B-1 GL        | 50.800     | 29.21                | 30.99                           | 17.81             | 66.00             | 71.00  | 42.00                   | 7.0/6.0                | -                     | 250.00                         | 277.50                         | 10.45          |
| <b>DUPLEX</b>    |            |                      |                                 |                   |                   |        |                         |                        |                       |                                |                                |                |
| 08B-2 GL         | 12.700     | 8.51                 | 7.75                            | 4.45              | 31.20             | 32.20  | 11.80                   | 1.60                   | 13.92                 | 32.00                          | 38.70                          | 1.45           |
| 10B-2 GL         | 15.875     | 10.16                | 9.65                            | 5.08              | 36.10             | 37.50  | 14.70                   | 1.70                   | 16.59                 | 44.50                          | 57.80                          | 2.00           |
| 12B-2 GL         | 19.050     | 12.07                | 11.68                           | 5.72              | 42.00             | 44.70  | 16.00                   | 1.85                   | 19.46                 | 57.80                          | 66.10                          | 2.62           |
| 16B-2 GL         | 25.400     | 15.88                | 17.02                           | 8.28              | 68.00             | 71.00  | 21.0/24.0               | 4.15/3.1               | 31.88                 | 106.00                         | 133.00                         | 6.10/6.92      |
| *20B-2 GL        | 31.750     | 19.05                | 19.56                           | 10.19             | 77.80             | 81.50  | 26.40                   | 4.5/3.5                | 36.45                 | 170.00                         | 211.20                         | 8.23           |
| *24B-2 GL        | 38.100     | 25.40                | 25.40                           | 14.63             | 101.70            | 106.20 | 33.20                   | 6.0/4.8                | 48.36                 | 280.00                         | 319.20                         | 14.77          |
| *28B-2 GL        | 44.450     | 27.94                | 30.99                           | 15.90             | 124.60            | 129.10 | 36.70                   | 7.5/6.0                | 59.56                 | 360.00                         | 406.80                         | 19.82          |
| *32B-2 GL        | 50.800     | 29.21                | 30.99                           | 17.81             | 124.60            | 129.60 | 42.00                   | 7.0/6.0                | 58.55                 | 450.00                         | 508.50                         | 20.94          |
| <b>TRIPLEX</b>   |            |                      |                                 |                   |                   |        |                         |                        |                       |                                |                                |                |
| 08B-3 GL         | 12.700     | 8.51                 | 7.75                            | 4.45              | 45.10             | 46.10  | 11.80                   | 1.60                   | 13.92                 | 47.50                          | 57.80                          | 2.10           |
| 10B-3 GL         | 15.875     | 10.16                | 9.65                            | 5.08              | 52.70             | 54.10  | 14.70                   | 1.70                   | 16.59                 | 66.70                          | 84.50                          | 2.87           |
| 12B-3 GL         | 19.050     | 12.07                | 11.68                           | 5.72              | 61.50             | 64.20  | 16.00                   | 1.85                   | 19.46                 | 86.70                          | 101.80                         | 3.89           |
| 16B-3 GL         | 25.400     | 15.88                | 17.02                           | 8.28              | 99.80             | 102.90 | 21.0/24.0               | 4.15/3.1               | 31.88                 | 160.00                         | 203.70                         | 9.12/10.34     |
| *20B-3 GL        | 31.750     | 19.05                | 19.56                           | 10.19             | 114.20            | 117.90 | 26.40                   | 4.5/3.5                | 36.45                 | 250.00                         | 290.00                         | 11.34          |
| *24B-3 GL        | 38.100     | 25.40                | 25.40                           | 14.63             | 150.10            | 154.60 | 33.20                   | 6.0/4.8                | 48.36                 | 425.00                         | 493.00                         | 22.10          |
| *28B-3 GL        | 44.450     | 27.94                | 30.99                           | 15.90             | 184.20            | 188.70 | 36.70                   | 7.5/6.0                | 59.56                 | 530.00                         | 609.50                         | 29.64          |
| *32B-3 GL        | 50.800     | 29.21                | 30.99                           | 17.81             | 183.20            | 188.20 | 42.00                   | 7.0/6.0                | 58.55                 | 670.00                         | 770.50                         | 31.27          |

\* X-Series chains with spin riveted pins also available in these sizes.

Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

# Roller Chain

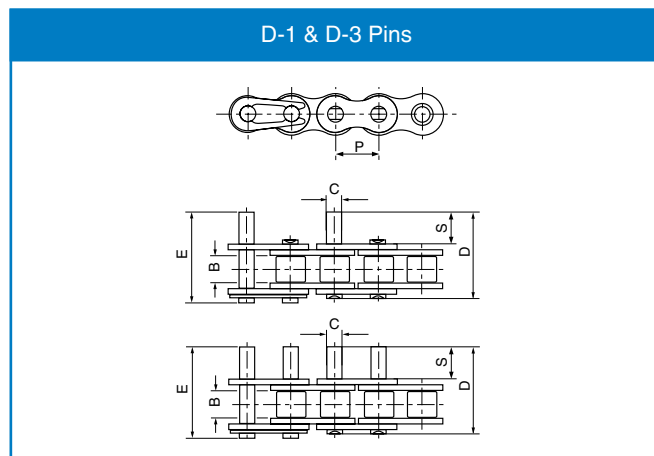
## Special Transmission Roller Chain



| ISO Chain number | Pitch<br>P | Roller diameter<br>A | Width between inner plates<br>B | Pin diameter<br>C | Pin length |       | Inner plate height<br>F | Plate thickness<br>g/G | Minimum tensile strength<br>kN | Average tensile strength<br>kN | Weight<br>kg/m |
|------------------|------------|----------------------|---------------------------------|-------------------|------------|-------|-------------------------|------------------------|--------------------------------|--------------------------------|----------------|
|                  | P          | A                    | B                               | C                 | D          | E     | F                       | g/G                    |                                |                                |                |
| 04BH             | 6.00       | 4.00                 | 2.80                            | 1.85              | 8.40       | 9.40  | 5.00                    | 0.90                   | 5.00                           | 5.30                           | 0.14           |
| 081              | 12.70      | 7.75                 | 3.30                            | 3.66              | 9.30       | 12.30 | 9.90                    | 1.00                   | 8.00                           | 9.40                           | 0.28           |
| 084              | 12.70      | 7.75                 | 4.88                            | 4.09              | 14.60      | 17.60 | 11.50                   | 1.80                   | 15.60                          | 15.70                          | 0.51           |
| 415              | 12.70      | 7.77                 | 4.76                            | 3.60              | 11.00      | 12.40 | 9.70                    | 1.00                   | 6.86                           | 7.60                           | 0.32           |
| 415H             | 12.70      | 7.77                 | 4.76                            | 3.96              | 13.10      | 14.50 | 12.00                   | 1.50                   | 14.40                          | 16.10                          | 0.55           |
| 415B/083         | 12.70      | 7.75                 | 4.88                            | 4.09              | 12.90      | 14.40 | 10.30                   | 1.30                   | 12.00                          | 14.20                          | 0.44           |
| 415BF1           | 12.70      | 7.75                 | 4.88                            | 4.09              | 11.50      | 13.00 | 10.30                   | 1.00                   | 9.00                           | 10.60                          | 0.38           |
| 423              | 12.70      | 8.51                 | 6.40                            | 4.45              | 15.60      | 17.10 | 12.40                   | 1.70                   | 19.60                          | 21.90                          | 0.71           |
| 478              | 12.70      | 7.80                 | 4.80                            | 4.00              | 11.60      | 13.65 | 10.46                   | 1.25                   | 9.80                           | 12.80                          | 0.39           |
| 08BF             | 12.70      | 8.51                 | 5.55                            | 4.45              | 14.60      | 16.10 | 11.80                   | 1.60                   | 17.80                          | 19.20                          | 0.66           |
| 12BH             | 19.05      | 12.07                | 11.68                           | 5.94              | 25.20      | 26.80 | 16.00                   | 2.42                   | 40.00                          | 44.40                          | 1.45           |
| 12BHF1           | 19.05      | 12.07                | 11.68                           | 6.10              | 25.00      | 27.20 | 16.50                   | 2.50                   | 44.00                          | 48.80                          | 1.46           |
| 16BF1            | 25.40      | 15.88                | 12.20                           | 8.28              | 31.40      | 32.70 | 21.00                   | 4.15/3.1               | 60.00                          | 71.40                          | 2.60           |
| 16BF2            | 25.40      | 15.88                | 17.02                           | 8.28              | 38.60      | 39.80 | 21.00                   | 4.15                   | 60.00                          | 71.40                          | 3.08           |
| 16BF5            | 25.40      | 15.88                | 12.70                           | 8.28              | 30.80      | 32.10 | 20.00                   | 3.5/3.0                | 50.00                          | 57.50                          | 2.37           |
| 16BH             | 25.40      | 15.88                | 17.02                           | 8.90              | 35.70      | 38.90 | 24.10                   | 4.0/3.1                | 80.00                          | 94.20                          | 3.11           |
| 24BH             | 38.10      | 25.40                | 25.40                           | 14.63             | 58.60      | 63.40 | 36.20                   | 7.5/6.0                | 225.00                         | 250.30                         | 9.00           |

## Extended Pin Chain

| ISO Chain No. | ANSI Chain No. | P      | B     | C     | S     | D     | E      |
|---------------|----------------|--------|-------|-------|-------|-------|--------|
|               | 35             | 9.525  | 4.77  | 3.58  | 9.50  | 20.80 | 21.60  |
|               | 40             | 12.700 | 7.85  | 3.96  | 9.50  | 25.10 | 26.20  |
|               | 50             | 15.875 | 9.40  | 5.08  | 11.90 | 31.30 | 33.10  |
|               | 60             | 19.050 | 12.57 | 5.94  | 14.30 | 38.60 | 40.60  |
|               | 80             | 25.400 | 15.75 | 7.92  | 19.10 | 50.30 | 53.30  |
|               | 100            | 31.750 | 18.90 | 9.53  | 23.80 | 61.80 | 66.10  |
|               | 120            | 38.100 | 25.22 | 11.10 | 28.60 | 76.40 | 80.40  |
|               | 140            | 44.450 | 25.22 | 12.70 | 33.30 | 84.80 | 89.40  |
|               | 160            | 50.800 | 31.55 | 14.27 | 38.10 | 99.60 | 104.40 |
| 08B           |                | 12.700 | 7.75  | 4.45  | 9.50  | 25.10 | 26.60  |
| 10B           |                | 15.875 | 9.65  | 5.08  | 11.90 | 30.10 | 31.50  |
| 12B           |                | 19.050 | 11.68 | 5.72  | 14.30 | 35.40 | 37.10  |
| 16B           |                | 25.400 | 17.02 | 8.28  | 19.10 | 53.00 | 54.30  |

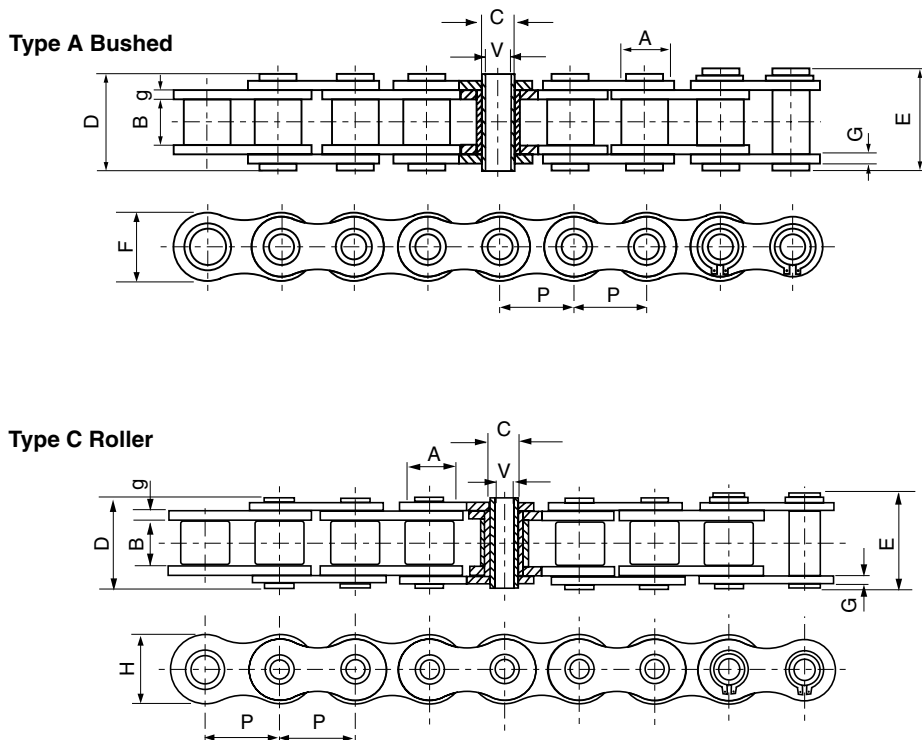


Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

# Roller Chain

## Hollow Pin Chain

Hollow Pin Chain



| Chain number | Pitch  | Roller/Bush diameter | Width between inner plates | Pin diameter |      | Pin length |      | Inner plate height | Plate thickness | Minimum tensile strength | Average tensile strength | Weight | Type form |
|--------------|--------|----------------------|----------------------------|--------------|------|------------|------|--------------------|-----------------|--------------------------|--------------------------|--------|-----------|
|              | P      | A                    | B                          | C            | V    | D          | E    | F                  | g/G             | kN                       | kN                       | kg/m   |           |
| 08BHP(4.0)   | 12.700 | 8.51                 | 7.75                       | 6.55         | 4.00 | 16.4       | 17.6 | 11.80              | 1.6/1.3         | 11.10                    | 12.1                     | 0.60   | A         |
| 08BHP(4.5)   | 12.700 | 8.51                 | 7.75                       | 6.55         | 4.50 | 16.4       | 17.6 | 11.80              | 1.6/1.3         | 11.10                    | 12.1                     | 0.56   | A         |
| 10BHP        | 15.875 | 10.16                | 9.65                       | 5.94         | 4.04 | 19.3       | 20.6 | 14.70              | 1.70            | 17.00                    | 20.8                     | 0.86   | C         |
| 12BHP        | 19.050 | 12.07                | 11.68                      | 6.50         | 4.00 | 21.6       | 22.8 | 15.90              | 1.85            | 23.60                    | 25.9                     | 1.09   | C         |
| 40HP         | 12.700 | 7.95                 | 7.85                       | 5.63         | 4.00 | 16.5       | 17.6 | 12.00              | 1.50            | 11.00                    | 12.2                     | 0.54   | A         |
| 50HP         | 15.875 | 10.16                | 9.40                       | 7.03         | 5.13 | 20.7       | 21.9 | 15.09              | 2.03            | 20.00                    | 22.6                     | 0.91   | A         |
| 60HP         | 19.050 | 11.91                | 12.70                      | 8.31         | 6.00 | 25.8       | 26.8 | 18.00              | 2.42            | 24.00                    | 26.9                     | 1.29   | A         |
| 60HPF1       | 19.050 | 11.91                | 12.70                      | 8.31         | 5.01 | 25.5       | 26.8 | 18.00              | 2.42            | 28.00                    | 30.9                     | 1.37   | A         |
| 60HB         | 19.050 | 11.91                | 12.70                      | 7.00         | 5.01 | 25.5       | 26.6 | 18.00              | 2.42            | 20.00                    | 22.4                     | 1.35   | C         |
| 80HP         | 25.400 | 15.88                | 15.75                      | 11.40        | 8.05 | 32.5       | 33.8 | 24.00              | 3.25            | 50.00                    | 58.3                     | 2.26   | A         |

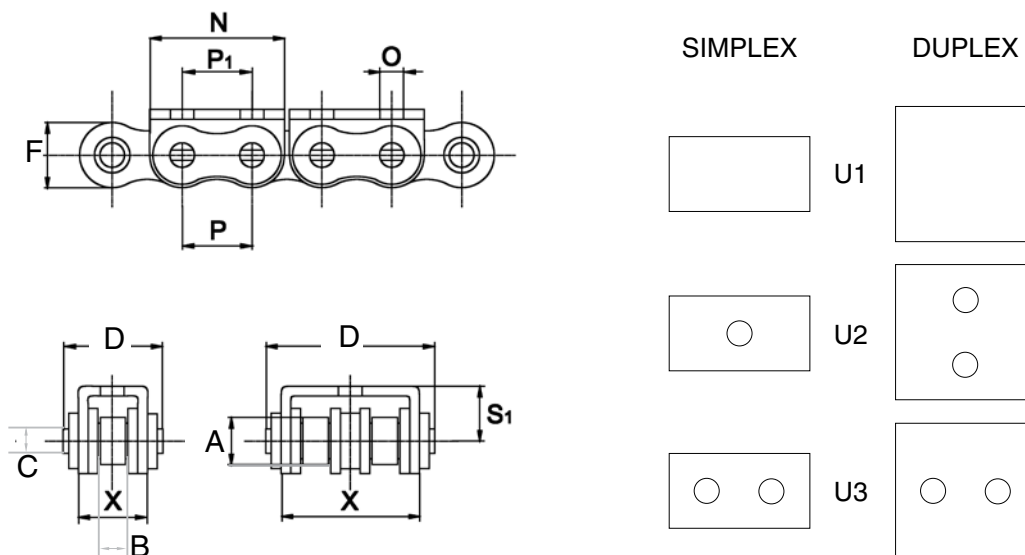
Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.



# Roller Chain

**Special Chain -** Challenge produce many special chains. The following pages are examples of a few. Contact Challenge for a quote on any special chains or attachments that aren't shown in our catalogue.

Special Chain with "U" Attachments



| Chain number | Chain Pitch | Roller diameter | Width between inner plates | Pin diameter | Side Plate Height | Pin length | Hole diameter | Hole pitch     |      |      |                | Tensile strength |
|--------------|-------------|-----------------|----------------------------|--------------|-------------------|------------|---------------|----------------|------|------|----------------|------------------|
|              | P           | A               | B                          | C            | F                 | D          | O             | P <sub>1</sub> | X    | N    | S <sub>1</sub> | kN               |
| 08B-1/U1     | 12.700      | 8.51            | 7.75                       | 4.45         | 11.8              | 20.4       | -             | -              | 14.4 | 24.0 | 8.5            | 14.60            |
| 08B-1/U2     | 12.700      | 8.51            | 7.75                       | 4.45         | 11.8              | 20.4       | 5             | -              | 14.4 | 24.0 | 8.5            | 14.60            |
| 08B-1/U3     | 12.700      | 8.51            | 7.75                       | 4.45         | 11.8              | 20.4       | 5             | 12.7           | 14.4 | 24.0 | 8.5            | 14.60            |
| 08B-2/U1     | 12.700      | 8.51            | 7.75                       | 4.45         | 11.8              | 34.4       | -             | -              | 28.4 | 24.0 | 8.1            | 28.60            |
| 08B-2/U2     | 12.700      | 8.51            | 7.75                       | 4.45         | 11.8              | 34.4       | 4             | 14.0           | 28.4 | 24.0 | 8.1            | 28.60            |
| 08B-2/U3     | 12.700      | 8.51            | 7.75                       | 4.45         | 11.8              | 34.4       | 4             | 12.7           | 28.4 | 24.0 | 8.1            | 28.60            |
| 10B-1/U1     | 15.875      | 10.16           | 9.65                       | 5.08         | 14.7              | 22.8       | -             | -              | 16.4 | 30.0 | 10.6           | 18.20            |
| 10B-1/U2     | 15.875      | 10.16           | 9.65                       | 5.08         | 14.7              | 22.8       | 5             | -              | 16.4 | 30.0 | 10.6           | 18.20            |
| 10B-1/U3     | 15.875      | 10.16           | 9.65                       | 5.08         | 14.7              | 22.8       | 5             | 15.8           | 16.4 | 30.0 | 10.6           | 18.20            |
| 10B-2/U1     | 15.875      | 10.16           | 9.65                       | 5.08         | 14.7              | 39.0       | -             | -              | 33.3 | 30.0 | 10.6           | 36.30            |
| 10B-2/U2     | 15.875      | 10.16           | 9.65                       | 5.08         | 14.7              | 39.0       | 5             | 16.6           | 33.3 | 30.0 | 10.6           | 36.30            |
| 10B-2/U3     | 15.875      | 10.16           | 9.65                       | 5.08         | 14.7              | 39.0       | 5             | 15.8           | 33.3 | 30.0 | 10.6           | 36.30            |
| 12B-1/U1     | 19.050      | 12.07           | 11.68                      | 5.72         | 16.0              | 26.5       | -             | -              | 19.4 | 35.0 | 13.0           | 23.60            |
| 12B-1/U2     | 19.050      | 12.07           | 11.68                      | 5.72         | 16.0              | 26.5       | 5             | -              | 19.4 | 35.0 | 13.0           | 23.60            |
| 12B-1/U3     | 19.050      | 12.07           | 11.68                      | 5.72         | 16.0              | 26.5       | 5             | 19.0           | 19.4 | 35.0 | 13.0           | 23.60            |
| 12B-2/U1     | 19.050      | 12.07           | 11.68                      | 5.72         | 16.0              | 46.5       | -             | -              | 39.4 | 35.0 | 12.0           | 46.60            |
| 12B-2/U2     | 19.050      | 12.07           | 11.68                      | 5.72         | 16.0              | 46.5       | 5             | 19.5           | 39.4 | 35.0 | 12.0           | 46.60            |
| 12B-2/U3     | 19.050      | 12.07           | 11.68                      | 5.72         | 16.0              | 46.5       | 5             | 19.0           | 39.4 | 35.0 | 12.0           | 46.60            |
| 16B-1/U1     | 25.400      | 15.88           | 17.02                      | 8.28         | 21.0              | 39.2       | -             | -              | 29.4 | 49.0 | 15.4           | 58.00            |
| 16B-1/U2     | 25.400      | 15.88           | 17.02                      | 8.28         | 21.0              | 39.2       | 5             | -              | 29.4 | 49.0 | 15.4           | 58.00            |
| 16B-1/U3     | 25.400      | 15.88           | 17.02                      | 8.28         | 21.0              | 39.2       | 5             | 25.4           | 29.4 | 49.0 | 15.4           | 58.00            |
| 16B-2/U1     | 25.400      | 15.88           | 17.02                      | 8.28         | 21.0              | 73.0       | -             | -              | 29.4 | 49.0 | 15.4           | 98.00            |
| 16B-2/U2     | 25.400      | 15.88           | 17.02                      | 8.28         | 21.0              | 73.0       | 5             | -              | 29.4 | 49.0 | 15.4           | 98.00            |
| 16B-2/U3     | 25.400      | 15.88           | 17.02                      | 8.28         | 21.0              | 73.0       | 5             | 25.4           | 29.4 | 49.0 | 15.4           | 98.00            |

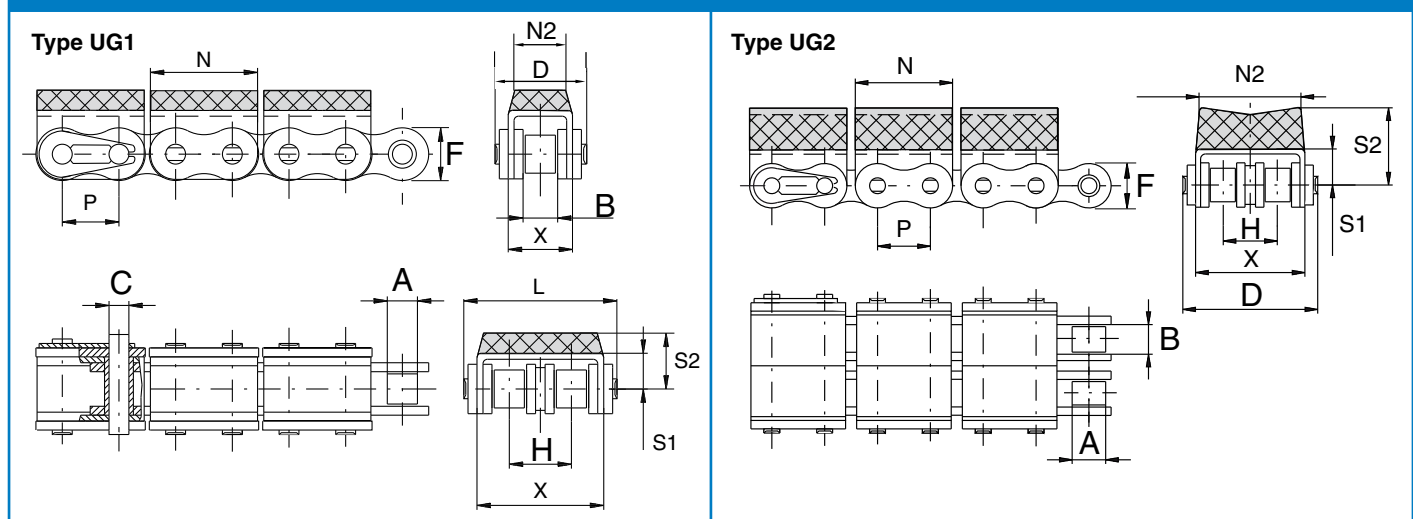
Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

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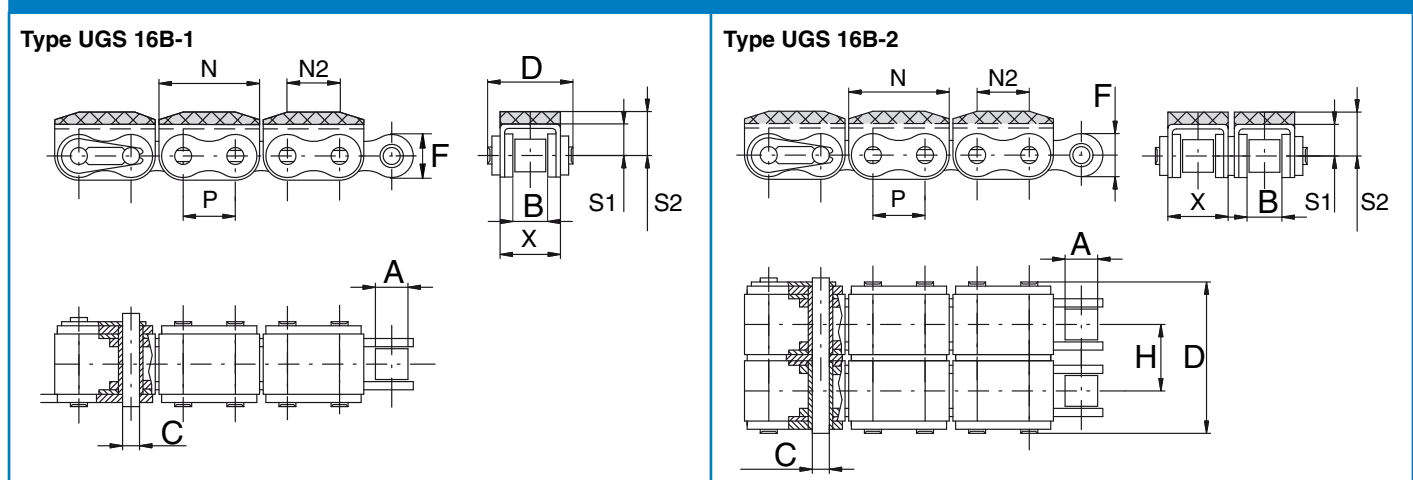
# Roller Chain

## Special Chain with “U” Attachments and Rubber Elements

Special Chain with “U” Attachments and Rubber Elements



Special Chain with “U” Attachments and Rubber Elements - Model UGS



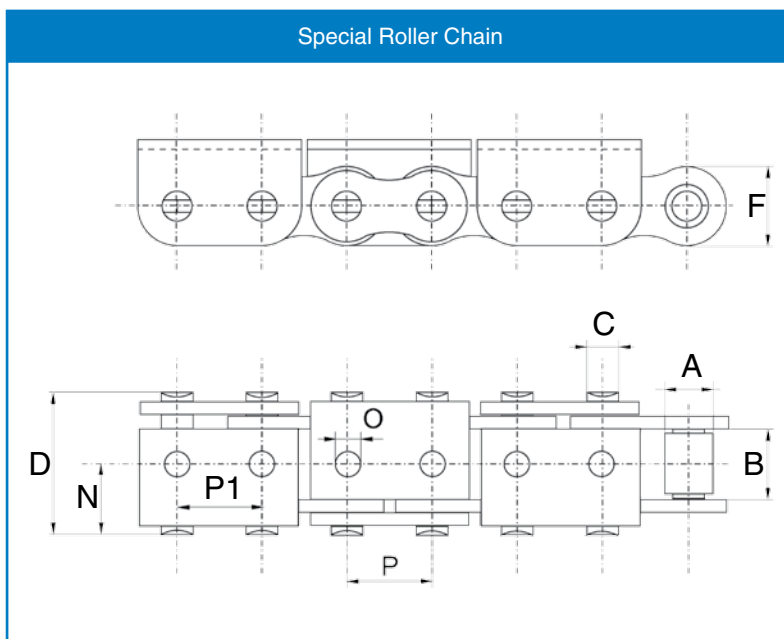
| Chain Number | Chain Pitch | Roller diameter | Width between inner plates | Pin diameter | Side Plate Height | Pin length | “U” profile | “U” profile | “U” profile | “U” Profile height | “U” Profile height | Transverse pitch | Min. Tensile strength |
|--------------|-------------|-----------------|----------------------------|--------------|-------------------|------------|-------------|-------------|-------------|--------------------|--------------------|------------------|-----------------------|
|              | P           | A               | B                          | C            | F                 | D          | X           | N           | N2          | S1                 | S2                 | H                | kN                    |
| 08B-1/UG1    | 12.700      | 8.51            | 7.75                       | 4.45         | 11.80             | 20.40      | 14.4        | 24          | 10.0        | 8.50               | 13.00              | -                | 14.60                 |
| 08B-2/UG1    | 12.700      | 8.51            | 7.75                       | 4.45         | 11.80             | 34.40      | 28.4        | 24          | 20.0        | 8.10               | 12.50              | 13.92            | 28.60                 |
| 10B-1/UG1    | 15.875      | 10.16           | 9.65                       | 5.08         | 14.70             | 22.80      | 16.4        | 30          | 13.5        | 10.60              | 17.00              | -                | 18.20                 |
| 10B-2/UG1    | 15.875      | 10.16           | 9.65                       | 5.08         | 14.70             | 39.00      | 33.3        | 30          | 30.0        | 10.60              | 15.50              | 16.59            | 36.30                 |
| 12B-1/UG1    | 19.050      | 12.07           | 11.68                      | 5.72         | 16.00             | 26.50      | 19.4        | 35          | 12.0        | 13.00              | 21.00              | -                | 23.60                 |
| 12B-2/UG1    | 19.050      | 12.07           | 11.68                      | 5.72         | 16.00             | 46.50      | 39.4        | 35          | 36.0        | 12.00              | 20.00              | 19.46            | 46.60                 |
| 16B-1/UG1    | 25.400      | 15.88           | 17.02                      | 8.28         | 21.00             | 39.20      | 29.4        | 49          | 22.0        | 15.40              | 21.40              | -                | 58.00                 |
| 16B-2/UG1    | 25.400      | 15.88           | 17.02                      | 8.28         | 21.00             | 73.00      | 29.4        | 49          | 22.0        | 15.40              | 21.40              | 31.88            | 98.00                 |
| 12B-1/UG2    | 19.050      | 12.07           | 11.68                      | 5.72         | 16.00             | 26.50      | 19.4        | 35          | 13.5        | 13.00              | 21.00              | -                | 23.60                 |
| 12B-2/UG2    | 19.050      | 12.07           | 11.68                      | 5.72         | 16.00             | 46.50      | 39.4        | 35          | 36.0        | 12.00              | 28.00              | 19.46            | 46.60                 |
| 16B-1/UGS    | 25.400      | 15.88           | 17.02                      | 8.28         | 21.00             | 39.20      | 29.4        | 49          | 25.4        | 15.40              | 21.40              | -                | 58.00                 |
| 16B-2/UGS    | 25.400      | 17.02           | 15.88                      | 8.28         | 21.00             | 73.00      | 29.4        | 49          | 25.4        | 15.40              | 21.40              | 31.88            | 98.00                 |

Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

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# Roller Chain

## Special Roller Chain

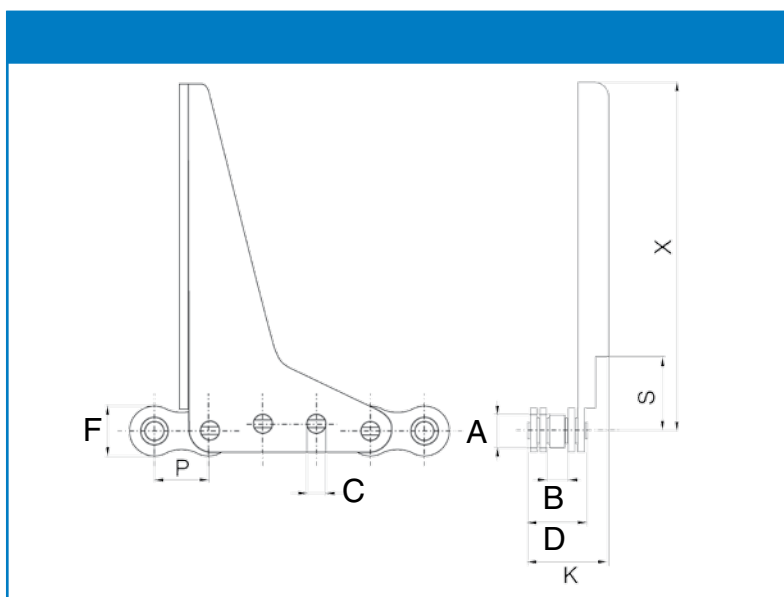


| Chain number | Pitch | Width between inner plates | Roller diameter | Pin diameter | Pin length | Side plate height | Hole diameter | Hole pitch | Tensile strength |    |
|--------------|-------|----------------------------|-----------------|--------------|------------|-------------------|---------------|------------|------------------|----|
|              | P     | B                          | A               | C            | D          | F                 | O             | P1         | N                | kN |
| 16B-1/P      | 25.4  | 17.02                      | 15.88           | 8.28         | 36.1       | 21.0              | 6.5           | 25.4       | 15.9             | 58 |

## Special Chain with Driver

**Note:** Various configurations of this chain are available.

Please provide dimensions when enquiring.



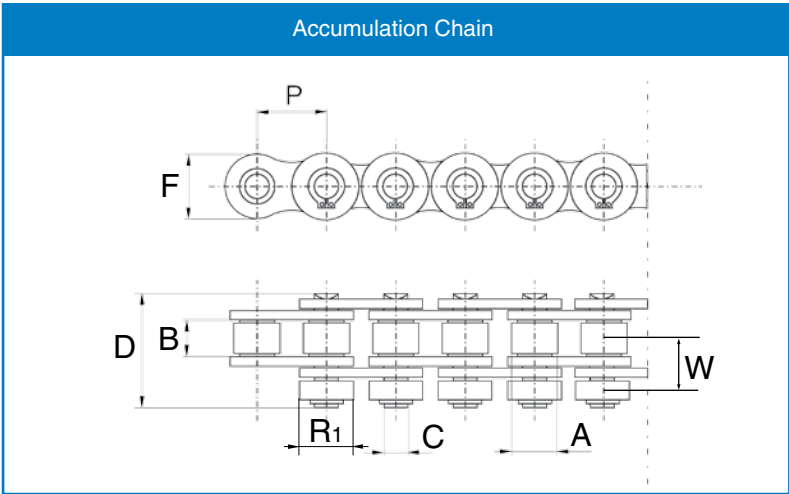
| Chain number | Pitch | Roller diameter | Width between inner plates | Pin diameter | Pin length | Side plate height | Attachment width | Attachment height |       | Tensile strength |
|--------------|-------|-----------------|----------------------------|--------------|------------|-------------------|------------------|-------------------|-------|------------------|
|              | P     | A               | B                          | C            | L          | F                 | K                | X                 | S     | kN               |
| 08 X3/Z1     | 12.70 | 7.75            | 4.88                       | 4.09         | 13.00      | 9.90              | 16.00            | 85.00             | 17.50 | 82.60            |

Roller Chain

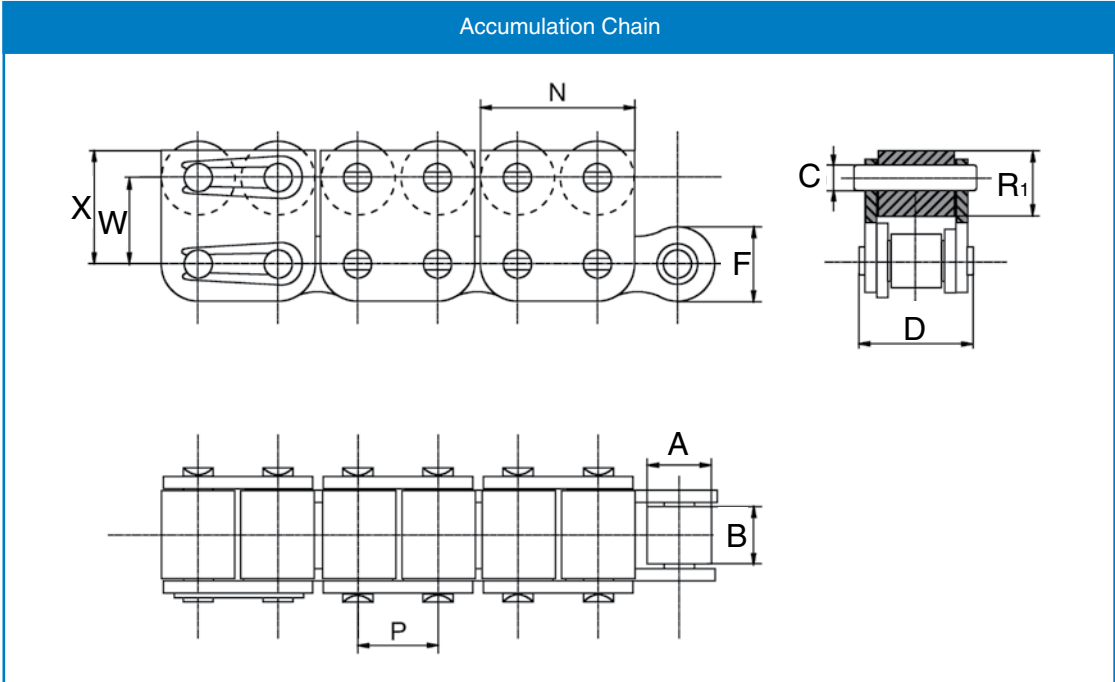
Accumulation Chain

**Note:** all accumulation chain is available with various roller dimensions as well as different pitches to those quoted below.

To avoid confusion please always supply the chain and accumulation roller dimensions.



| Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter | Pin length | Roller diameter | Roller pitch | Tensile strength |
|--------------|--------|-----------------|----------------------------|--------------|------------|-----------------|--------------|------------------|
|              | P      | A               | B                          | C            | D          | R <sub>1</sub>  | W            | kN               |
| 10B-1/R      | 15.875 | 10.16           | 9.65                       | 5.08         | 25.4       | 14.2            | 15.1         | 22.7             |



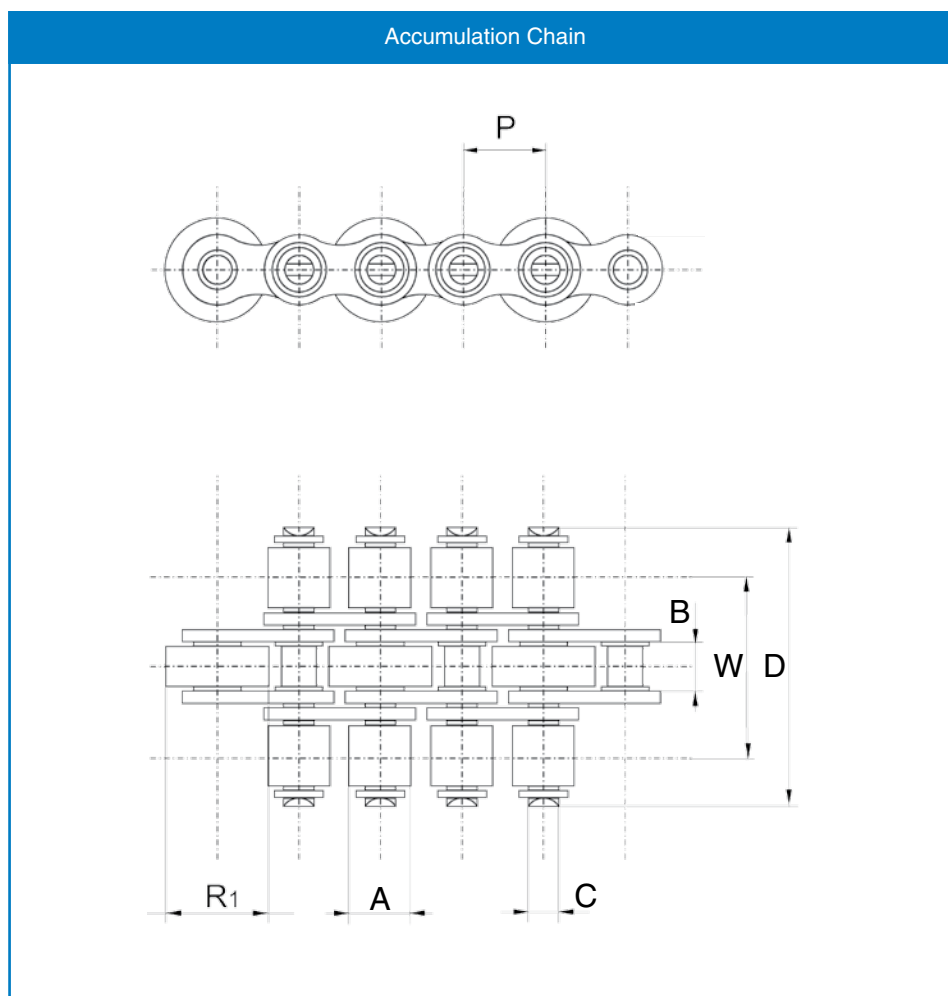
|              | Pitch  | Roller diameter | Width between inner plates | Roller diameter | Pin diameter | Pin length | Inner plate height |      |      |      | Tensile strength |
|--------------|--------|-----------------|----------------------------|-----------------|--------------|------------|--------------------|------|------|------|------------------|
| Chain number | P      | A               | B                          | R <sub>1</sub>  | C            | D          | F                  | W    | X    | N    | kN               |
| 10B/R1       | 15.875 | 10.16           | 10.16                      | 13.0            | 5.08         | 19.6       | 14.2               | 15.8 | 20.6 | 28.4 | 22.7             |

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.



# Roller Chain

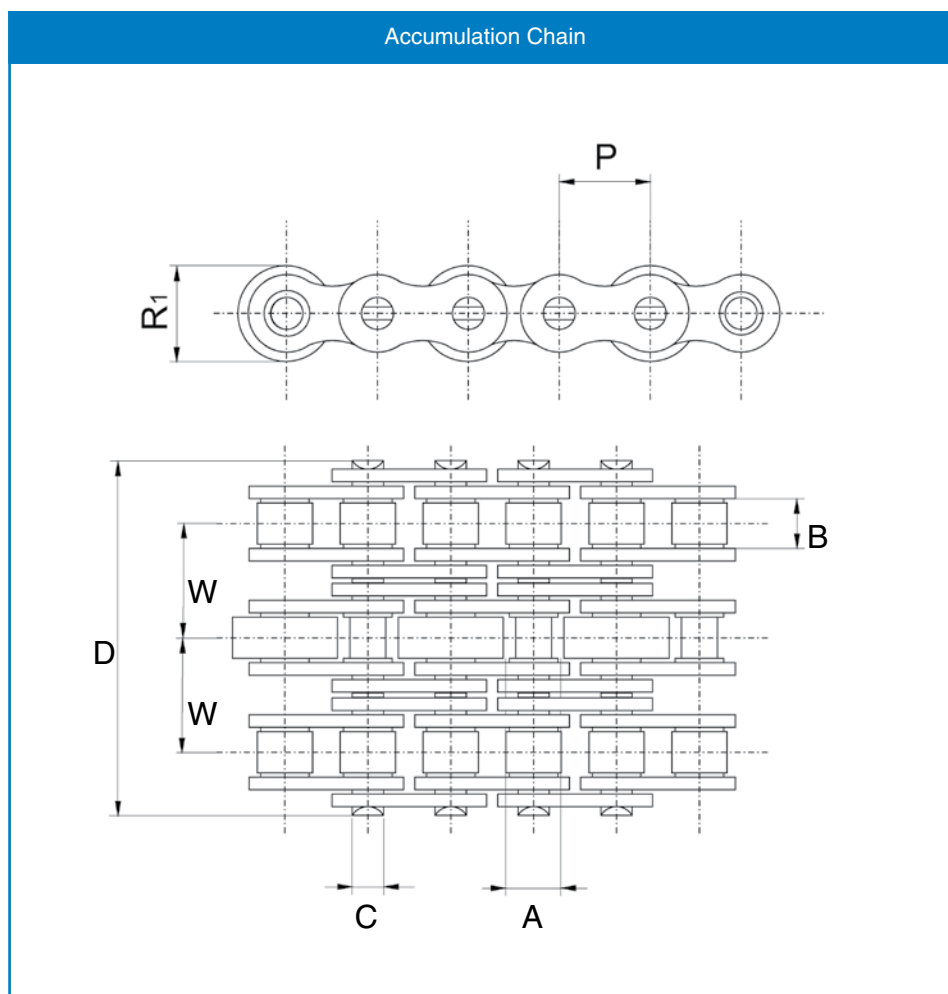
## Accumulation Chain



| Chain number | Pitch<br>$P$ | Roller diameter.<br>$A$ | Width between inner plates<br>$B$ | Pin diameter<br>$C$ | Pin length<br>$D$ | Roller diameter<br>$R_1$ | Roller pitch<br>$W$ | Tensile strength<br>kN | Weight<br>kg/m |
|--------------|--------------|-------------------------|-----------------------------------|---------------------|-------------------|--------------------------|---------------------|------------------------|----------------|
| 08B-1/S6     | 12.70        | 8.51                    | 7.75                              | 4.47                | 27                | 16.0                     | 19.1                | 18.2                   | 1.17           |
| 08B-1/S7     | 12.70        | 8.51                    | 7.75                              | 4.47                | 33                | 16.0                     | 22.0                | 18.2                   | 1.38           |
| 12B-1/S1     | 19.05        | 12.07                   | 11.68                             | 5.72                | 48                | 26.0                     | 31.5                | 29.5                   | 3.50           |
| 12B-1/S2     | 19.05        | 12.07                   | 11.68                             | 5.72                | 43                | 26.0                     | 29.2                | 29.5                   | 3.20           |
| 12B-1/S2a    | 19.05        | 12.07                   | 11.68                             | 5.72                | 43                | 24.0                     | 29.2                | 29.5                   | 2.80           |
| 12B-1/S3     | 19.05        | 12.07                   | 11.68                             | 5.72                | 40                | 28.0                     | 27.0                | 29.5                   | 3.40           |
| 16B-1/S5     | 25.40        | 15.88                   | 17.02                             | 8.28                | 65                | 38.5                     | 44.9                | 58.0                   | 7.00           |

# Roller Chain

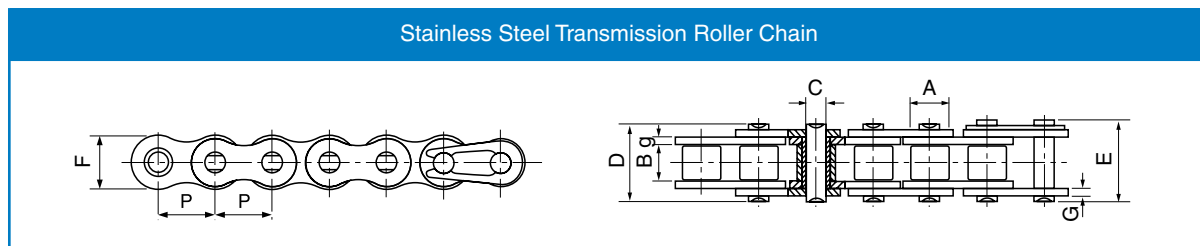
## Accumulation Chain



| Chain number | Pitch | Roller diameter | Width between inner plate | Pin diameter | Pin length | Roller diameter | Roller pitch | Tensile strength |
|--------------|-------|-----------------|---------------------------|--------------|------------|-----------------|--------------|------------------|
|              | P     | A               | B                         | C            | D          | R <sub>1</sub>  | W            | kN               |
| 12B-3/S2a    | 19.05 | 12.07           | 11.68                     | 5.72         | 61.7       | 24.0            | 19.46        | 88.5             |
| 12B-3/S2     | 19.05 | 12.07           | 11.68                     | 5.72         | 61.7       | 26.0            | 19.46        | 88.5             |

# Roller Chain

## Stainless Steel Transmission Roller Chain (Grade 304)



| ISO Chain number | ANSI Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter | Pin length |       | Inner plate height | Plate thickness | Minimum tensile strength | Average tensile strength | Weight |
|------------------|-------------------|--------|-----------------|----------------------------|--------------|------------|-------|--------------------|-----------------|--------------------------|--------------------------|--------|
|                  |                   | P      | A               | B                          | C            | D          | E     | F                  | g/G             | kN                       | kN                       | kg/m   |
|                  | *35SS             | 9.525  | 5.08            | 4.77                       | 3.58         | 12.40      | 13.17 | 9.00               | 1.30            | 5.50                     | 6.60                     | 0.33   |
|                  | 40SS              | 12.700 | 7.95            | 7.85                       | 3.96         | 16.60      | 17.80 | 12.00              | 1.50            | 9.60                     | 10.80                    | 0.63   |
|                  | 50SS              | 15.875 | 10.16           | 9.40                       | 5.08         | 20.70      | 22.20 | 15.09              | 2.03            | 15.20                    | 17.20                    | 1.03   |
|                  | 60SS              | 19.050 | 11.91           | 12.57                      | 5.94         | 25.90      | 27.70 | 18.00              | 2.42            | 21.70                    | 26.40                    | 1.51   |
|                  | 80SS              | 25.400 | 15.88           | 15.75                      | 7.92         | 32.70      | 35.00 | 24.00              | 3.25            | 38.90                    | 46.60                    | 2.62   |
|                  | 100SS             | 31.750 | 19.05           | 18.90                      | 9.53         | 40.40      | 44.70 | 30.00              | 4.00            | 60.00                    | 70.20                    | 3.94   |
| 04BSS            |                   | 6.000  | 4.00            | 2.80                       | 1.85         | 6.80       | 7.80  | 5.00               | 0.60            | 2.00                     | 2.40                     | 0.11   |
| 05BSS            |                   | 8.000  | 5.00            | 3.00                       | 2.31         | 8.20       | 8.90  | 7.10               | 0.80            | 3.50                     | 4.10                     | 0.20   |
| #06BSS           |                   | 9.525  | 6.35            | 5.72                       | 3.28         | 13.15      | 14.10 | 8.20               | 1.30            | 6.20                     | 6.80                     | 0.41   |
| 08BSS            |                   | 12.700 | 8.51            | 7.75                       | 4.45         | 16.70      | 18.20 | 11.80              | 1.60            | 12.00                    | 14.30                    | 0.70   |
| 10BSS            |                   | 15.875 | 10.16           | 9.65                       | 5.08         | 19.50      | 20.90 | 14.70              | 1.70            | 14.50                    | 17.20                    | 0.94   |
| 12BSS            |                   | 19.050 | 12.07           | 11.68                      | 5.72         | 22.50      | 24.20 | 16.00              | 1.85            | 18.50                    | 20.90                    | 1.16   |
| 16BSS            |                   | 25.400 | 15.88           | 17.02                      | 8.28         | 36.10      | 37.40 | 21.00              | 4.15/3.1        | 40.00                    | 47.60                    | 2.73   |
| 20BSS            |                   | 31.750 | 19.05           | 19.56                      | 10.19        | 41.30      | 45.00 | 26.40              | 4.5/3.5         | 59.00                    | 69.60                    | 3.73   |

\* Bush chain: **A** in the table indicates the external diameter of the bush

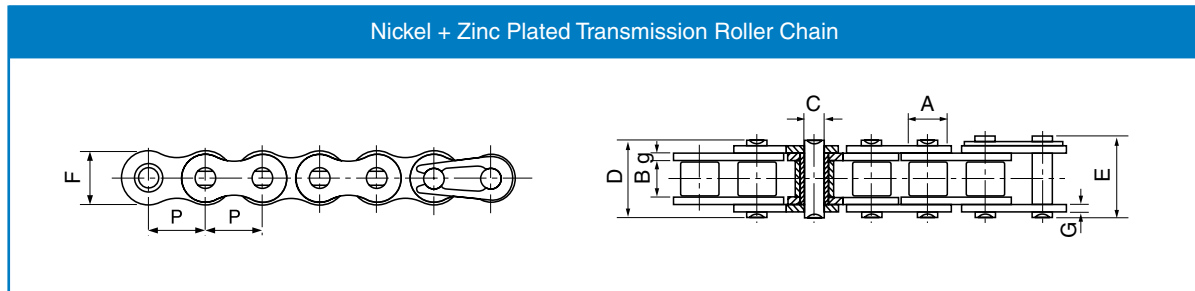
# Straight side plate chain

Duplex and Triplex chains are also available.

Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

# Roller Chain

## Nickel Plated Transmission Roller Chain



| ISO Chain number | ANSI Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter | Pin length |       | Inner plate height | Plate thickness | Minimum tensile strength | Average tensile strength | Weight |
|------------------|-------------------|--------|-----------------|----------------------------|--------------|------------|-------|--------------------|-----------------|--------------------------|--------------------------|--------|
|                  |                   | P      | A               | B                          | C            | D          | E     | F                  | g/G             | kN                       | kN                       | kg/m   |
|                  | *25NP             | 6.350  | 3.30            | 3.18                       | 2.31         | 7.90       | 8.40  | 6.00               | 0.80            | 3.50                     | 4.60                     | 0.15   |
|                  | *35NP             | 9.525  | 5.08            | 4.77                       | 3.58         | 12.40      | 13.17 | 9.00               | 1.30            | 7.90                     | 10.80                    | 0.33   |
|                  | 41NP              | 12.700 | 7.77            | 6.25                       | 3.58         | 13.75      | 15.00 | 9.91               | 1.30            | 6.67                     | 12.60                    | 0.41   |
|                  | 40NP              | 12.700 | 7.95            | 7.85                       | 3.96         | 16.60      | 17.80 | 12.00              | 1.50            | 14.10                    | 17.50                    | 0.62   |
|                  | 50NP              | 15.875 | 10.16           | 9.40                       | 5.08         | 20.70      | 22.20 | 15.09              | 2.03            | 22.20                    | 29.40                    | 1.02   |
|                  | 60NP              | 19.050 | 11.91           | 12.57                      | 5.94         | 25.90      | 27.70 | 18.00              | 2.42            | 31.80                    | 41.50                    | 1.50   |
|                  | 80NP              | 25.400 | 15.88           | 15.75                      | 7.92         | 32.70      | 35.00 | 24.00              | 3.25            | 56.70                    | 69.40                    | 2.60   |
|                  | 100NP             | 31.750 | 19.05           | 18.90                      | 9.53         | 40.40      | 44.70 | 30.00              | 4.00            | 88.50                    | 109.20                   | 3.91   |
| 04BNP            |                   | 6.000  | 4.00            | 2.80                       | 1.85         | 6.80       | 7.80  | 5.00               | 0.60            | 3.00                     | 3.20                     | 0.11   |
| 05BNP            |                   | 8.000  | 5.00            | 3.00                       | 2.31         | 8.20       | 8.90  | 7.10               | 0.80            | 5.00                     | 5.90                     | 0.20   |
| #06BNP           |                   | 9.525  | 6.35            | 5.72                       | 3.28         | 13.15      | 14.10 | 8.20               | 1.30            | 9.00                     | 10.40                    | 0.41   |
| 08BNP            |                   | 12.700 | 8.51            | 7.75                       | 4.45         | 16.70      | 18.20 | 11.80              | 1.60            | 18.00                    | 19.40                    | 0.69   |
| 10BNP            |                   | 15.875 | 10.16           | 9.65                       | 5.08         | 19.50      | 20.90 | 14.70              | 1.70            | 22.40                    | 27.50                    | 0.93   |
| 12BNP            |                   | 19.050 | 12.07           | 11.68                      | 5.72         | 22.50      | 24.20 | 16.00              | 1.85            | 29.00                    | 32.20                    | 1.15   |
| 16BNP            |                   | 25.400 | 15.88           | 17.02                      | 8.28         | 36.10      | 37.40 | 21.00              | 4.15/3.1        | 60.00                    | 72.80                    | 2.71   |
| 20BNP            |                   | 31.750 | 19.05           | 19.56                      | 10.19        | 41.30      | 45.00 | 26.40              | 4.5/3.5         | 95.00                    | 106.70                   | 3.70   |

Duplex and Triplex chains are also available.

## Zinc Plated Transmission Roller Chain

| ISO Chain number | ANSI Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter | Pin length |       | Inner plate height | Plate thickness | Minimum tensile strength | Average tensile strength | Weight |
|------------------|-------------------|--------|-----------------|----------------------------|--------------|------------|-------|--------------------|-----------------|--------------------------|--------------------------|--------|
|                  |                   | P      | A               | B                          | C            | D          | E     | F                  | g/G             | kN                       | kN                       | kg/m   |
|                  | *25ZP             | 6.350  | 3.30            | 3.18                       | 2.31         | 7.90       | 8.40  | 6.00               | 0.80            | 3.50                     | 4.60                     | 0.14   |
|                  | *35ZP             | 9.525  | 5.08            | 4.77                       | 3.58         | 12.40      | 13.17 | 9.00               | 1.30            | 7.90                     | 10.80                    | 0.33   |
|                  | 41ZP              | 12.700 | 7.77            | 6.25                       | 3.58         | 13.75      | 15.00 | 9.91               | 1.30            | 6.67                     | 12.60                    | 0.41   |
|                  | 40ZP              | 12.700 | 7.95            | 7.85                       | 3.96         | 16.60      | 17.80 | 12.00              | 1.50            | 14.10                    | 17.50                    | 0.62   |
|                  | 50ZP              | 15.875 | 10.16           | 9.40                       | 5.08         | 20.70      | 22.20 | 15.09              | 2.03            | 22.20                    | 29.40                    | 1.02   |
|                  | 60ZP              | 19.050 | 11.91           | 12.57                      | 5.94         | 25.90      | 27.70 | 18.00              | 2.42            | 31.80                    | 41.50                    | 1.50   |
|                  | 80ZP              | 25.400 | 15.88           | 15.75                      | 7.92         | 32.70      | 35.00 | 24.00              | 3.25            | 56.70                    | 69.40                    | 2.60   |
|                  | 100ZP             | 31.750 | 19.05           | 18.90                      | 9.53         | 40.40      | 44.70 | 30.00              | 4.00            | 88.50                    | 109.20                   | 3.91   |
| 04BZP            |                   | 6.000  | 4.00            | 2.80                       | 1.85         | 6.80       | 7.80  | 5.00               | 0.60            | 3.00                     | 3.20                     | 0.11   |
| 05BZP            |                   | 8.000  | 5.00            | 3.00                       | 2.31         | 8.20       | 8.90  | 7.10               | 0.80            | 5.00                     | 5.90                     | 0.20   |
| #06BZP           |                   | 9.525  | 6.35            | 5.72                       | 3.28         | 13.15      | 14.10 | 8.20               | 1.30            | 9.00                     | 10.40                    | 0.41   |
| 08BZP            |                   | 12.700 | 8.51            | 7.75                       | 4.45         | 16.70      | 18.20 | 11.80              | 1.60            | 18.00                    | 19.40                    | 0.69   |
| 10BZP            |                   | 15.875 | 10.16           | 9.65                       | 5.08         | 19.50      | 20.90 | 14.70              | 1.70            | 22.40                    | 27.50                    | 0.93   |
| 12BZP            |                   | 19.050 | 12.07           | 11.68                      | 5.72         | 22.50      | 24.20 | 16.00              | 1.85            | 29.00                    | 32.20                    | 1.15   |
| 16BZP            |                   | 25.400 | 15.88           | 17.02                      | 8.28         | 36.10      | 37.40 | 21.00              | 4.15/3.1        | 60.00                    | 72.80                    | 2.71   |
| 20BZP            |                   | 31.750 | 19.05           | 19.56                      | 10.19        | 41.30      | 45.00 | 26.40              | 4.5/3.5         | 95.00                    | 106.70                   | 3.70   |

\* Bush chain: **A** in the table indicates the external diameter of the bush

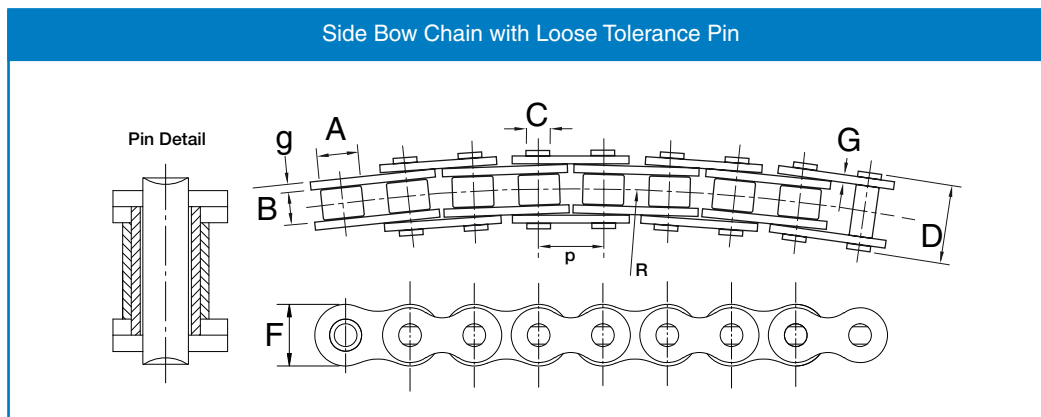
# Straight side plate chain

Duplex and Triplex chains are also available.

Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

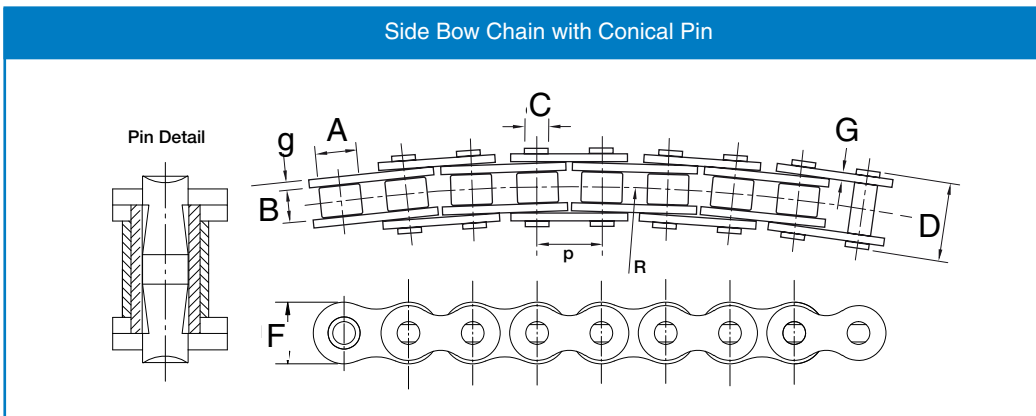
# Roller Chain

## Side Bow Chain with Loose Tolerance Pin



| Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter | Pin length | Inner plate height | Plate thickness | Min. side bow radius | Average tensile strength | Weight |
|--------------|--------|-----------------|----------------------------|--------------|------------|--------------------|-----------------|----------------------|--------------------------|--------|
|              | P      | A               | B                          | C            | D          | F                  | g/G             | R                    | kN                       | kg/m   |
| 40SB         | 12.700 | 7.95            | 7.85                       | 3.45         | 16.9       | 11.7               | 1.50            | 350                  | 11.00                    | 0.80   |
| 50SB         | 15.875 | 10.16           | 9.40                       | 4.37         | 20.7       | 14.9               | 2.03            | 400                  | 20.00                    | 1.09   |
| 60SB         | 19.050 | 11.91           | 12.57                      | 5.34         | 26.6       | 18.0               | 2.42            | 500                  | 28.00                    | 1.54   |
| 63SB         | 19.050 | 11.91           | 12.68                      | 5.08         | 28.8       | 17.2               | 2.42 / 2.03     | 350                  | 25.00                    | 1.40   |
| 80SB         | 25.400 | 15.88           | 15.75                      | 7.19         | 34.0       | 24.0               | 3.25            | 715                  | 39.00                    | 2.60   |
| 08BSB        | 12.700 | 8.51            | 7.75                       | 3.97         | 17.4       | 11.8               | 1.50            | 400                  | 11.20                    | 0.70   |
| 08BSBF1      | 12.700 | 8.51            | 7.75                       | 3.97         | 16.3       | 11.8               | 1.60 / 1.20     | 400                  | 11.00                    | 0.65   |
| 10BSB        | 15.875 | 10.16           | 9.65                       | 4.50         | 20.1       | 14.7               | 1.70            | 400                  | 18.70                    | 0.93   |
| 12BSB        | 19.050 | 12.07           | 11.68                      | 5.12         | 23.1       | 16.0               | 1.85            | 500                  | 21.00                    | 1.16   |
| 16BSB        | 25.400 | 15.88           | 17.22                      | 7.90         | 36.5       | 21.0               | 3.70 - 3.00     | 500                  | 53.50                    | 2.53   |

## Side Bow Chain with Conical Pin



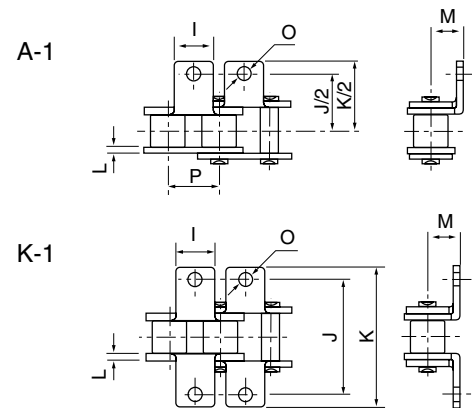
| Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter | Pin length | Inner plate height | Plate thickness | Min. side bow radius | Average tensile strength | Weight |
|--------------|--------|-----------------|----------------------------|--------------|------------|--------------------|-----------------|----------------------|--------------------------|--------|
|              | P      | A               | B                          | C            | D          | F                  | g/G             | R                    | kN                       | kg/m   |
| 40SB         | 12.700 | 7.95            | 7.85                       | 3.98         | 16.9       | 11.7               | 1.50            | 350                  | 11.00                    | 0.80   |
| 50SB         | 15.875 | 10.16           | 9.40                       | 5.08         | 20.7       | 14.9               | 2.03            | 400                  | 20.00                    | 1.09   |
| 60SB         | 19.050 | 11.91           | 12.57                      | 5.94         | 26.6       | 18.0               | 2.42            | 500                  | 28.00                    | 1.54   |
| 80SB         | 25.400 | 15.88           | 15.75                      | 7.92         | 34.0       | 24.0               | 3.25            | 711                  | 39.00                    | 2.60   |
| 08BSB        | 12.700 | 8.51            | 7.75                       | 4.45         | 17.4       | 11.8               | 1.50            | 400                  | 11.20                    | 0.70   |
| 08BSBF1      | 12.700 | 8.51            | 7.75                       | 4.45         | 16.3       | 11.8               | 1.60 - 1.20     | 400                  | 11.00                    | 0.65   |
| 10BSB        | 15.875 | 10.16           | 9.65                       | 5.08         | 20.1       | 14.7               | 1.70            | 400                  | 18.70                    | 0.93   |
| 12BSB        | 19.050 | 12.07           | 11.68                      | 5.72         | 23.1       | 16.0               | 1.85            | 500                  | 21.00                    | 1.16   |
| 16BSB        | 25.400 | 15.88           | 17.22                      | 8.28         | 36.5       | 21.0               | 3.70 - 3.00     | 500                  | 53.50                    | 2.53   |
| C2050SB      | 31.750 | 10.16           | 9.40                       | 5.08         | 21.3       | 15.0               | 2.03            | 800                  | 20.50                    | 0.84   |



# Roller Chain Attachments

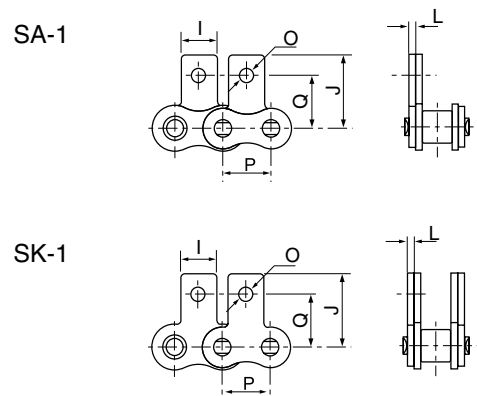
## A-1 & K-1 Attachments

| ISO No. | ANSI No. | P      | I     | J      | K      | L    | M     | O     |
|---------|----------|--------|-------|--------|--------|------|-------|-------|
|         | 40       | 12.700 | 9.50  | 25.40  | 35.20  | 1.50 | 7.90  | 3.40  |
|         | 50       | 15.875 | 12.70 | 31.75  | 46.20  | 2.03 | 10.30 | 5.50  |
|         | 60       | 19.050 | 15.90 | 38.10  | 55.60  | 2.42 | 11.90 | 5.50  |
|         | 80       | 25.400 | 19.10 | 50.80  | 64.80  | 3.25 | 15.90 | 6.80  |
|         | 100      | 31.750 | 25.40 | 63.50  | 87.30  | 4.00 | 19.80 | 9.20  |
|         | 120      | 38.100 | 28.60 | 76.20  | 108.50 | 4.80 | 23.00 | 9.80  |
|         | 140      | 44.450 | 34.90 | 88.90  | 123.00 | 5.60 | 28.60 | 11.40 |
|         | 160      | 50.800 | 38.10 | 101.60 | 142.80 | 6.40 | 31.80 | 13.10 |
| *06B    |          | 9.525  | 8.00  | 19.04  | 27.00  | 1.30 | 6.50  | 3.50  |
| 08B     |          | 12.700 | 9.50  | 25.40  | 36.40  | 1.60 | 8.90  | 4.50  |
| 10B     |          | 15.875 | 14.30 | 31.75  | 44.60  | 1.70 | 10.31 | 5.30  |
| 12B     |          | 19.050 | 16.00 | 38.10  | 52.40  | 1.85 | 13.46 | 6.40  |
| 16B     |          | 25.400 | 19.10 | 50.80  | 72.60  | 3.10 | 15.88 | 6.40  |



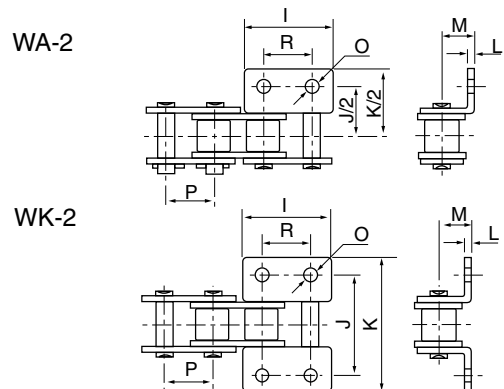
## SA-1 & SK-1 Attachments

| ISO No. | ANSI No. | P      | I     | J     | Q     | L    | O     |
|---------|----------|--------|-------|-------|-------|------|-------|
|         | 40       | 12.700 | 9.50  | 19.05 | 12.70 | 1.50 | 3.40  |
|         | 50       | 15.875 | 12.70 | 25.25 | 15.90 | 2.03 | 5.50  |
|         | 60       | 19.050 | 15.90 | 29.33 | 18.30 | 2.42 | 5.50  |
|         | 80       | 25.400 | 19.10 | 34.70 | 24.60 | 3.25 | 6.80  |
|         | 100      | 31.750 | 25.40 | 43.30 | 31.80 | 4.00 | 9.20  |
|         | 120      | 38.100 | 28.60 | 51.60 | 36.50 | 4.80 | 9.80  |
|         | 140      | 44.450 | 34.90 | 62.00 | 44.50 | 5.60 | 11.40 |
|         | 160      | 50.800 | 38.10 | 69.85 | 50.80 | 6.40 | 13.10 |
| *06B    |          | 9.525  | 8.00  | 13.50 | 9.52  | 1.30 | 3.50  |
| 08B     |          | 12.700 | 9.50  | 18.90 | 13.35 | 1.60 | 4.30  |
| 10B     |          | 15.875 | 14.30 | 22.95 | 16.50 | 1.70 | 5.30  |
| 12B     |          | 19.050 | 16.00 | 28.60 | 21.45 | 1.85 | 6.40  |
| 16B     |          | 25.400 | 19.10 | 34.00 | 23.15 | 3.10 | 6.40  |



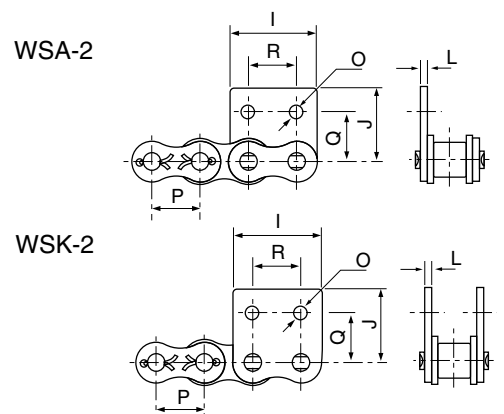
## WA-2 & WK-2 Attachments

| ISO No. | ANSI No. | P      | I     | R     | J     | K     | L    | M     | O    |
|---------|----------|--------|-------|-------|-------|-------|------|-------|------|
|         | 40       | 12.700 | 23.00 | 12.70 | 25.40 | 35.60 | 1.50 | 7.90  | 3.40 |
|         | 50       | 15.875 | 28.80 | 15.88 | 31.80 | 46.80 | 2.03 | 10.30 | 5.50 |
|         | 60       | 19.050 | 34.65 | 19.05 | 38.10 | 56.40 | 2.42 | 11.90 | 5.50 |
|         | 80       | 25.400 | 45.90 | 25.40 | 50.80 | 73.20 | 3.25 | 15.90 | 6.80 |
|         | 100      | 31.750 | 57.65 | 31.75 | 63.50 | 89.80 | 4.00 | 19.80 | 9.20 |
| 08B     |          | 12.700 | 24.00 | 12.70 | 25.40 | 36.40 | 1.60 | 8.90  | 4.30 |
| 10B     |          | 15.875 | 29.58 | 15.88 | 31.80 | 44.60 | 1.70 | 10.31 | 5.30 |
| 12B     |          | 19.050 | 34.05 | 19.05 | 38.10 | 52.40 | 1.85 | 13.46 | 6.40 |
| 16B     |          | 25.400 | 46.40 | 25.40 | 50.80 | 72.60 | 3.10 | 15.88 | 6.40 |



## WSA-2 & WSK-2 Attachments

| ISO No. | ANSI No. | P      | I     | R     | J     | Q     | L    | O    |
|---------|----------|--------|-------|-------|-------|-------|------|------|
|         | 40       | 12.700 | 23.00 | 12.70 | 17.40 | 12.70 | 1.50 | 3.40 |
|         | 50       | 15.875 | 28.80 | 15.88 | 23.05 | 15.90 | 2.03 | 5.50 |
|         | 60       | 19.050 | 34.65 | 19.05 | 26.86 | 18.30 | 2.42 | 5.50 |
|         | 80       | 25.400 | 45.90 | 25.40 | 35.45 | 24.60 | 3.25 | 6.80 |
|         | 100      | 31.750 | 57.65 | 31.75 | 44.00 | 31.80 | 4.00 | 9.20 |
| 08B     |          | 12.700 | 23.30 | 12.70 | 18.90 | 13.35 | 1.60 | 4.30 |
| 10B     |          | 15.875 | 29.58 | 15.88 | 22.95 | 16.50 | 1.70 | 5.30 |
| 12B     |          | 19.050 | 34.05 | 19.05 | 28.60 | 21.45 | 1.85 | 6.40 |
| 16B     |          | 25.400 | 46.40 | 25.40 | 34.00 | 23.15 | 3.10 | 6.40 |

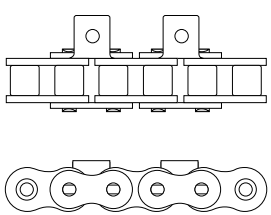


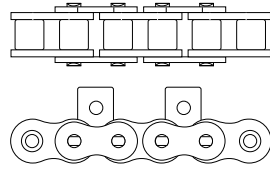
\* Straight side plates

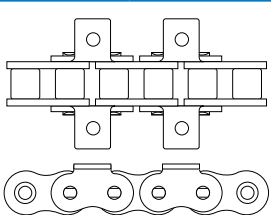
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

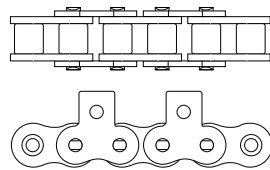
# Roller Chain Attachments

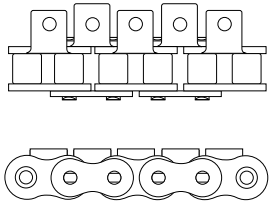
## Attachment Chain Designation

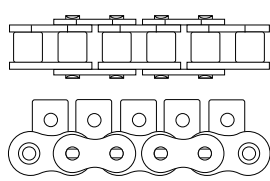
| 1. Standard Chains with bent attachment A1 - one hole - one side - every outer    |                 |
|-----------------------------------------------------------------------------------|-----------------|
|  | Chain Reference |
|                                                                                   | 06BA-2          |
|                                                                                   | 08BA-2          |
|                                                                                   | 10BA-2          |
|                                                                                   | 12BA-2          |
|                                                                                   | 16BA-2          |

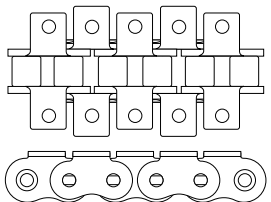
| 7. Standard Chains with straight attachment SA1 - one hole - one side - every outer |                 |
|-------------------------------------------------------------------------------------|-----------------|
|   | Chain Reference |
|                                                                                     | 06BSA-2         |
|                                                                                     | 08BSA-2         |
|                                                                                     | 10BSA-2         |
|                                                                                     | 12BSA-2         |
|                                                                                     | 16BSA-2         |

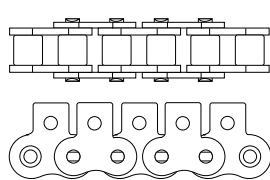
| 2. Standard Chains with bent attachment K1 - one hole - both sides - every outer  |                 |
|-----------------------------------------------------------------------------------|-----------------|
|  | Chain Reference |
|                                                                                   | 06BK-2          |
|                                                                                   | 08BK-2          |
|                                                                                   | 10BK-2          |
|                                                                                   | 12BK-2          |
|                                                                                   | 16BK-2          |

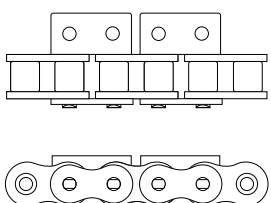
| 8. Standard Chains with straight attachment SK1 - one hole - both sides - every outer |                 |
|---------------------------------------------------------------------------------------|-----------------|
|     | Chain Reference |
|                                                                                       | 06BSK-2         |
|                                                                                       | 08BSK-2         |
|                                                                                       | 10BSK-2         |
|                                                                                       | 12BSK-2         |
|                                                                                       | 16BSK-2         |

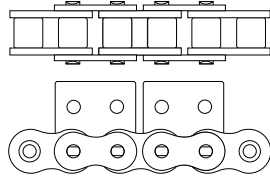
| 3. Standard Chains with bent attachment A1 - one hole - one side - every outer and inner |                 |
|------------------------------------------------------------------------------------------|-----------------|
|        | Chain Reference |
|                                                                                          | 06BA-1          |
|                                                                                          | 08BA-1          |
|                                                                                          | 10BA-1          |
|                                                                                          | 12BA-1          |
|                                                                                          | 16BA-1          |

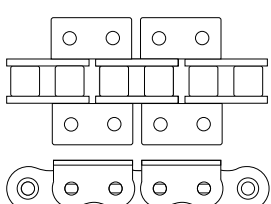
| 9. Standard Chains with straight attachment SA1 - one hole - one side - every outer and inner |                 |
|-----------------------------------------------------------------------------------------------|-----------------|
|            | Chain Reference |
|                                                                                               | 06BSA-1         |
|                                                                                               | 08BSA-1         |
|                                                                                               | 10BSA-1         |
|                                                                                               | 12BSA-1         |
|                                                                                               | 16BSA-1         |

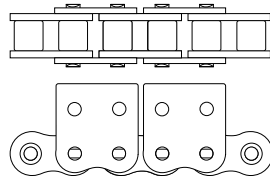
| 4. Standard Chains with bent attachment K1 - one hole - both sides - every outer and inner |                 |
|--------------------------------------------------------------------------------------------|-----------------|
|         | Chain Reference |
|                                                                                            | 06BK-1          |
|                                                                                            | 08BK-1          |
|                                                                                            | 10BK-1          |
|                                                                                            | 12BK-1          |
|                                                                                            | 16BK-1          |

| 10. Standard Chains with straight attachment SK1 - one hole - both sides - every outer and inner |                 |
|--------------------------------------------------------------------------------------------------|-----------------|
|              | Chain Reference |
|                                                                                                  | 06BSK-1         |
|                                                                                                  | 08BSK-1         |
|                                                                                                  | 10BSK-1         |
|                                                                                                  | 12BSK-1         |
|                                                                                                  | 16BSK-1         |

| 5. Standard Chains with bent attachment WA2 - two holes - one side - every outer    |                 |
|-------------------------------------------------------------------------------------|-----------------|
|  | Chain Reference |
|                                                                                     | 06BWA-2         |
|                                                                                     | 08BWA-2         |
|                                                                                     | 10BWA-2         |
|                                                                                     | 12BWA-2         |
|                                                                                     | 16BWA-2         |

| 11. Standard Chains with straight attachment WSA2 - two holes - one side - every outer |                 |
|----------------------------------------------------------------------------------------|-----------------|
|    | Chain Reference |
|                                                                                        | 06BWSA-2        |
|                                                                                        | 08BWSA-2        |
|                                                                                        | 10BWSA-2        |
|                                                                                        | 12BWSA-2        |
|                                                                                        | 16BWSA-2        |

| 6. Standard Chains with bent attachment WK2 - two holes - both sides - every outer  |                 |
|-------------------------------------------------------------------------------------|-----------------|
|  | Chain Reference |
|                                                                                     | 06BWK-2         |
|                                                                                     | 08BWK-2         |
|                                                                                     | 10BWK-2         |
|                                                                                     | 12BWK-2         |
|                                                                                     | 16BWK-2         |

| 12. Standard Chains with straight attachment WSK2 - two holes - both sides - every outer |                 |
|------------------------------------------------------------------------------------------|-----------------|
|      | Chain Reference |
|                                                                                          | 06WSK-2         |
|                                                                                          | 08WSK-2         |
|                                                                                          | 10WSK-2         |
|                                                                                          | 12WSK-2         |
|                                                                                          | 16WSK-1         |

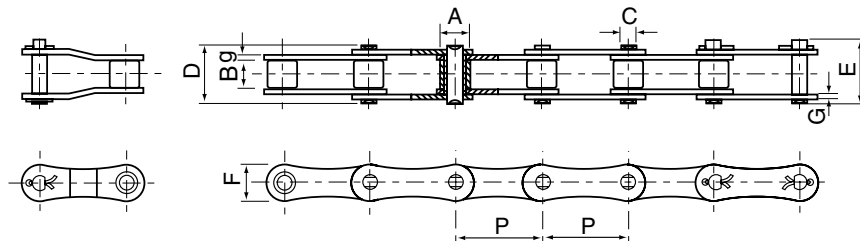
Standard boxed lengths are 5 metres or 10 feet.  
Special lengths available.

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# Double Pitch Chain

## Double Pitch Transmission Chain

Double Pitch Transmission Chain

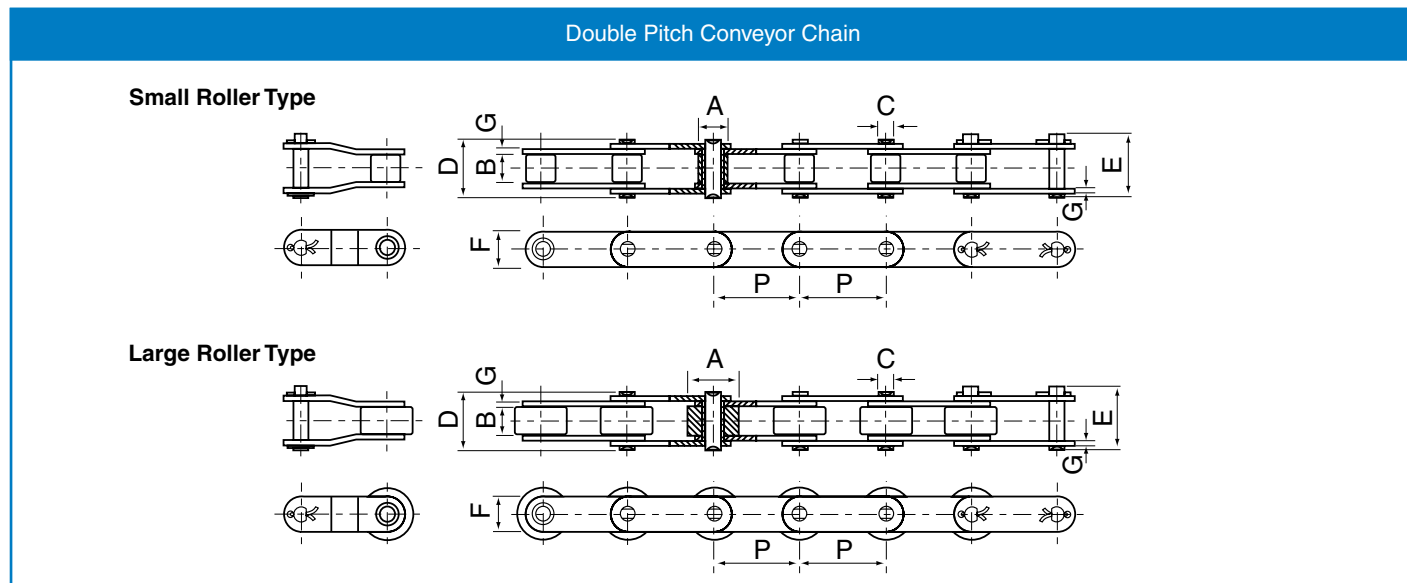


| ISO Chain number | ANSI Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter | Pin length |       | Inner plate height | Plate thickness | Minimum tensile strength | Average tensile strength | Weight |
|------------------|-------------------|--------|-----------------|----------------------------|--------------|------------|-------|--------------------|-----------------|--------------------------|--------------------------|--------|
|                  |                   | P      | A               | B                          | C            | D          | E     | F                  | g/G             | kN                       | kN                       | kg/m   |
|                  | A2040             | 25.40  | 7.95            | 7.85                       | 3.96         | 16.60      | 17.80 | 12.00              | 1.50            | 14.10                    | 16.70                    | 0.42   |
| 208B             |                   | 25.40  | 8.51            | 7.75                       | 4.45         | 16.70      | 18.20 | 11.80              | 1.60            | 18.00                    | 19.40                    | 0.45   |
|                  | A2050             | 31.75  | 10.16           | 9.40                       | 5.08         | 20.70      | 22.20 | 15.00              | 2.03            | 22.20                    | 28.10                    | 0.73   |
| 210B             |                   | 31.75  | 10.16           | 9.65                       | 5.08         | 19.50      | 20.90 | 14.70              | 1.70            | 22.40                    | 27.50                    | 0.65   |
|                  | A2060             | 38.10  | 11.91           | 12.57                      | 5.94         | 25.90      | 27.70 | 18.00              | 2.42            | 31.80                    | 36.80                    | 1.02   |
| 212B             |                   | 38.10  | 12.07           | 11.68                      | 5.72         | 22.50      | 25.20 | 16.00              | 1.85            | 29.00                    | 32.20                    | 0.76   |
|                  | A2080             | 50.80  | 15.88           | 15.75                      | 7.92         | 32.70      | 36.50 | 24.00              | 3.25            | 56.70                    | 65.70                    | 1.70   |
| 216AH            |                   | 50.80  | 15.88           | 15.75                      | 7.92         | 36.20      | 39.40 | 24.00              | 4.00            | 56.70                    | 70.00                    | 2.17   |
| 216B             |                   | 50.80  | 15.88           | 17.02                      | 8.28         | 36.10      | 39.10 | 21.00              | 4.15/3.1        | 60.00                    | 72.80                    | 1.75   |
|                  | A2100             | 63.50  | 19.05           | 18.90                      | 9.53         | 40.40      | 44.70 | 30.00              | 4.00            | 88.50                    | 102.60                   | 2.55   |
| 220B             |                   | 63.50  | 19.05           | 19.56                      | 10.19        | 41.30      | 45.00 | 26.40              | 4.5/3.5         | 95.00                    | 106.70                   | 2.62   |
|                  | A2120             | 76.20  | 22.23           | 25.22                      | 11.10        | 50.30      | 54.30 | 35.70              | 4.80            | 127.00                   | 147.30                   | 4.06   |
| 224B             |                   | 76.20  | 25.40           | 25.40                      | 14.63        | 53.40      | 57.80 | 33.20              | 6.0/4.8         | 160.00                   | 178.00                   | 4.70   |
| 228B             |                   | 88.90  | 27.94           | 30.99                      | 15.90        | 65.10      | 69.50 | 36.70              | 7.5/6.0         | 200.00                   | 222.00                   | 6.23   |
| 232B             |                   | 101.60 | 29.21           | 30.99                      | 17.81        | 66.00      | 71.00 | 42.00              | 7.0/6.0         | 250.00                   | 277.50                   | 6.72   |

Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

# Double Pitch Chain

## Double Pitch Conveyor Chain



| ISO Chain number | ANSI Chain number | Pitch<br>P | Roller diameter<br>A | Width between inner plates<br>B | Pin diameter<br>C | Pin length<br>D | Side plate height<br>F | Plate thickness<br>G | Minimum tensile strength<br>kN | Average tensile strength<br>kN | Weight<br>kg/m |
|------------------|-------------------|------------|----------------------|---------------------------------|-------------------|-----------------|------------------------|----------------------|--------------------------------|--------------------------------|----------------|
|                  | C2040             | 25.40      | 7.95                 | 7.85                            | 3.96              | 16.60           | 12.00                  | 1.50                 | 14.10                          | 16.70                          | 0.50           |
|                  | C2042             |            | 15.88                |                                 |                   |                 |                        |                      |                                |                                | 0.84           |
|                  | C2040H            | 25.40      | 7.95                 | 7.85                            | 3.96              | 18.80           | 12.00                  | 2.03                 | 14.10                          | 17.20                          | 0.65           |
| C208B            |                   | 25.40      | 8.51                 | 7.75                            | 4.45              | 16.70           | 11.80                  | 1.60                 | 18.00                          | 19.40                          | 0.55           |
| C208BL           |                   |            | 15.88                |                                 |                   |                 |                        |                      |                                |                                | 0.89           |
|                  | C2050             | 31.75      | 10.16                | 9.40                            | 5.08              | 20.70           | 15.00                  | 2.03                 | 22.20                          | 28.10                          | 0.78           |
|                  | C2052             |            | 19.05                |                                 |                   |                 |                        |                      |                                |                                | 1.27           |
|                  | C2060             | 38.10      | 11.91                | 12.57                           | 5.94              | 25.90           | 18.00                  | 2.42                 | 31.80                          | 36.80                          | 1.12           |
|                  | C2062             |            | 22.23                |                                 |                   |                 |                        |                      |                                |                                | 1.61           |
|                  | C2060H            | 38.10      | 11.91                | 12.57                           | 5.94              | 29.20           | 18.00                  | 3.25                 | 31.80                          | 41.60                          | 1.44           |
|                  | C2062H            |            | 22.23                |                                 |                   |                 |                        |                      |                                |                                | 2.07           |
|                  | C2080             | 50.80      | 15.88                | 15.75                           | 7.92              | 32.70           | 24.00                  | 3.25                 | 56.70                          | 65.70                          | 2.08           |
|                  | C2082             |            | 28.58                |                                 |                   |                 |                        |                      |                                |                                | 3.12           |
|                  | C2080H            | 50.80      | 15.88                | 15.75                           | 7.92              | 36.20           | 24.40                  | 4.00                 | 56.70                          | 70.00                          | 2.54           |
|                  | C2082H            |            | 28.58                |                                 |                   |                 |                        |                      |                                |                                | 3.58           |
|                  | C2100             | 63.50      | 19.05                | 18.90                           | 9.53              | 40.40           | 30.00                  | 4.00                 | 88.50                          | 102.60                         | 3.01           |
|                  | C2102             |            | 39.67                |                                 |                   |                 |                        |                      |                                |                                | 4.83           |
|                  | C2100H            | 63.50      | 19.05                | 18.90                           | 9.53              | 43.60           | 30.00                  | 4.80                 | 88.50                          | 112.40                         | 3.56           |
|                  | C2102H            |            | 39.67                |                                 |                   |                 |                        |                      |                                |                                | 5.38           |
|                  | C2120             | 76.20      | 22.23                | 25.22                           | 11.10             | 50.30           | 35.70                  | 4.80                 | 127.00                         | 147.30                         | 4.66           |
|                  | C2122             |            | 44.45                |                                 |                   |                 |                        |                      |                                |                                | 7.66           |
|                  | C2120H            | 76.20      | 22.23                | 25.22                           | 11.10             | 53.50           | 35.70                  | 5.60                 | 127.00                         | 160.90                         | 5.26           |
|                  | C2122H            |            | 44.45                |                                 |                   |                 |                        |                      |                                |                                | 8.26           |
|                  | C2160             | 101.60     | 28.58                | 31.75                           | 14.27             | 64.80           | 47.80                  | 6.40                 | 226.80                         | 278.90                         | 8.23           |
|                  | C2162             |            | 57.15                |                                 |                   |                 |                        |                      |                                |                                | 11.95          |
|                  | C2160H            | 101.60     | 28.58                | 31.75                           | 14.27             | 68.20           | 47.80                  | 7.20                 | 226.80                         | 285.80                         | 9.06           |
|                  | C2162H            |            | 57.15                |                                 |                   |                 |                        |                      |                                |                                | 12.77          |

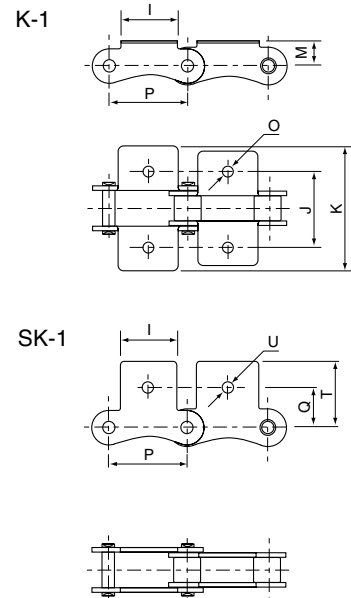
Standard boxed lengths are 5 metres or 10 feet.  
Each box contains one CL. Special lengths available.

# Double Pitch Attachments

## K-1 & SK-1 Attachments

| ANSI Chain number | P     | I    | J    | K     | M    | O    | Q    | T    | U    |
|-------------------|-------|------|------|-------|------|------|------|------|------|
| A2040             | 25.40 | 19.1 | 25.4 | 39.6  | 9.1  | 3.4  | 11.1 | 20.5 | 5.5  |
| A2050             | 31.75 | 23.8 | 31.8 | 49.0  | 11.1 | 5.5  | 14.3 | 25.0 | 6.6  |
| A2060             | 38.10 | 28.6 | 42.9 | 67.8  | 14.7 | 5.5  | 17.5 | 32.9 | 9.2  |
| A2080             | 50.80 | 38.1 | 55.6 | 87.8  | 19.1 | 6.8  | 22.2 | 43.5 | 11.0 |
| A2100             | 63.50 | 47.6 | 66.6 | 107.5 | 23.4 | 9.2  | 28.6 | 50.4 | 13.0 |
| A2120             | 76.20 | 57.2 | 79.3 | 127.5 | 27.8 | 11.0 |      |      |      |

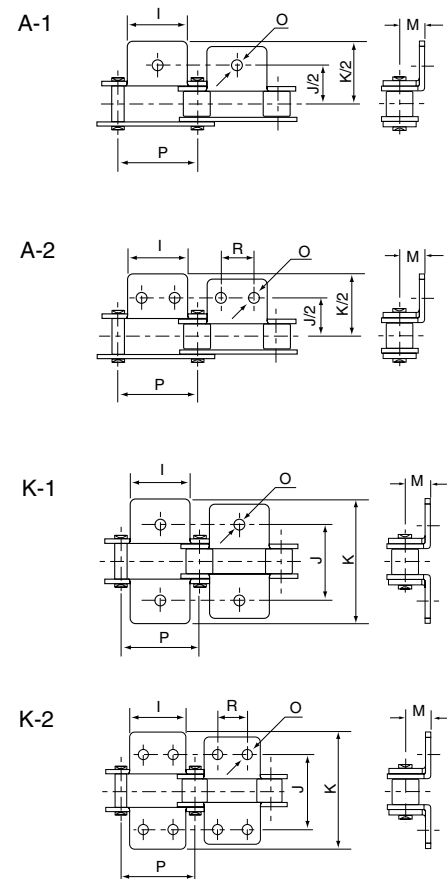
### K-1 & SK-1 Attachments



## A-1, A-2 & K-1, K-2 Attachments

| ISO Chain number | ANSI Chain number | P      | I     | R     | J      | K      | M     | O     |
|------------------|-------------------|--------|-------|-------|--------|--------|-------|-------|
| C208B<br>C208BL  | C2040<br>C2042    | 25.40  | 19.10 | 9.50  | 25.40  | 39.60  | 9.10  | 3.40  |
|                  |                   | 25.40  | 23.20 | 12.70 | 25.40  | 39.60  | 9.10  | 4.50  |
|                  | C2050<br>C2052    | 31.75  | 23.80 | 11.90 | 31.80  | 49.00  | 11.10 | 5.50  |
|                  | C2060<br>C2062    | 38.10  | 28.60 | 14.30 | 42.90  | 67.80  | 14.70 | 5.50  |
|                  | C2060H<br>C2062H  | 38.10  | 28.60 | 14.30 | 42.90  | 67.80  | 14.70 | 5.50  |
|                  | C2080<br>C2082    | 50.80  | 38.10 | 19.10 | 55.60  | 87.80  | 19.10 | 6.80  |
|                  | C2080H<br>C2082H  | 50.80  | 38.10 | 19.10 | 55.60  | 87.80  | 19.10 | 6.80  |
|                  | C2100<br>C2102    | 63.50  | 47.60 | 23.80 | 66.60  | 107.50 | 23.40 | 9.20  |
|                  | C2100H<br>C2102H  | 63.50  | 47.60 | 23.80 | 66.60  | 107.50 | 23.40 | 9.20  |
|                  | C2120<br>C2122    | 76.20  | 57.20 | 28.60 | 79.30  | 121.40 | 27.80 | 11.00 |
|                  | C2120H<br>C2122H  | 76.20  | 57.20 | 28.60 | 79.30  | 121.40 | 27.80 | 11.00 |
|                  | C2160<br>C2162    | 101.60 | 76.20 | 38.10 | 104.70 | 151.60 | 36.50 | 13.10 |
|                  | C2160H<br>C2162H  | 101.60 | 76.20 | 38.10 | 104.70 | 151.60 | 36.50 | 13.10 |

### A-1, A-2 & K-1, K-2 Attachments

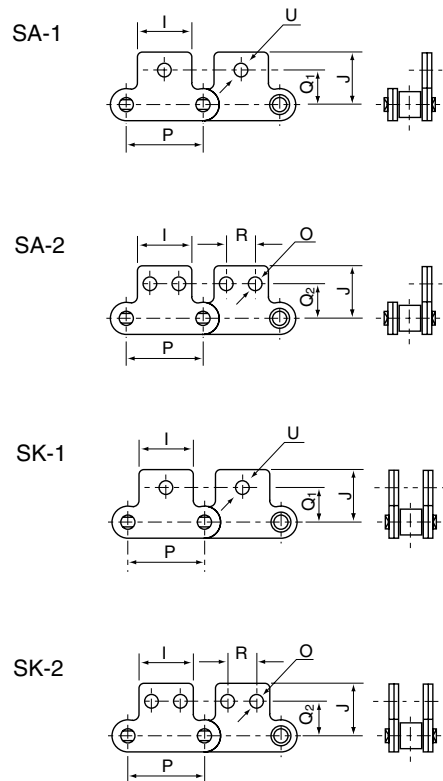


# Double Pitch Attachments

## SA-1, SA-2 & SK-1, SK-2 Attachments

| ISO Chain number | ANSI Chain number | P     | I     | R     | Q <sub>1</sub> | Q <sub>2</sub> | J     | O    | U     |
|------------------|-------------------|-------|-------|-------|----------------|----------------|-------|------|-------|
|                  | C2040<br>C2042    | 25.40 | 19.10 | 9.50  | 11.10          | 13.50          | 20.50 | 3.40 | 5.50  |
| C208B<br>C208BL  |                   | 25.40 | 23.20 | 12.70 | 11.10          | 13.50          | 20.50 | 4.50 | 5.50  |
|                  | C2050<br>C2052    | 31.75 | 23.80 | 11.90 | 14.30          | 15.90          | 25.00 | 5.50 | 6.60  |
|                  | C2060<br>C2062    | 38.10 | 28.60 | 14.30 | 17.50          | 19.10          | 32.90 | 5.50 | 9.20  |
|                  | C2060H<br>C2062H  | 38.10 | 28.60 | 14.30 | 17.50          | 19.10          | 32.90 | 5.50 | 9.20  |
|                  | C2080<br>C2082    | 50.80 | 38.10 | 19.10 | 22.20          | 25.40          | 43.50 | 6.60 | 11.00 |
|                  | C2080H<br>C2082H  | 50.80 | 38.10 | 19.10 | 22.20          | 25.40          | 43.50 | 6.60 | 11.00 |
|                  | C2100<br>C2102    | 63.50 | 47.60 | 23.80 | 28.60          | 31.80          | 50.40 | 8.40 | 13.00 |
|                  | C2100H<br>C2102H  | 63.50 | 47.60 | 23.80 | 28.60          | 31.80          | 50.40 | 8.40 | 13.00 |

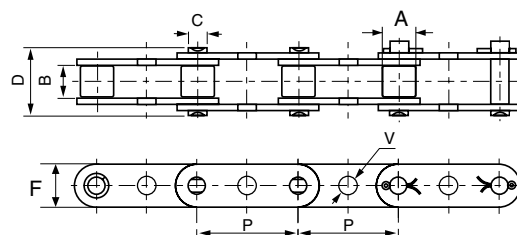
SA-1, SA-2 &amp; SK-1, SK-2 Attachments



## Special Chain (Attachment Holes in Side Plate)

| ANSI Chain number | Pitch | Roller diameter | Width between inner plates | Pin diameter | Pin length | Side plate height | Side plate hole diameter |
|-------------------|-------|-----------------|----------------------------|--------------|------------|-------------------|--------------------------|
|                   | P     | A               | B                          | C            | D          | F                 | V                        |
| C2040<br>C2042    | 25.40 | 7.95<br>15.88   | 7.85                       | 3.96         | 16.60      | 12.00             | 4.10                     |
| C2050<br>C2052    | 31.75 | 10.16<br>19.05  | 9.40                       | 5.08         | 20.70      | 15.00             | 5.10                     |
| C2060<br>C2062    | 38.10 | 11.91<br>22.23  | 12.57                      | 5.94         | 25.90      | 18.00             | 6.10                     |
| C2060H<br>C2062H  | 38.10 | 11.91<br>22.23  | 12.57                      | 5.94         | 29.20      | 18.00             | 6.10                     |
| C2080<br>C2082    | 50.80 | 15.88<br>28.58  | 15.75                      | 7.92         | 32.70      | 24.00             | 8.10                     |
| C2080H<br>C2082H  | 50.80 | 15.88<br>28.58  | 15.75                      | 7.92         | 36.20      | 24.00             | 8.10                     |
| C2100<br>C2102    | 63.50 | 19.05<br>39.67  | 18.90                      | 9.53         | 40.40      | 30.00             | 10.10                    |
| C2100H<br>C2102H  | 63.50 | 19.05<br>39.67  | 18.90                      | 9.53         | 43.60      | 30.00             | 10.10                    |

Special Chain

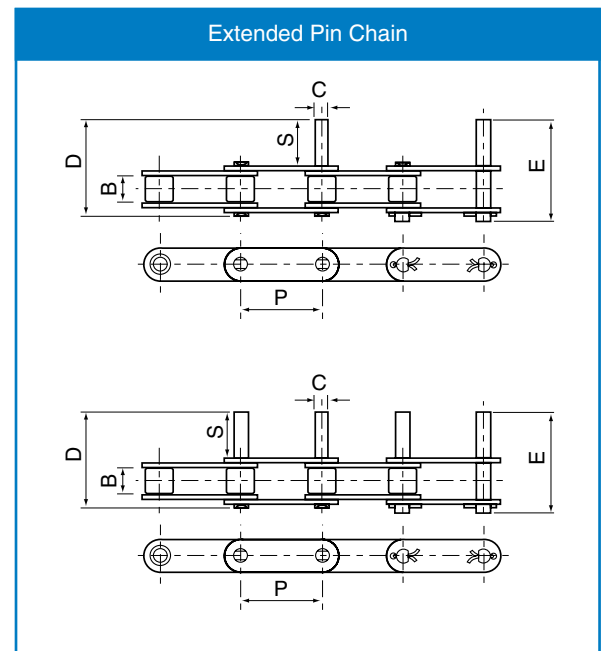




## Double Pitch Chain

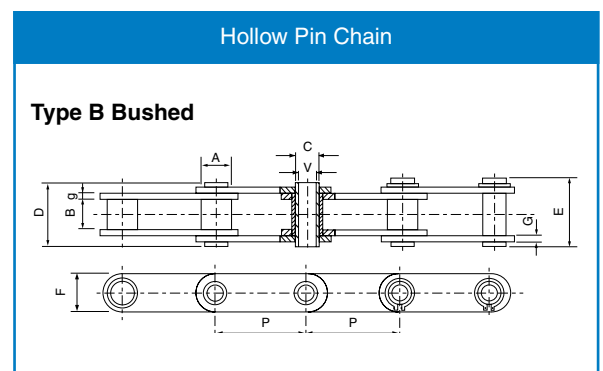
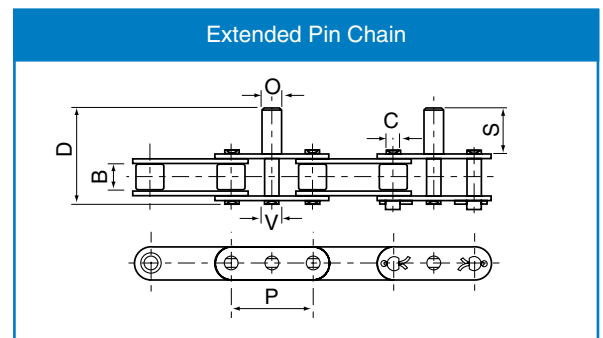
### Extended Pin Chain

| ANSI Chain number | Pitch  |       |       |       |        |        |
|-------------------|--------|-------|-------|-------|--------|--------|
|                   | P      | B     | C     | S     | D      | E      |
| C2040<br>C2042    | 25.40  | 7.85  | 3.96  | 9.50  | 25.10  | 26.20  |
| C2050<br>C2052    | 31.75  | 9.40  | 5.08  | 11.90 | 31.30  | 33.10  |
| C2060<br>C2062    | 38.10  | 12.57 | 5.94  | 14.30 | 38.60  | 40.60  |
| C2060H<br>C2062H  | 38.10  | 12.57 | 5.94  | 14.30 | 42.00  | 43.80  |
| C2080<br>C2082    | 50.80  | 15.75 | 7.92  | 19.10 | 50.30  | 53.30  |
| C2080H<br>C2082H  | 50.80  | 15.75 | 7.92  | 19.10 | 53.50  | 55.00  |
| C2100<br>C2102    | 63.50  | 18.90 | 9.53  | 23.80 | 61.80  | 66.10  |
| C2100H<br>C2102H  | 63.50  | 18.90 | 9.53  | 23.80 | 65.00  | 68.30  |
| C2120H<br>C2122H  | 76.20  | 25.22 | 11.10 | 28.60 | 79.60  | 83.60  |
| C2160H<br>C2162H  | 101.60 | 31.75 | 14.27 | 38.10 | 103.00 | 107.80 |



### Extended Pin Chain

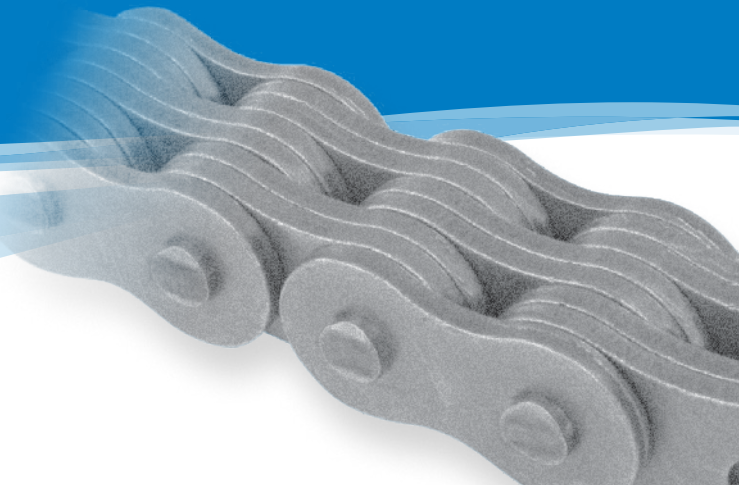
| Chain number | Pitch |       |      |      |       |       |       |
|--------------|-------|-------|------|------|-------|-------|-------|
|              | P     | B     | C    | V    | O     | S     | D     |
| C2060H       | 38.10 | 12.57 | 5.94 | 5.94 | 8.00  | 25.00 | 53.00 |
| C2060H       | 38.10 | 12.57 | 5.94 | 8.08 | 10.00 | 35.00 | 63.00 |
| C2060H       | 38.10 | 12.57 | 5.94 | 5.94 | 12.70 | 41.20 | 69.20 |
| C2060H       | 38.10 | 12.57 | 5.94 | 5.94 | 14.28 | 41.20 | 69.20 |



### Hollow Pin Chain - Bushed Type (No Roller)

| Chain number | Pitch  | Roller diameter | Width between inner plates | Pin diameter |      | Pin length |      | Side plate height | Plate thickness | Minimum tensile strength | Average tensile strength | Weight | Type |
|--------------|--------|-----------------|----------------------------|--------------|------|------------|------|-------------------|-----------------|--------------------------|--------------------------|--------|------|
|              | P      |                 |                            | C            | V    | D          | E    |                   |                 |                          |                          |        |      |
| C2040HP      | 25.400 | 7.95            | 7.85                       | 5.63         | 4.00 | 16.5       | 17.6 | 12.00             | 1.50            | 11.00                    | 12.6                     | 0.46   | B    |
| C2050HP      | 31.750 | 10.16           | 9.40                       | 7.22         | 5.12 | 20.5       | 21.8 | 15.00             | 2.03            | 20.40                    | 22.8                     | 0.76   | B    |
| 02060HP      | 38.100 | 11.91           | 12.70                      | 8.31         | 6.00 | 25.8       | 26.8 | 17.00             | 2.42            | 24.00                    | 27.1                     | 1.02   | B    |
| C2080HP      | 50.800 | 15.88           | 15.75                      | 11.40        | 8.05 | 32.5       | 33.8 | 24.00             | 3.25            | 50.00                    | 55.2                     | 1.81   | B    |

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.



## Challenge Leaf Chain

### **Applications:**

Leaf chain is used in lifting applications such as Fork Lifts, Pneumatic and Hydraulic Jack fittings, etc. all of which move at slow speeds

Challenge offer Leaf Chain complying with ANSI standards in types BL (heavy duty), AL (light duty), EL and FLC

Where applicable, ISO equivalents are also given

### **Construction:**

**Link plates** - produced from alloy steel, especially selected to withstand sudden shock loads. Heat treated to assure maximum breaking loads and wear resistance

**Bearing pins** - produced from heat treated alloy steel giving excellent resistance to bending

# Leaf Chain

## LH / BL Series Leaf Chain

ANSI B29.8, ISO 4347, DIN 8152

LH / BL Leaf Chain

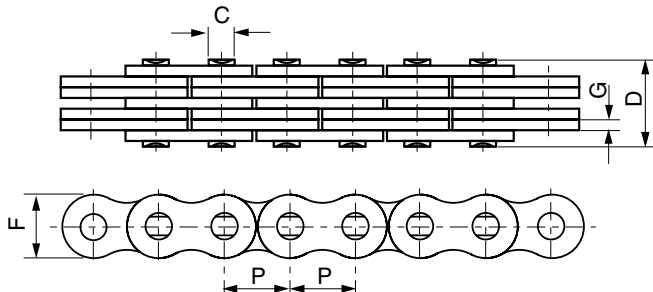
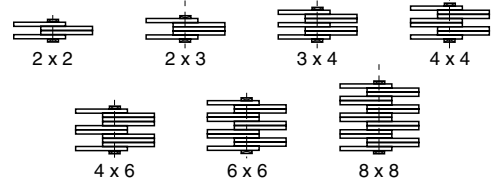


Plate Lacing



| ISO<br>Chain<br>number | ANSI<br>Chain<br>number | Pitch<br>P | Chain<br>lacing | Plate<br>height<br>F | Plate<br>thick-<br>ness<br>G | Pin<br>diameter<br>C | Pin<br>length<br>D | Minimum<br>tensile<br>strength<br>kN | Average<br>tensile<br>strength<br>kN | Weight<br>kg/m |
|------------------------|-------------------------|------------|-----------------|----------------------|------------------------------|----------------------|--------------------|--------------------------------------|--------------------------------------|----------------|
| LH0822                 | BL422                   | 12.700     | 2x2             | 12.07                | 2.08                         | 5.09                 | 11.05              | 22.20                                | 27.60                                | 0.64           |
| LH0823                 | BL423                   |            | 2x3             |                      |                              |                      | 13.16              | 22.20                                | 27.60                                | 0.80           |
| LH0834                 | BL434                   |            | 3x4             |                      |                              |                      | 17.40              | 33.40                                | 41.40                                | 1.12           |
| LH0844                 | BL444                   |            | 4x4             |                      |                              |                      | 19.51              | 44.50                                | 56.00                                | 1.28           |
| LH0846                 | BL446                   |            | 4x6             |                      |                              |                      | 23.75              | 44.50                                | 56.00                                | 1.60           |
| LH0866                 | BL466                   |            | 6x6             |                      |                              |                      | 27.99              | 66.70                                | 81.70                                | 1.92           |
| LH0888                 | BL488                   |            | 8x8             |                      |                              |                      | 36.45              | 89.00                                | 109.40                               | 2.56           |
| LH1022                 | BL522                   | 15.875     | 2x2             | 15.09                | 2.44                         | 5.96                 | 12.90              | 33.40                                | 43.10                                | 0.88           |
| LH1023                 | BL523                   |            | 2x3             |                      |                              |                      | 15.37              | 33.40                                | 43.10                                | 1.10           |
| LH1034                 | BL534                   |            | 3x4             |                      |                              |                      | 20.32              | 48.90                                | 65.60                                | 1.50           |
| LH1044                 | BL544                   |            | 4x4             |                      |                              |                      | 22.78              | 66.70                                | 84.50                                | 1.80           |
| LH1046                 | BL546                   |            | 4x6             |                      |                              |                      | 27.74              | 66.70                                | 84.50                                | 2.20           |
| LH1066                 | BL566                   |            | 6x6             |                      |                              |                      | 32.69              | 100.10                               | 125.10                               | 2.65           |
| LH1088                 | BL588                   |            | 8x8             |                      |                              |                      | 42.57              | 133.40                               | 169.50                               | 3.50           |
| LH1222                 | BL622                   | 19.050     | 2x2             | 18.11                | 3.30                         | 7.94                 | 17.37              | 48.90                                | 63.60                                | 1.45           |
| LH1223                 | BL623                   |            | 2x3             |                      |                              |                      | 20.73              | 48.90                                | 63.60                                | 1.80           |
| LH1234                 | BL634                   |            | 3x4             |                      |                              |                      | 27.43              | 75.60                                | 102.80                               | 2.50           |
| LH1244                 | BL644                   |            | 4x4             |                      |                              |                      | 30.78              | 97.90                                | 120.90                               | 2.90           |
| LH1246                 | BL646                   |            | 4x6             |                      |                              |                      | 37.49              | 97.90                                | 120.90                               | 3.60           |
| LH1266                 | BL666                   |            | 6x6             |                      |                              |                      | 44.20              | 146.80                               | 190.80                               | 4.30           |
| LH1288                 | BL688                   |            | 8x8             |                      |                              |                      | 57.61              | 195.70                               | 238.80                               | 5.80           |
| LH1622                 | BL822                   | 25.400     | 2x2             | 24.13                | 4.09                         | 9.54                 | 21.34              | 84.50                                | 108.20                               | 2.20           |
| LH1623                 | BL823                   |            | 2x3             |                      |                              |                      | 25.48              | 84.50                                | 108.20                               | 2.70           |
| LH1634                 | BL834                   |            | 3x4             |                      |                              |                      | 33.76              | 129.00                               | 170.00                               | 3.80           |
| LH1644                 | BL844                   |            | 4x4             |                      |                              |                      | 37.90              | 169.00                               | 214.60                               | 4.30           |
| LH1646                 | BL846                   |            | 4x6             |                      |                              |                      | 46.18              | 169.00                               | 214.60                               | 5.40           |
| LH1666                 | BL866                   |            | 6x6             |                      |                              |                      | 54.46              | 253.60                               | 324.50                               | 6.50           |
| LH1688                 | BL888                   |            | 8x8             |                      |                              |                      | 71.02              | 338.10                               | 432.70                               | 8.60           |

Available on reels.

# Leaf Chain

## LH / BL Series Leaf Chain (cont)

ANSI B29.8, ISO 4347, DIN 8152

LH / BL Leaf Chain

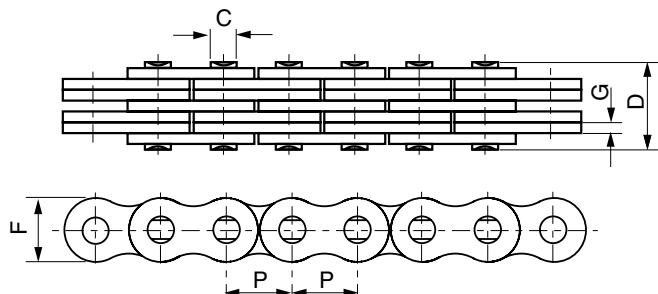
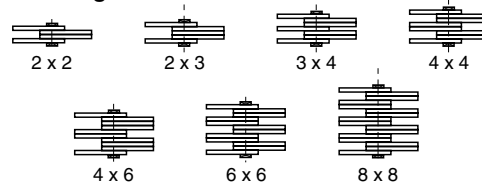


Plate Lacing



| ISO<br>Chain<br>number | ANSI<br>Chain<br>number | Pitch<br>P | Chain<br>lacing | Plate<br>height<br>F | Plate<br>thick-<br>ness<br>G | Pin<br>diameter<br>C | Pin<br>length<br>D | Minimum<br>tensile<br>strength<br>kN | Average<br>tensile<br>strength<br>kN | Weight<br>kg/m |
|------------------------|-------------------------|------------|-----------------|----------------------|------------------------------|----------------------|--------------------|--------------------------------------|--------------------------------------|----------------|
| LH2022                 | BL1022                  | 31.750     | 2x2             | 30.18                | 4.90                         | 11.11                | 25.37              | 115.60                               | 150.80                               | 3.40           |
| LH2023                 | BL1023                  |            | 2x3             |                      |                              |                      | 30.33              | 115.60                               | 150.80                               | 4.30           |
| LH2034                 | BL1034                  |            | 3x4             |                      |                              |                      | 40.23              | 182.40                               | 231.60                               | 6.00           |
| LH2044                 | BL1044                  |            | 4x4             |                      |                              |                      | 45.19              | 231.30                               | 291.40                               | 6.90           |
| LH2046                 | BL1046                  |            | 4x6             |                      |                              |                      | 55.09              | 231.30                               | 291.40                               | 8.60           |
| LH2066                 | BL1066                  |            | 6x6             |                      |                              |                      | 65.00              | 347.00                               | 430.30                               | 10.30          |
| LH2088                 | BL1088                  |            | 8x8             |                      |                              |                      | 84.81              | 462.60                               | 555.10                               | 13.80          |
| LH2422                 | BL1222                  | 38.100     | 2x2             | 36.20                | 5.77                         | 12.71                | 29.62              | 151.20                               | 192.00                               | 4.60           |
| LH2423                 | BL1223                  |            | 2x3             |                      |                              |                      | 35.43              | 151.20                               | 192.00                               | 5.80           |
| LH2434                 | BL1234                  |            | 3x4             |                      |                              |                      | 47.07              | 244.60                               | 315.90                               | 8.10           |
| LH2444                 | BL1244                  |            | 4x4             |                      |                              |                      | 52.88              | 302.50                               | 381.10                               | 9.30           |
| LH2446                 | BL1246                  |            | 4x6             |                      |                              |                      | 64.52              | 302.50                               | 381.10                               | 11.60          |
| LH2466                 | BL1266                  |            | 6x6             |                      |                              |                      | 76.15              | 453.70                               | 543.60                               | 13.90          |
| LH2488                 | BL1288                  |            | 8x8             |                      |                              |                      | 99.42              | 605.00                               | 726.00                               | 18.60          |
| LH2822                 | BL1422                  | 44.450     | 2x2             | 42.24                | 6.55                         | 14.29                | 33.55              | 191.30                               | 225.70                               | 6.10           |
| LH2823                 | BL1423                  |            | 2x3             |                      |                              |                      | 40.16              | 191.30                               | 225.70                               | 7.60           |
| LH2834                 | BL1434                  |            | 3x4             |                      |                              |                      | 53.37              | 315.80                               | 372.60                               | 10.60          |
| LH2844                 | BL1444                  |            | 4x4             |                      |                              |                      | 59.97              | 382.60                               | 451.20                               | 12.20          |
| LH2846                 | BL1446                  |            | 4x6             |                      |                              |                      | 73.18              | 382.60                               | 451.20                               | 15.20          |
| LH2866                 | BL1466                  |            | 6x6             |                      |                              |                      | 86.39              | 578.30                               | 682.40                               | 18.20          |
| LH2888                 | BL1488                  |            | 8x8             |                      |                              |                      | 112.80             | 765.10                               | 902.80                               | 24.30          |
| LH3222                 | BL1622                  | 50.800     | 2x2             | 48.26                | 7.52                         | 17.46                | 39.01              | 289.10                               | 341.10                               | 8.00           |
| LH3223                 | BL1623                  |            | 2x3             |                      |                              |                      | 46.58              | 289.10                               | 341.10                               | 10.00          |
| LH3234                 | BL1634                  |            | 3x4             |                      |                              |                      | 61.72              | 440.40                               | 519.60                               | 14.00          |
| LH3244                 | BL1644                  |            | 4x4             |                      |                              |                      | 69.29              | 578.30                               | 680.40                               | 16.00          |
| LH3246                 | BL1646                  |            | 4x6             |                      |                              |                      | 84.43              | 578.30                               | 680.40                               | 20.00          |
| LH3266                 | BL1666                  |            | 6x6             |                      |                              |                      | 99.57              | 857.40                               | 1000.70                              | 24.00          |
| LH3288                 | BL1688                  |            | 8x8             |                      |                              |                      | 129.84             | 1156.50                              | 1364.60                              | 32.00          |
| LH4022                 | BL2022                  | 63.500     | 2x2             | 60.33                | 9.91                         | 23.81                | 51.74              | 433.70                               | 511.70                               | 15.80          |
| LH4023                 | BL2023                  |            | 2x3             |                      |                              |                      | 61.70              | 433.70                               | 511.70                               | 19.80          |
| LH4034                 | BL2034                  |            | 3x4             |                      |                              |                      | 81.61              | 649.40                               | 766.20                               | 27.70          |
| LH4044                 | BL2044                  |            | 4x4             |                      |                              |                      | 91.57              | 867.40                               | 1023.50                              | 31.60          |
| LH4046                 | BL2046                  |            | 4x6             |                      |                              |                      | 111.48             | 867.40                               | 1023.50                              | 39.50          |
| LH4066                 | BL2066                  |            | 6x6             |                      |                              |                      | 131.39             | 1301.10                              | 1535.20                              | 47.40          |
| LH4088                 | BL2088                  |            | 8x8             |                      |                              |                      | 171.22             | 1734.80                              | 2046.50                              | 63.20          |

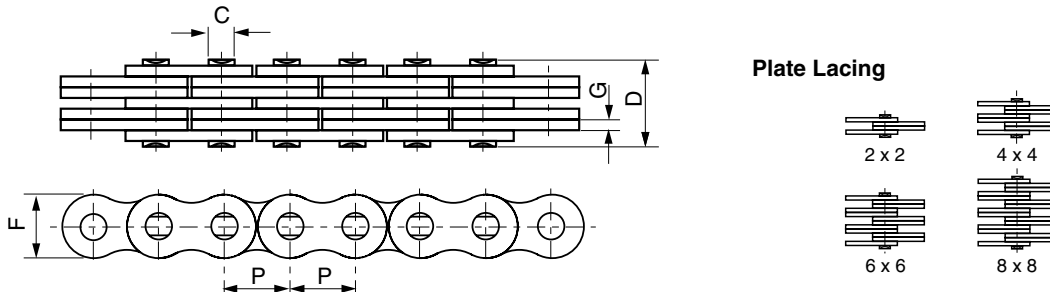
Available on reels.

# Leaf Chain

## LL/EL Series Leaf Chain

ANSI B29.8-1958, ISO 4347

LL/EL Leaf Chain



| ISO<br>Chain<br>number | ANSI<br>Chain<br>number | Pitch<br>P | Chain<br>lacing | Plate<br>height<br>F | Plate<br>thick-<br>G | Pin<br>diameter<br>C | Pin<br>length<br>strength<br>D | Minimum<br>tensile<br>strength<br>kN | Average<br>tensile<br>metre<br>kN | Weight<br>kg/m |
|------------------------|-------------------------|------------|-----------------|----------------------|----------------------|----------------------|--------------------------------|--------------------------------------|-----------------------------------|----------------|
| LL0822                 | EL0422                  | 12.700     | 2x2             | 10.60                | 1.30                 | 4.45                 | 7.60                           | 17.80                                | 20.40                             | 0.35           |
| LL0844                 | EL0444                  |            | 4x4             |                      |                      |                      | 13.00                          | 31.10                                | 35.70                             | 0.69           |
| LL0866                 | EL0466                  |            | 6x6             |                      |                      |                      | 18.20                          | 44.50                                | 50.90                             | 1.00           |
| LL0888                 | EL0488                  |            | 8x8             |                      |                      |                      | 23.50                          | 62.20                                | 71.20                             | 1.33           |
| LL1022                 | EL0522                  | 15.875     | 2x2             | 13.70                | 1.60                 | 5.08                 | 9.20                           | 22.30                                | 25.50                             | 0.54           |
| LL1044                 | EL0544                  |            | 4x4             |                      |                      |                      | 15.80                          | 44.50                                | 51.00                             | 1.06           |
| LL1066                 | EL0566                  |            | 6x6             |                      |                      |                      | 22.10                          | 66.70                                | 76.30                             | 1.57           |
| LL1088                 | EL0588                  |            | 8x8             |                      |                      |                      | 28.80                          | 89.00                                | 101.90                            | 2.10           |
| LL1222                 | EL0622                  | 19.050     | 2x2             | 16.00                | 1.85                 | 5.72                 | 10.40                          | 28.90                                | 33.20                             | 0.73           |
| LL1244                 | EL0644                  |            | 4x4             |                      |                      |                      | 17.90                          | 57.80                                | 66.40                             | 1.44           |
| LL1266                 | EL0666                  |            | 6x6             |                      |                      |                      | 25.40                          | 86.70                                | 99.70                             | 2.15           |
| LL1288                 | EL0688                  |            | 8x8             |                      |                      |                      | 32.90                          | 115.60                               | 132.90                            | 2.84           |
| LL1622                 | EL0822                  | 25.400     | 2x2             | 21.00                | 3.10                 | 8.28                 | 17.20                          | 58.00                                | 66.70                             | 1.52           |
| LL1644                 | EL0844                  |            | 4x4             |                      |                      |                      | 29.60                          | 144.00                               | 164.60                            | 2.90           |
| LL1666                 | EL0866                  |            | 6x6             |                      |                      |                      | 42.40                          | 200.00                               | 230.00                            | 4.30           |
| LL1688                 | EL0888                  |            | 8x8             |                      |                      |                      | 55.40                          | 288.00                               | 331.20                            | 5.71           |
| LL2022                 | EL1022                  | 31.750     | 2x2             | 26.40                | 3.70                 | 10.19                | 20.10                          | 95.00                                | 109.20                            | 2.33           |
| LL2044                 | EL1044                  |            | 4x4             |                      |                      |                      | 33.80                          | 190.00                               | 218.50                            | 4.40           |
| LL2066                 | EL1066                  |            | 6x6             |                      |                      |                      | 50.10                          | 285.00                               | 324.60                            | 6.79           |
| LL2088                 | EL1088                  |            | 8x8             |                      |                      |                      | 65.40                          | 380.00                               | 435.10                            | 8.75           |
| LL2422                 | EL1222                  | 38.100     | 2x2             | 33.40                | 5.00                 | 14.63                | 28.40                          | 170.00                               | 195.50                            | 4.47           |
| LL2444                 | EL1244                  |            | 4x4             |                      |                      |                      | 46.30                          | 340.00                               | 380.80                            | 8.22           |
| LL2466                 | EL1266                  |            | 6x6             |                      |                      |                      | 66.40                          | 510.00                               | 571.20                            | 12.22          |
| LL2488                 | EL1288                  |            | 8x8             |                      |                      |                      | 86.60                          | 680.00                               | 775.20                            | 16.30          |
| LL2822                 | EL1422                  | 44.450     | 2x2             | 37.08                | 6.00                 | 15.90                | 32.20                          | 200.00                               | 224.00                            | 5.10           |
| LL2844                 | EL1444                  |            | 4x4             |                      |                      |                      | 56.40                          | 400.00                               | 448.00                            | 9.90           |
| LL2866                 | EL1466                  |            | 6x6             |                      |                      |                      | 80.60                          | 600.00                               | 672.00                            | 14.60          |
| LL2888                 | EL1488                  |            | 8x8             |                      |                      |                      | 105.20                         | 800.00                               | 896.00                            | 19.40          |
| LL3222                 | EL1622                  | 50.800     | 2x2             | 42.00                | 6.00                 | 17.81                | 33.20                          | 260.00                               | 291.20                            | 5.80           |
| LL3244                 | EL1644                  |            | 4x4             |                      |                      |                      | 57.40                          | 520.00                               | 582.40                            | 11.40          |
| LL3266                 | EL1666                  |            | 6x6             |                      |                      |                      | 81.60                          | 780.00                               | 873.60                            | 16.90          |
| LL3288                 | EL1688                  |            | 8x8             |                      |                      |                      | 105.00                         | 1050.00                              | 1176.00                           | 24.00          |
| LL4022                 | EL2022                  | 63.500     | 2x2             | 52.76                | 8.25                 | 22.89                | 44.70                          | 360.00                               | 403.20                            | 10.30          |
| LL4044                 | EL2044                  |            | 4x4             |                      |                      |                      | 77.90                          | 780.00                               | 873.60                            | 20.00          |
| LL4066                 | EL2066                  |            | 6x6             |                      |                      |                      | 111.10                         | 1080.00                              | 1209.60                           | 29.50          |
| LL4088                 | EL2088                  |            | 8x8             |                      |                      |                      | 145.50                         | 1560.00                              | 1747.20                           | 39.10          |
| LL4822                 | EL2422                  | 76.200     | 2x2             | 63.88                | 10.30                | 29.24                | 56.10                          | 560.00                               | 627.20                            | 18.50          |
| LL4844                 | EL2444                  |            | 4x4             |                      |                      |                      | 97.40                          | 1120.00                              | 1554.40                           | 35.70          |
| LL4866                 | EL2466                  |            | 6x6             |                      |                      |                      | 138.90                         | 1168.00                              | 1308.10                           | 53.00          |
| LL4888                 | EL2488                  |            | 8x8             |                      |                      |                      | 182.40                         | 2240.00                              | 2508.80                           | 70.40          |

Available on reels.

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Leaf Chain

## AL Series Leaf Chain

AL Leaf Chain

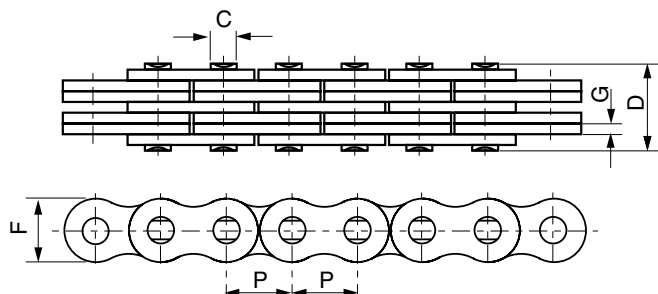
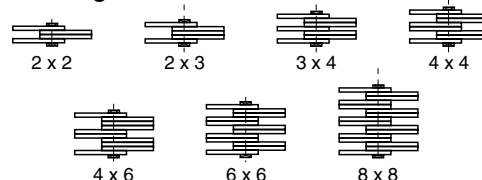


Plate Lacing



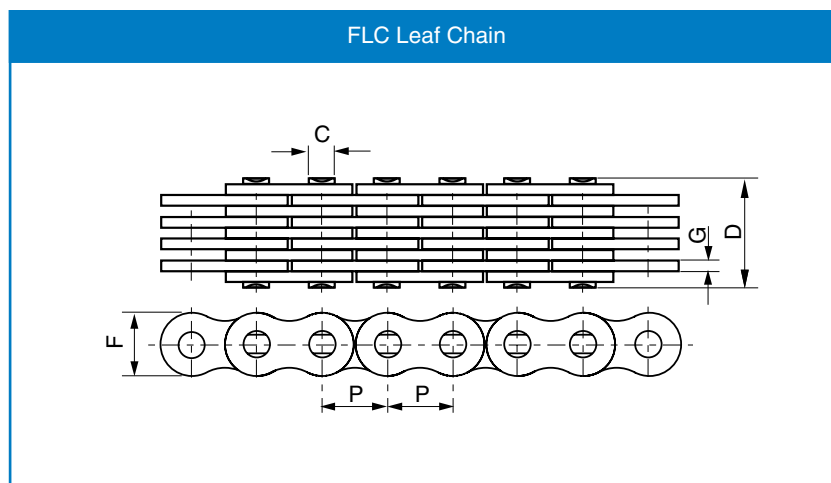
| ANSI<br>Chain<br>number | Pitch<br>P | Chain<br>lacing | Plate<br>height<br>F | Plate<br>thick-<br>ness<br>G | Pin<br>diameter<br>C | Pin<br>length<br>D | Minimum<br>tensile<br>strength<br>kN | Average<br>tensile<br>strength<br>kN | Weight<br>kg/m |
|-------------------------|------------|-----------------|----------------------|------------------------------|----------------------|--------------------|--------------------------------------|--------------------------------------|----------------|
| AL322                   | 9.525      | 2x2             | 7.70                 | 1.30                         | 3.58                 | 6.80               | 9.00                                 | 10.20                                | 0.23           |
| AL422                   |            | 2x2             |                      |                              |                      | 7.90               | 14.10                                | 16.90                                | 0.39           |
| AL444                   | 12.700     | 4x4             | 10.40                | 1.50                         | 3.96                 | 14.40              | 28.20                                | 35.20                                | 0.74           |
| AL466                   |            | 6x6             |                      |                              |                      | 20.50              | 42.30                                | 52.70                                | 1.10           |
| AL522                   |            | 2x2             |                      |                              |                      | 10.30              | 22.00                                | 27.50                                | 0.61           |
| AL534                   | 15.875     | 3x4             | 12.80                | 2.03                         | 5.08                 | 17.00              | 33.00                                | 46.00                                | 1.10           |
| AL544                   |            | 4x4             |                      |                              |                      | 18.90              | 44.00                                | 55.00                                | 1.19           |
| AL566                   |            | 6x6             |                      |                              |                      | 26.90              | 66.00                                | 82.50                                | 1.79           |
| AL622                   |            | 2x2             |                      |                              |                      | 12.40              | 37.00                                | 44.40                                | 0.86           |
| AL644                   | 19.050     | 4x4             | 15.60                | 2.42                         | 5.94                 | 22.70              | 64.00                                | 78.80                                | 1.69           |
| AL666                   |            | 6x6             |                      |                              |                      | 32.40              | 101.00                               | 118.60                               | 2.52           |
| AL822                   |            | 2x2             |                      |                              |                      | 16.00              | 56.70                                | 68.60                                | 1.54           |
| AL844                   | 25.400     | 4x4             | 20.50                | 3.25                         | 7.92                 | 29.40              | 113.40                               | 135.60                               | 3.00           |
| AL866                   |            | 6x6             |                      |                              |                      | 42.50              | 170.00                               | 202.30                               | 4.46           |
| AL1022                  |            | 2x2             |                      |                              |                      | 19.60              | 88.50                                | 107.10                               | 2.37           |
| AL1044                  | 31.750     | 4x4             | 25.60                | 4.00                         | 9.53                 | 35.90              | 177.00                               | 203.60                               | 4.68           |
| AL1066                  |            | 6x6             |                      |                              |                      | 52.30              | 265.00                               | 315.30                               | 7.00           |
| AL1222                  |            | 2x2             |                      |                              |                      | 24.30              | 127.00                               | 151.10                               | 3.65           |
| AL1244                  | 38.100     | 4x4             | 30.50                | 4.80                         | 11.10                | 43.80              | 254.00                               | 299.70                               | 7.05           |
| AL1266                  |            | 6x6             |                      |                              |                      | 63.00              | 381.00                               | 426.30                               | 10.44          |
| AL1444                  | 44.450     | 4x4             | 36.40                | 5.60                         | 12.64                | 51.30              | 372.70                               | 413.60                               | 10.34          |
| AL1466                  |            | 6x6             |                      |                              |                      | 74.56              | 559.00                               | 620.40                               | 15.16          |
| AL1644                  | 50.800     | 4x4             | 41.60                | 6.40                         | 14.21                | 58.06              | 471.00                               | 522.80                               | 12.98          |
| AL1666                  |            | 6x6             |                      |                              |                      | 84.46              | 706.00                               | 783.60                               | 19.41          |

Available on reels.



# Leaf Chain

## FLC Series Leaf Chain

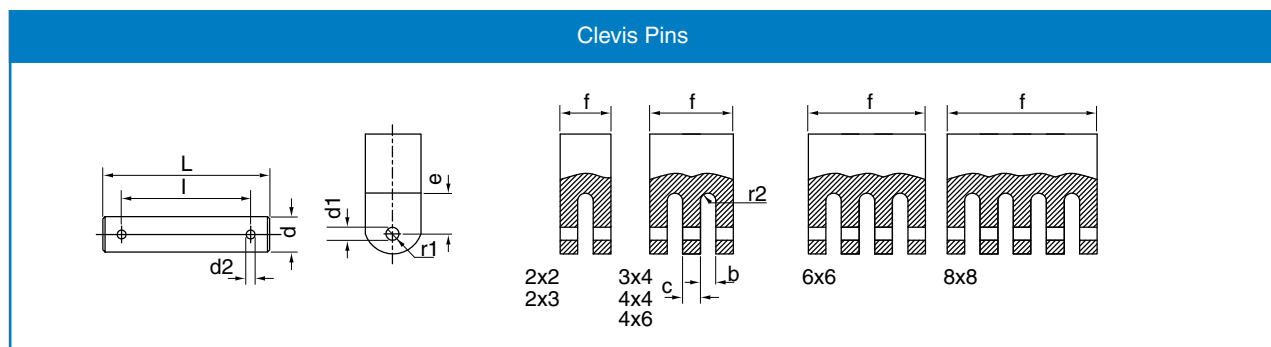


| Chain number | Pitch  | Chain lacing | Plate height | Plate thickness | Pin diameter | Pin length | Minimum tensile strength kN | Average tensile strength kN | Weight kg/m |
|--------------|--------|--------------|--------------|-----------------|--------------|------------|-----------------------------|-----------------------------|-------------|
|              | P      |              | F            | G               | C            | D          |                             |                             |             |
| FL644        | 19.050 | 4x4          | 4.70         | 0.60            | 1.85         | 6.60       | 6.50                        | 7.80                        | 0.13        |
| FL666        | 19.050 | 6x6          | 4.70         | 0.60            | 1.85         | 9.30       | 9.75                        | 11.80                       | 0.20        |
| FL688        | 19.050 | 8x8          | 4.70         | 0.60            | 1.85         | 12.00      | 13.00                       | 15.60                       | 0.25        |
| FL844        | 25.400 | 4x4          | 6.90         | 0.73            | 2.31         | 7.90       | 10.00                       | 12.10                       | 0.25        |
| FL944        | 9.525  | 4x4          | 8.70         | 1.04            | 3.28         | 10.40      | 21.00                       | 24.70                       | 0.43        |
| FL966        | 9.525  | 6x6          | 8.70         | 1.00            | 3.28         | 14.90      | 31.00                       | 36.80                       | 0.65        |
| F1222        | 38.100 | 2x2          | 8.20         | 1.00            | 3.58         | 7.00       | 11.43                       | 13.60                       | 0.19        |
| F1223        | 38.100 | 2x3          | 10.20        | 2.03            | 4.45         | 12.80      | 20.00                       | 23.80                       | 0.61        |
| F1244        | 38.100 | 4x4          | 10.20        | 1.70            | 4.45         | 16.70      | 44.00                       | 52.30                       | 0.83        |

Available on reels.

# Leaf Chain

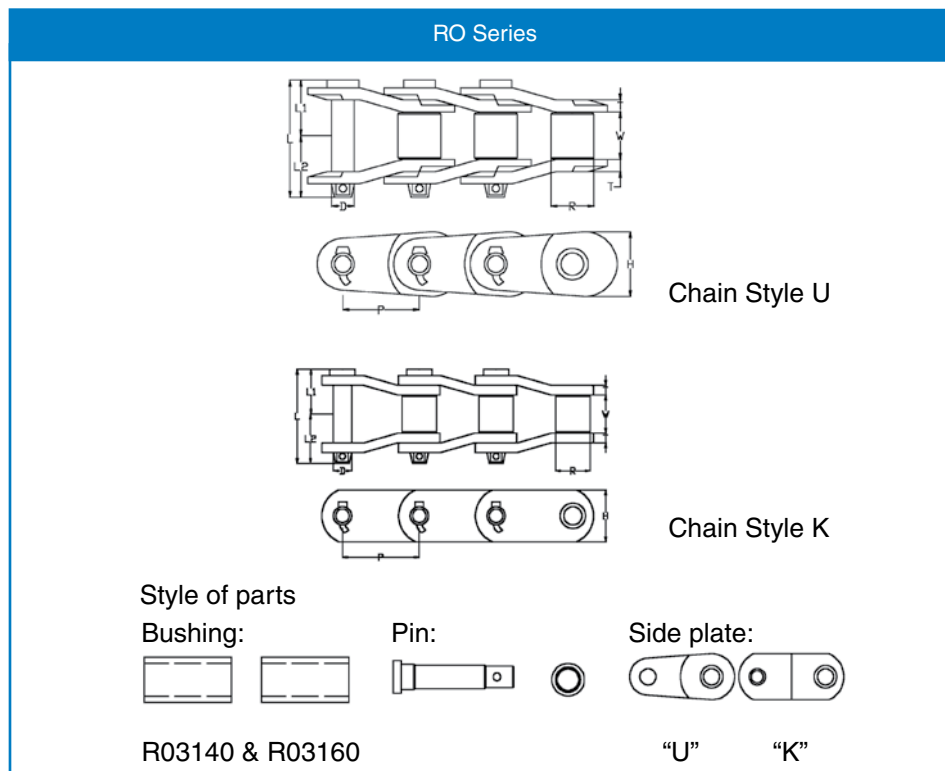
## Clevis Pins



| Type          | l<br>min. | L<br>max | d<br>max | d2  | f<br>max | b<br>min | c<br>max | d1    | e<br>min | r1<br>max | r2<br>max |
|---------------|-----------|----------|----------|-----|----------|----------|----------|-------|----------|-----------|-----------|
| BL422/AL522   | 10.8      | 17.0     |          |     | 10.7     | 4.2      | -        |       |          |           | 2         |
| BL423         | 12.7      | 18.9     |          |     | 12.6     | 6.4      | -        |       |          |           | 3         |
| BL434         | 17.0      | 23.2     | 5.80     | 1.6 | 16.9     | 4.2      | 2.0      | 5.15  | 9.0      | 6.5       | 2         |
| BL444/AL544   | 19.0      | 25.2     |          |     | 18.9     | 4.2      | 4.0      |       |          |           | 2         |
| BL446         | 23.0      | 29.2     |          |     | 22.9     | 6.4      | 4.0      |       |          |           | 3         |
| BL466/AL566   | 27.0      | 33.3     |          |     | 26.9     | 4.2      | 4.0      |       |          |           | 2         |
| BL488/AL588   | 35.5      | 41.8     |          |     | 35.4     | 4.2      | 4.0      |       |          |           | 2         |
| BL522         | 12.8      | 19.4     |          |     | 12.7     | 5.0      | -        |       |          |           | 2         |
| BL523         | 15.0      | 21.6     |          |     | 14.9     | 7.5      | -        |       |          |           | 3         |
| BL534         | 20.0      | 26.6     |          |     | 19.9     | 5.0      | 2.4      |       |          |           | 2         |
| BL544/AL644   | 22.5      | 29.1     | 5.95     | 2.0 | 22.4     | 5.0      | 4.8      | 6.00  | 11.0     | 8.0       | 2         |
| BL546         | 27.0      | 33.7     |          |     | 26.9     | 7.5      | 4.8      |       |          |           | 3         |
| BL566/AL666   | 32.0      | 38.7     |          |     | 31.9     | 5.0      | 4.8      |       |          |           | 2         |
| BL588/AL688   | 42.5      | 49.3     |          |     | 42.4     | 5.0      | 4.8      |       |          |           | 2         |
| BL623         | 20.0      | 30.7     |          |     | 19.9     | 10.3     | -        |       |          |           | 5         |
| BL634         | 27.0      | 37.7     |          |     | 26.9     | 6.8      | 3.2      |       |          |           | 3         |
| BL644/AL844   | 30.0      | 40.7     | 7.93     | 3.2 | 29.9     | 6.8      | 6.4      | 8.00  | 14.0     | 9.5       | 3         |
| BL646         | 37.0      | 47.7     |          |     | 36.9     | 10.3     | 6.4      |       |          |           | 5         |
| BL666/AL866   | 43.0      | 53.7     |          |     | 42.9     | 6.8      | 6.4      |       |          |           | 3         |
| BL688         | 56.5      | 67.2     |          |     | 56.4     | 6.8      | 6.4      |       |          |           | 3         |
| BL823         | 25.0      | 35.7     |          |     | 24.9     | 12.8     | -        |       |          |           | 6         |
| BL834         | 33.0      | 43.7     |          |     | 32.9     | 8.5      | 4.0      |       |          |           | 4         |
| BL844/AL1044  | 37.0      | 47.7     | 9.52     | 3.2 | 36.9     | 8.5      | 8.0      | 9.60  | 18.0     | 12.5      | 4         |
| BL846         | 46.0      | 56.7     |          |     | 45.9     | 12.8     | 8.0      |       |          |           | 6         |
| BL866/AL1066  | 53.0      | 63.7     |          |     | 52.9     | 8.5      | 8.0      |       |          |           | 4         |
| BL888/AL1088  | 69.5      | 80.3     |          |     | 69.4     | 8.5      | 8.0      |       |          |           | 4         |
| BL1023        | 30.0      | 42.4     |          |     | 29.8     | 15.1     | -        |       |          |           | 7         |
| BL1034        | 39.2      | 51.6     |          |     | 39.0     | 10.0     | 4.7      |       |          |           | 5         |
| BL1044/AL1244 | 44.2      | 56.6     | 11.09    | 4.0 | 44.0     | 10.0     | 9.4      | 11.20 | 22.0     | 15.0      | 5         |
| BL1046        | 54.2      | 66.6     |          |     | 54.0     | 15.1     | 9.4      |       |          |           | 7         |
| BL1066/AL1266 | 63.2      | 75.6     |          |     | 63.0     | 10.0     | 9.4      |       |          |           | 5         |
| BL1088/AL1288 | 79.9      | 92.4     |          |     | 79.7     | 10.0     | 9.4      |       |          |           | 5         |
| BL1223        | 34.5      | 46.9     |          |     | 34.3     | 17.7     | -        |       |          |           | 8         |
| BL1234        | 46.2      | 58.6     |          |     | 46.0     | 11.8     | 5.5      |       |          |           | 5         |
| BL1244/AL1444 | 50.0      | 64.4     | 12.70    | 4.0 | 49.0     | 11.8     | 11.0     | 12.80 | 26.0     | 19.0      | 5         |
| BL1246        | 63.5      | 76.0     |          |     | 63.3     | 17.7     | 11.0     |       |          |           | 8         |
| BL1266/AL1466 | 75.3      | 87.8     |          |     | 75.1     | 11.8     | 11.0     |       |          |           | 5         |
| BL1288/AL1488 | 98.6      | 111.1    |          |     | 98.4     | 11.8     | 11.0     |       |          |           | 5         |
| BL1423        | 38.7      | 51.1     |          |     | 38.5     | 20.1     | -        |       |          |           | 10        |
| BL1434        | 52.2      | 64.6     |          |     | 52.0     | 13.4     | 6.3      |       |          |           | 6         |
| BL1444        | 58.6      | 71.1     | 14.27    | 4.0 | 58.4     | 13.4     | 12.6     | 14.35 | 31.0     | 22.0      | 10        |
| BL1446        | 71.7      | 84.2     |          |     | 71.5     | 20.1     | 12.6     |       |          |           | 10        |
| BL1466        | 85.1      | 97.7     |          |     | 84.9     | 13.4     | 12.6     |       |          |           | 10        |
| BL1623        | 43.1      | 60.6     |          |     | 42.8     | 22.5     | -        |       |          |           | 10        |
| BL1634        | 58.0      | 75.5     |          |     | 57.7     | 15.0     | 7.1      |       |          |           | 7         |
| BL1644        | 65.7      | 82.9     | 17.46    | 5.0 | 65.4     | 15.0     | 14.2     | 17.50 | 34.0     | 25.0      | 7         |
| BL1646        | 79.9      | 97.4     |          |     | 79.6     | 22.5     | 14.2     |       |          |           | 10        |
| BL1666        | 94.6      | 112.2    |          |     | 94.3     | 15.0     | 14.2     |       |          |           | 7         |
| BL1688        | 124.0     | 141.6    |          |     | 123.7    | 15.0     | 14.2     |       |          |           | 7         |

# Heavy Duty Drive Chain

## RO Series



| Challenge Chain number | Chain Style | Pitch Inches P | Pitch mm P | Roller diameter R | Width between inner plates W | Bearing Pin Diameter D | Pin Length L | L1    | L2    | Side plate height H | Plate Thickness s T | Tensile strength kgf | Approx Weight kg/m |
|------------------------|-------------|----------------|------------|-------------------|------------------------------|------------------------|--------------|-------|-------|---------------------|---------------------|----------------------|--------------------|
| RO3140                 | U           | 1.75           | 44.45      | 25.4              | 25.4                         | 12.15                  | 62.6         | 28.55 | 34.05 | 43.2                | 5.6                 | 24000                | 7.7                |
| RO3160                 | U           | 2.00           | 50.80      | 28.58             | 31.75                        | 13.73                  | 72.3         | 33.40 | 38.90 | 49.2                | 6.4                 | 30600                | 10.0               |
| RO1613AK               | U           | 2.00           | 50.80      | 28.58             | 31.5                         | 15.06                  | 78.0         | 36.20 | 41.80 | 42.9                | 8.1                 | 31750                | 11.3               |
| RO3180                 | U           | 2.25           | 57.15      | 35.72             | 36.4                         | 17.46                  | 81.0         | 37.30 | 43.70 | 54                  | 7.2                 | 36300                | 14.3               |
| RO25H ■                | K           | 2.50           | 63.50      | 31.75             | 38.1                         | 15.88                  | 92.5         | 43.05 | 49.45 | 41.5                | 9.5                 | 39700                | 13.7               |
| RO1625                 | U           | 2.50           | 63.50      | 39.69             | 38.9                         | 19.8                   | 89.7         | 41.40 | 48.30 | 60.3                | 8                   | 43000                | 16.3               |
| RO588                  | K           | 2.61           | 66.27      | 22.23             | 28.6                         | 11.11                  | 67.0         | 32.00 | 35.00 | 28.6                | 6.4                 | 14700                | 5.4                |
| RO568 ■                | K           | 3.07           | 77.90      | 41.28             | 40.1                         | 19.05                  | 97.0         | 45.05 | 51.95 | 54                  | 9.5                 | 52400                | 17.7               |
| RO568-T                | K           | 3.07           | 77.90      | 41.28             | 40.1                         | 19.05                  | 97.0         | 45.05 | 51.95 | 54                  | 9.5                 | 50000                | 17.7               |
| RO3                    | K           | 3.08           | 78.11      | 31.75             | 38.1                         | 15.88                  | 86.5         | 40.05 | 46.45 | 38                  | 8                   | 27700                | 10.5               |
| RO3H △                 | K           | 3.08           | 78.11      | 31.75             | 38.1                         | 15.88                  | 92.5         | 43.05 | 49.45 | 41.5                | 9.5                 | 39700                | 12.4               |
| RO3125 △               | K           | 3.13           | 79.38      | 41.28             | 41.2                         | 20.32                  | 99.5         | 45.90 | 53.60 | 54                  | 9.5                 | 52000                | 18.8               |
| RO1616 ■               | K           | 3.50           | 88.90      | 44.45             | 38.6                         | 22.23                  | 111.7        | 51.60 | 60.10 | 54                  | 12.7                | 63500                | 23.9               |
| RO3924T                | K           | 3.91           | 99.21      | 57.15             | 38.4                         | 30.16                  | 121.0        | 56.85 | 64.10 | 82.6                | 14.3                | 118000               | 45.0               |
| RO5                    | K           | 4.06           | 103.20     | 44.45             | 38.6                         | 22.23                  | 111.7        | 51.60 | 60.10 | 54                  | 12.7                | 63500                | 19.9               |
| RO4                    | K           | 4.06           | 103.20     | 44.45             | 49.1                         | 22.23                  | 122.2        | 56.85 | 65.35 | 54                  | 12.7                | 63500                | 21.0               |
| RO4HF △                | K           | 4.06           | 103.20     | 44.45             | 49.2                         | 22.23                  | 135.7        | 63.60 | 72.10 | 59                  | 16                  | 80300                | 23.2               |
| RO4HF-T                | K           | 4.06           | 103.20     | 44.45             | 49.2                         | 22.23                  | 135.7        | 63.60 | 72.10 | 59                  | 16                  | 69000                | 23.2               |
| RO1245 ■               | K           | 4.07           | 103.45     | 45.24             | 49.2                         | 23.8                   | 130.0        | 60.25 | 69.75 | 60                  | 14.5                | 84600                | 27.2               |
| RO1245T                | K           | 4.07           | 103.45     | 45.24             | 49.2                         | 23.8                   | 130.0        | 60.25 | 69.75 | 60                  | 14.5                | 77000                | 27.2               |
| RO1343                 | K           | 4.09           | 103.89     | 47.63             | 49.2                         | 25.4                   | 132.0        | 62.25 | 69.75 | 70                  | 14.5                | 105000               | 31.9               |
| RO1343T                | K           | 4.09           | 103.89     | 47.63             | 49.2                         | 25.4                   | 132.0        | 62.25 | 69.75 | 70                  | 14.5                | 86500                | 32.9               |
| RO1345                 | K           | 4.09           | 103.89     | 50.8              | 49.2                         | 25.4                   | 132.0        | 62.25 | 69.75 | 70                  | 14.5                | 105000               | 32.9               |
| RO41345T               | K           | 4.09           | 103.89     | 50.8              | 49.2                         | 25.4                   | 132.0        | 62.25 | 69.75 | 70                  | 14.5                | 86500                | 32.9               |
| RO635 ■                | K           | 4.00           | 114.30     | 57.15             | 52.4                         | 27.9                   | 135.5        | 64.25 | 71.25 | 76                  | 14.5                | 113000               | 38.3               |
| RO11634A               | K           | 5.00           | 127.00     | 63.5              | 58.7                         | 28.63                  | 141.5        | 67.40 | 74.10 | 76                  | 14.5                | 109000               | 39.8               |
| RO1602AA ■             | K           | 5.00           | 127.00     | 63.5              | 70.0                         | 31.75                  | 161.2        | 77.05 | 84.15 | 90                  | 16                  | 156000               | 52.3               |
| RO6042 ■               | K           | 6.00           | 152.40     | 76.2              | 76.3                         | 38.1                   | 184.0        | 86.70 | 97.30 | 101.6               | 19                  | 207000               | 71.3               |

Note: RO3140 and RO3160 are specially designed for use where the chains on equipment are subject to heavy twisting and side bow caused by operating misalignment.

■ conforms to American National Standard Institute (ANSI)    △ Conforms to American Petroleum Institute (API)

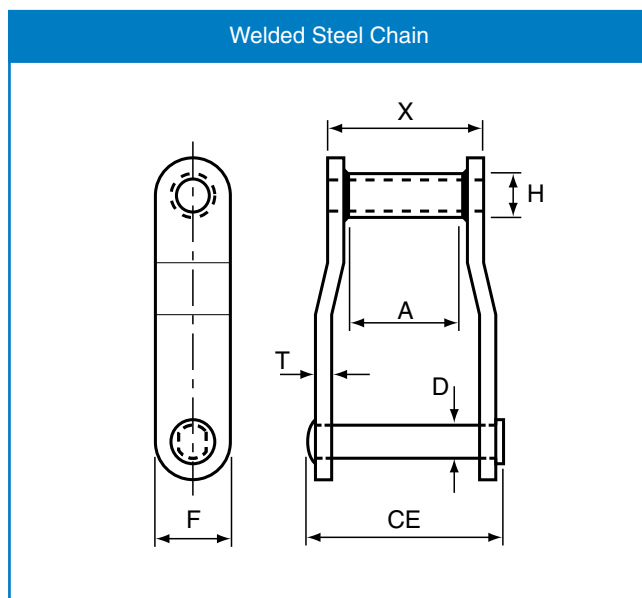
Special heat treating processes are applied to improve material characteristics.

Chains with a "T" mark have through hardened & Induction hardened pins to ensure wear resistance.

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Timber Chain

## Welded Steel Mill Chain



| Chain number | Pitch  |        | Average Ultimate Strength lbf | Max. Working Load lbf | Links Per Foot | Average Weight lb/ft | Dimensions |        |       |       |       |       |       |
|--------------|--------|--------|-------------------------------|-----------------------|----------------|----------------------|------------|--------|-------|-------|-------|-------|-------|
|              | mm     | Inches |                               |                       |                |                      | CE         | X      | D     | T     | F     | H     | A     |
| WR78         | 66.27  | 2.609  | 20000                         | 3000                  | 46             | 4.0                  | 76.20      | 50.80  | 12.70 | 6.35  | 28.58 | 22.23 | 28.58 |
| WH78         | 66.27  | 2.609  | 30000                         | 3500                  | 46             | 4.0                  | 76.20      | 50.80  | 12.70 | 6.35  | 28.58 | 22.23 | 28.58 |
| WR82         | 78.11  | 3.075  | 25000                         | 3800                  | 39             | 4.8                  | 82.55      | 57.15  | 14.29 | 6.35  | 31.75 | 26.99 | 9.00  |
| WH82         | 78.11  | 3.075  | 36000                         | 4400                  | 39             | 4.8                  | 82.55      | 57.15  | 14.29 | 6.35  | 31.75 | 26.99 | 8.50  |
| WR124        | 101.60 | 4.000  | 45500                         | 6200                  | 30             | 8.3                  | 107.95     | 69.85  | 19.05 | 9.53  | 38.1  | 34.93 | 38.10 |
| WH124        | 101.60 | 4.000  | 67000                         | 7200                  | 30             | 8.3                  | 107.95     | 69.85  | 19.05 | 9.53  | 38.1  | 34.93 | 38.10 |
| WH124HD Spc  | 103.20 | 4.063  | 119000                        | 10500                 | 30             | 14.7                 | 120.65     | 76.20  | 25.40 | 12.7  | 50.8  | 44.45 | 41.28 |
| WR111PLUS    | 120.90 | 4.760  | 52000                         | 7500                  | 26             | 9.5                  | 123.83     | 85.73  | 19.05 | 9.53  | 44.45 | 34.93 | 60.33 |
| WH111PLUS    | 120.90 | 4.760  | 77000                         | 8850                  | 26             | 9.5                  | 123.83     | 85.73  | 19.05 | 9.53  | 44.45 | 34.93 | 60.33 |
| WR110        | 152.40 | 6.000  | 45500                         | 6750                  | 20             | 7.2                  | 117.48     | 76.20  | 19.05 | 9.53  | 38.1  | 34.93 | 47.63 |
| WH110        | 152.40 | 6.000  | 67000                         | 7875                  | 20             | 7.2                  | 117.48     | 76.20  | 19.05 | 9.53  | 38.1  | 34.93 | 47.63 |
| WR106        | 152.40 | 6.000  | 45500                         | 6200                  | 20             | 7.0                  | 107.95     | 69.85  | 19.05 | 9.53  | 38.1  | 34.93 | 41.28 |
| WH106        | 152.40 | 6.000  | 67000                         | 7200                  | 20             | 7.0                  | 107.95     | 69.85  | 19.05 | 9.53  | 38.1  | 34.93 | 41.28 |
| WR132        | 153.67 | 6.050  | 78000                         | 13000                 | 20             | 14.2                 | 158.75     | 111.13 | 25.40 | 12.7  | 50.8  | 44.45 | 73.03 |
| WH132        | 153.67 | 6.050  | 111000                        | 15300                 | 20             | 14.2                 | 158.75     | 111.13 | 25.40 | 12.7  | 50.8  | 44.45 | 73.03 |
| WH132D       | 153.67 | 6.050  | 139500                        | 16700                 | 20             | 16.4                 | 171.45     | 117.48 | 25.40 | 15.88 | 50.8  | 44.45 | 73.03 |
| WR150        | 153.67 | 6.050  | 78000                         | 13000                 | 20             | 16.8                 | 158.75     | 111.13 | 25.40 | 12.7  | 63.5  | 44.45 | 73.03 |
| WH150        | 153.67 | 6.050  | 112000                        | 15300                 | 20             | 16.8                 | 158.75     | 111.13 | 25.40 | 12.7  | 63.5  | 44.45 | 73.03 |
| WH150XHD     | 153.67 | 6.050  | 151000                        | 18200                 | 20             | 19.7                 | 171.45     | 117.48 | 28.58 | 15.88 | 63.5  | 44.45 | 73.03 |
| WH155        | 153.67 | 6.050  | 145000                        | 17750                 | 20             | 20.0                 | 168.28     | 114.30 | 28.58 | 14.29 | 63.5  | 44.45 | 73.03 |
| WH159        | 155.58 | 6.125  | 230000                        | 20250                 | 20             | 26.5                 | 168.28     | 117.48 | 31.75 | 15.88 | 76.2  | 50.8  | 73.03 |

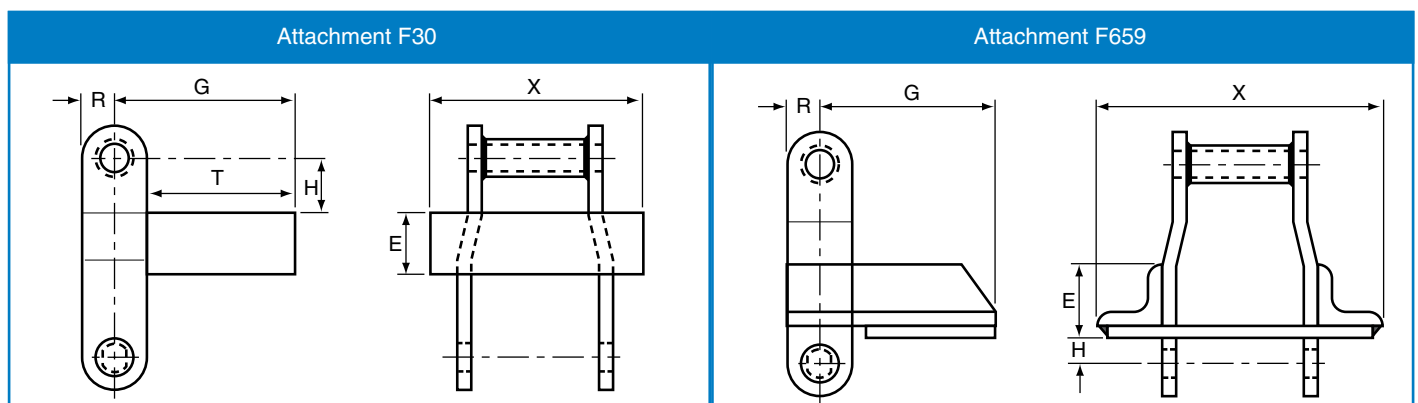
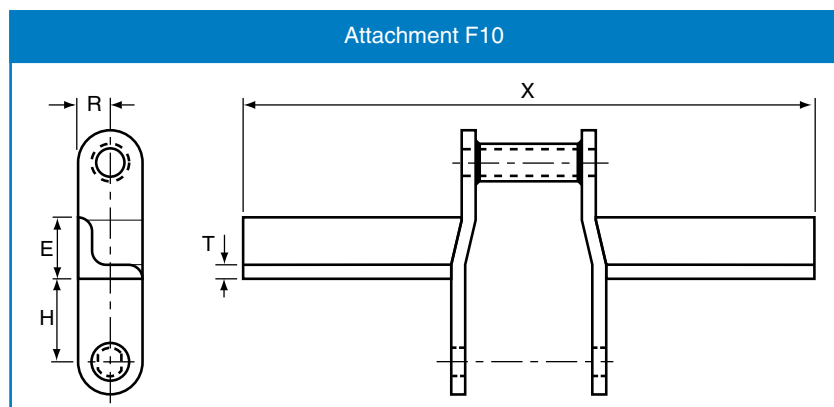
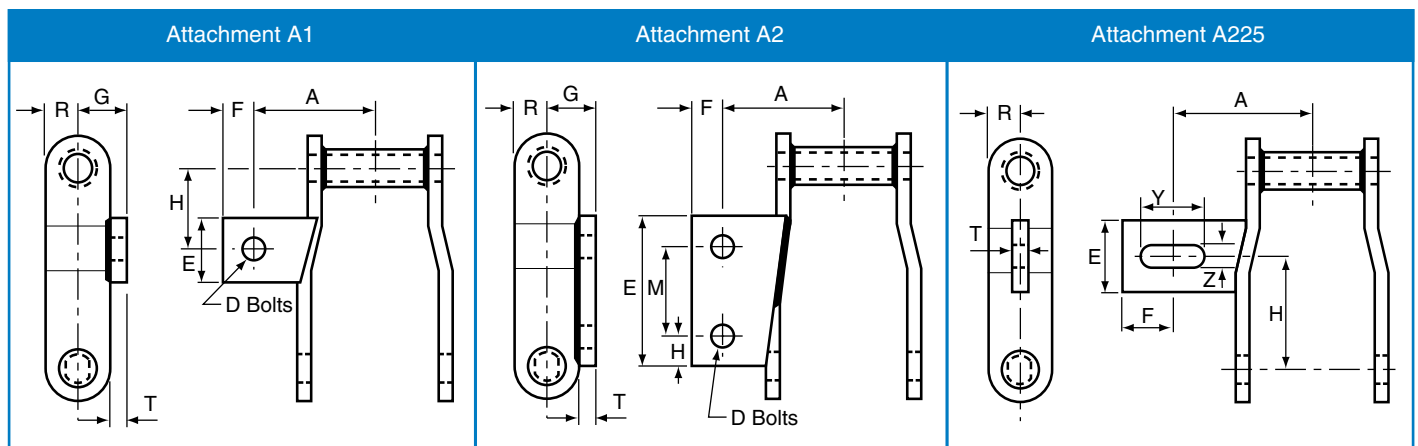
WR - Welded steel chain - through hardened pins and case hardened bushes

WH - Weld steel chain - all components fully heat treated

# Timber Chain

## Welded Steel Chain Attachments (Offset Side Bar)

| Attachment number | Chain number | Weight<br>lb/ft | Dimensions |       |        |       |        |       |   |       |       |       |        |       |       |
|-------------------|--------------|-----------------|------------|-------|--------|-------|--------|-------|---|-------|-------|-------|--------|-------|-------|
|                   |              |                 | A          | D     | E      | F     | G      | H     | K | M     | R     | T     | X      | Y     | Z     |
| A1                | WR/WH78      | 4.97            | 50.80      | 9.58  | 31.75  | 12.70 | 20.57  | 31.75 | - | -     | 14.27 | 6.35  | -      | -     | -     |
| A1                | WR/WH82      | 6.50            | 54.10      | 9.58  | 44.45  | 15.88 | 23.88  | 38.10 | - | -     | 15.88 | 6.35  | -      | -     | -     |
| A1                | WR/WH124     | 8.40            | 66.68      | 15.88 | 50.80  | 15.88 | 28.70  | 45.97 | - | -     | 19.05 | 9.53  | -      | -     | -     |
| A2                | WR/WH78      | 4.50            | 50.80      | 9.58  | 54.10  | 12.70 | 19.81  | 10.41 | - | 28.70 | 14.27 | 6.35  | -      | -     | -     |
| A2                | WR/WH82      | 6.00            | 54.10      | 9.53  | 57.15  | 15.80 | 23.88  | 12.70 | - | 31.75 | 15.88 | 7.92  | -      | -     | -     |
| A2                | WR/WH124     | 10.00           | 66.68      | 9.58  | 76.20  | 22.23 | 28.70  | 22.23 | - | 49.28 | 19.05 | 9.53  | -      | -     | -     |
| A2                | WR/WH132     | 17.00           | 95.25      | 12.70 | 101.60 | 19.05 | 38.10  | 41.28 | - | 69.85 | 25.40 | 12.70 | -      | -     | -     |
| A225              | WR/WH124     | 8.90            | 101.60     | -     | 50.80  | 49.28 | -      | 50.80 | - | -     | 19.05 | 12.70 | -      | 57.15 | 22.23 |
| F10               | WR/WH82      | 4.80            | -          | -     | 31.75  | -     | -      | 23.80 | - | -     | 15.88 | 6.35  | 260.35 | -     | -     |
| F30               | WR/WH78      | 9.90            | -          | -     | 25.40  | -     | 68.33  | 20.57 | - | -     | 14.27 | 54.10 | 76.20  | -     | -     |
| F659              | WR/WH124     | 13.10           | -          | -     | 44.45  | -     | 120.65 | 12.70 | - | -     | 19.05 | -     | 167.39 | -     | -     |



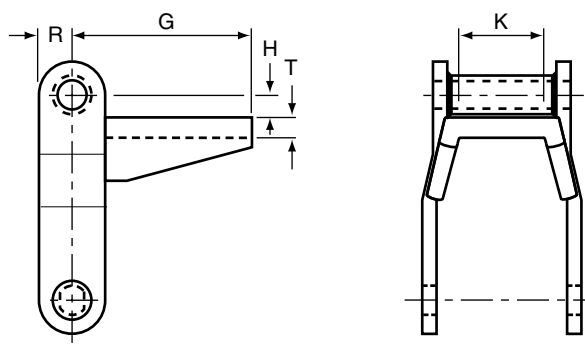
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Timber Chain

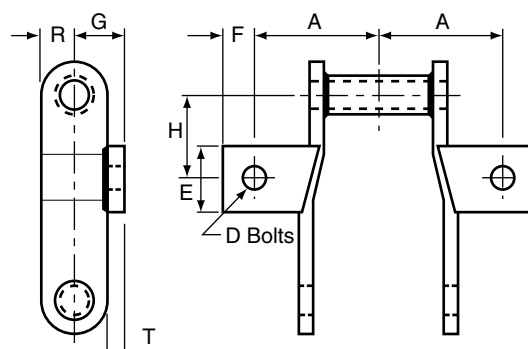
## Welded Steel Chain Attachments (Offset Side Bar)

| Attachment number | Chain number | Weight<br>lb/ft | Dimensions |       |        |       |       |       |       |       |       |       |   |   |   |
|-------------------|--------------|-----------------|------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|---|---|---|
|                   |              |                 | A          | D     | E      | F     | G     | H     | K     | M     | R     | T     | X | Y | Z |
| H2                | WR/WH78      | 4.75            | -          | -     | -      | -     | 90.42 | 7.87  | 25.40 | -     | 14.22 | 6.35  | - | - | - |
| H2                | WR/WH82      | 9.00            | -          | -     | -      | -     | 91.95 | 15.75 | 28.70 | -     | 15.75 | 4.83  | - | - | - |
| K1                | WR/WH78      | 4.97            | 50.80      | 9.65  | 31.75  | 12.70 | 20.57 | 31.75 | -     | -     | 14.22 | 6.35  | - | - | - |
| K1                | WR/WH82      | 6.50            | 54.10      | 9.65  | 44.45  | 15.75 | 23.88 | 38.10 | -     | -     | 15.75 | 6.35  | - | - | - |
| K1                | WR/WH124     | 11.70           | 66.55      | 15.75 | 50.80  | 15.75 | 28.70 | 45.97 | -     | -     | 19.05 | 9.65  | - | - | - |
| K2                | WR/WH78      | 5.00            | 50.80      | 9.65  | 54.10  | 12.70 | 19.81 | 10.41 | -     | 28.70 | 14.22 | 6.35  | - | - | - |
| K2                | WR/WH82      | 8.00            | 54.10      | 9.65  | 57.15  | 15.75 | 23.88 | 12.70 | -     | 31.75 | 15.75 | 7.87  | - | - | - |
| K2                | WR/WH124     | 12.00           | 66.55      | 9.65  | 76.20  | 22.35 | 28.70 | 22.35 | -     | 49.28 | 19.05 | 9.65  | - | - | - |
| K2                | WR/WH132     | 19.00           | 95.25      | 12.70 | 101.60 | 19.05 | 38.10 | 41.15 | -     | 69.85 | 25.40 | 12.70 | - | - | - |
| RR                | WR/WH78      | 4.70            | -          | -     | -      | -     | 38.10 | 19.05 | -     | -     | 14.22 | 6.35  | - | - | - |
| RR                | WR/WH82      | 7.00            | -          | -     | -      | -     | 44.45 | 20.57 | -     | -     | 15.75 | 6.35  | - | - | - |
| RR                | WR/WH124     | 10.00           | -          | -     | -      | -     | 47.75 | 38.10 | -     | -     | 19.05 | 9.65  | - | - | - |

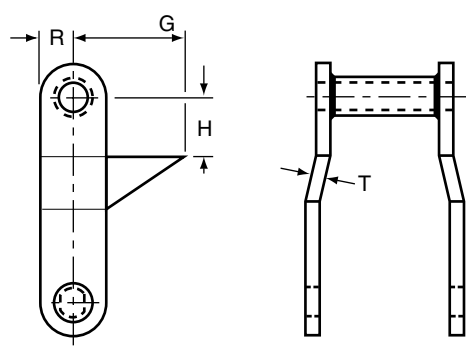
Attachment H2



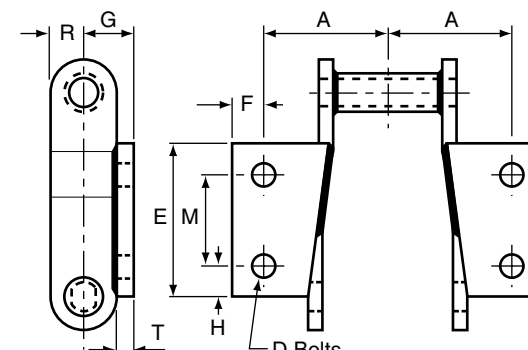
Attachment K1



Attachment RR



Attachment K2

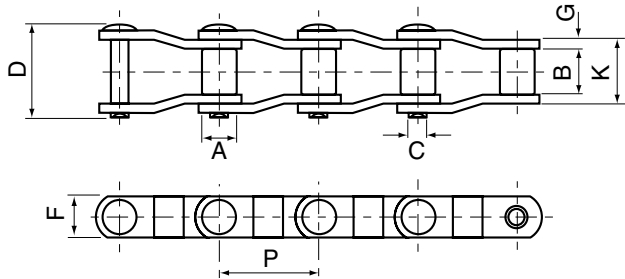




# Timber Chain

## Offset Side Bar Roller Chain

Offset Side Bar Roller Chain



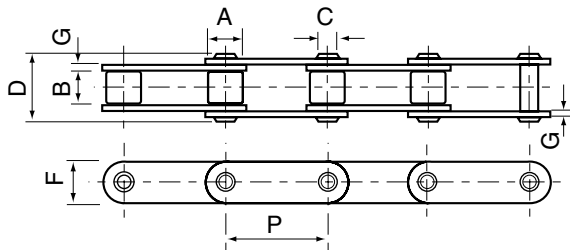
Material Spec.

|         | Side Bar | Pin | Bushing | Roller |
|---------|----------|-----|---------|--------|
| S0-578  | CH       | CH  | CC      | CC     |
| M0-88   | C        | CH  | CC      | CC     |
| LXS-882 | CH       | AH  | AC      | CH     |
| M0H-578 | CH       | CH  | CC      | CH     |

| Chain number | Pitch |        | Average Ultimate Strength lbf | Max. Working Load lbf | Links Per Foot | Average Weight lb/ft | Dimensions |       |       |       |       |      |       |
|--------------|-------|--------|-------------------------------|-----------------------|----------------|----------------------|------------|-------|-------|-------|-------|------|-------|
|              | inch  | mm     |                               |                       |                |                      | A          | B     | C     | D     | F     | G    | K     |
| S0-578       | 2.609 | 66.269 | 19,000                        | 2,200                 | 4.6            | 2.7                  | 22.23      | 26.99 | 9.53  | 52.78 | 25.40 | 3.97 | 36.51 |
| M0-88        | 2.609 | 66.269 | 20,000                        | 2,400                 | 4.6            | 3.8                  | 22.23      | 26.99 | 11.11 | 59.53 | 28.58 | 6.35 | 41.28 |
| LXS-882      | 2.609 | 66.269 | 29,000                        | 2,800                 | 4.6            | 3.9                  | 22.23      | 28.58 | 11.11 | 59.53 | 28.58 | 6.35 | 42.86 |
| M0H-578      | 2.609 | 66.269 | 19,000                        | 2,200                 | 4.6            | 2.7                  | 22.23      | 26.99 | 9.53  | 52.78 | 25.40 | 5.56 | 36.12 |

## Straight Side Bar Roller Chain

Straight Side Bar Roller Chain



Material Spec.

|        | Side Bar | Pin | Bushing | Roller |
|--------|----------|-----|---------|--------|
| MS-88  | C        | CH  | CC      | CC     |
| 81-X   | CH       | AC  | AC      | CH     |
| 81-XH  | CH       | AC  | AC      | CH     |
| 81-XHS | CH       | AC  | AC      | CH     |
| SS-188 | CH       | AC  | CC      | CC     |

| Chain number | Pitch |        | Average Ultimate Strength lbf | Max. Working Load lbf | Links Per Foot | Average Weight lb/ft | Dimensions |       |       |       |       |       |      | Side Plate Thickness (G) |      |
|--------------|-------|--------|-------------------------------|-----------------------|----------------|----------------------|------------|-------|-------|-------|-------|-------|------|--------------------------|------|
|              | inch  | mm     |                               |                       |                |                      | A          | B     | C     | D     | F     | K     |      | Chain                    | Conn |
| MS-88        | 2.609 | 66.269 | 26,000                        | 2,500                 | 4.6            | 3.8                  | 22.23      | 26.99 | 11.11 | 59.53 | 28.58 | 41.28 | 6.35 | 6.35                     |      |
| 81-X         | 2.609 | 66.269 | 22,000                        | 2,200                 | 4.6            | 2.6                  | 23.02      | 26.99 | 11.11 | 47.23 | 28.58 | 34.93 | 3.97 | 3.97                     |      |
| 81-XH        | 2.609 | 66.269 | 41,800                        | 5,000                 | 4.6            | 3.9                  | 23.02      | 26.99 | 11.11 | 59.18 | 31.75 | 42.86 | 7.94 | 5.56                     |      |
| 81-XHS       | 2.609 | 66.269 | 41,800                        | 5,000                 | 4.6            | 4.2                  | 23.02      | 26.99 | 11.11 | 63.50 | 32.94 | 42.86 | 7.94 | 7.94                     |      |
| SS-188       | 2.609 | 66.269 | 26,000                        | 2,500                 | 4.6            | 3.8                  | 22.23      | 26.99 | 11.11 | 59.53 | 28.58 | 41.28 | 6.35 | 6.35                     |      |

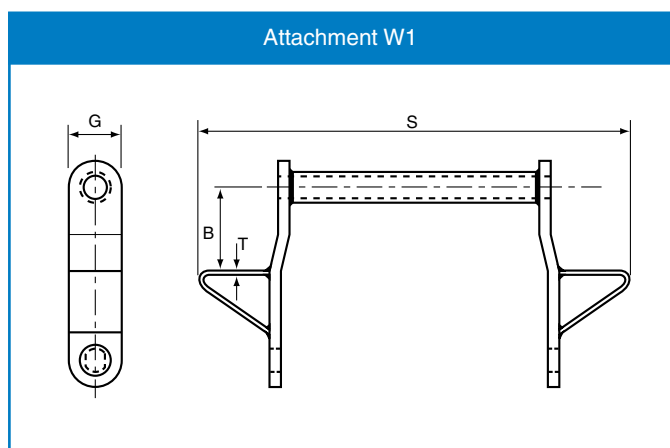
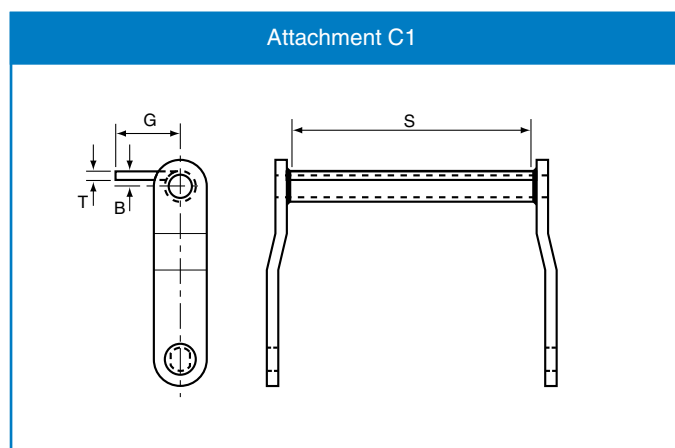
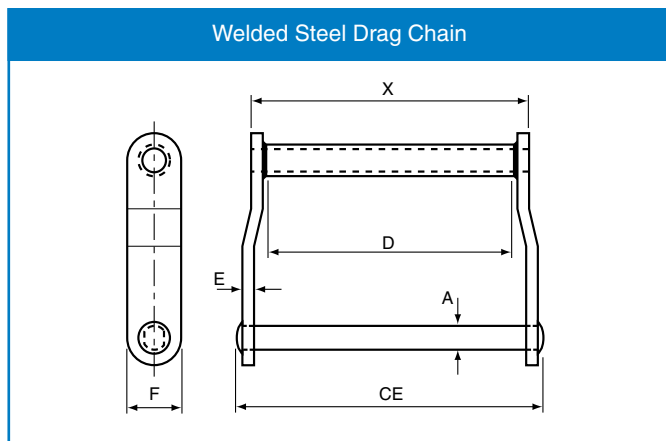
C: Carbon Steel  
CC: Carbon Steel Case Hardened

AC: Alloy Steel Case Hardened  
CH: Carbon Steel Heat Treated

AH: Alloy Steel Heat Treated

# Timber Chain

## Welded Steel Drag Chain



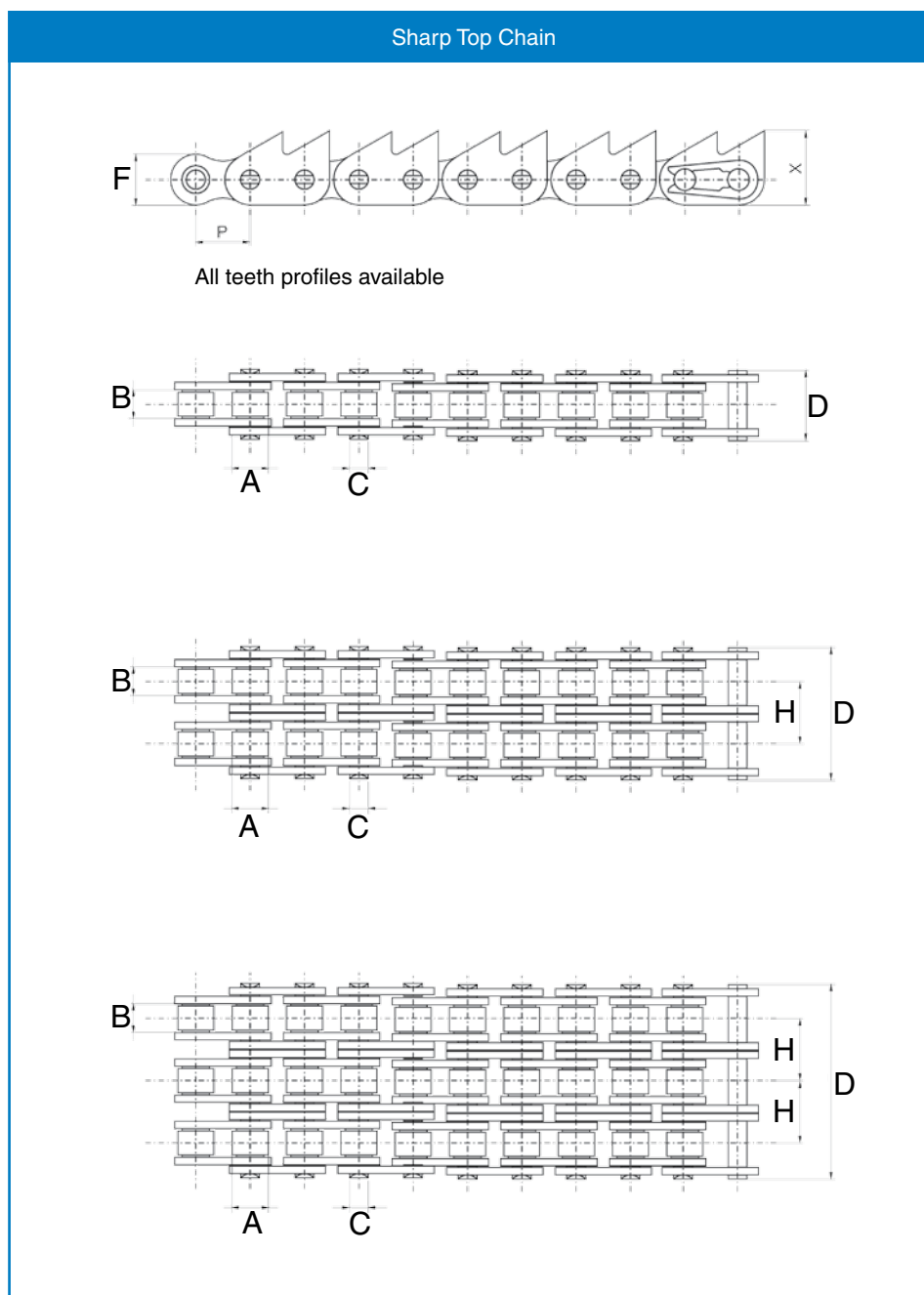
| Chain number | Pitch  |        | Average Ultimate Strength lbf | Max. Working Load lbf | Links Per Foot | Average Weight lb/ft | Dimensions |        |       |       |       |   |        |
|--------------|--------|--------|-------------------------------|-----------------------|----------------|----------------------|------------|--------|-------|-------|-------|---|--------|
|              | mm     | Inches |                               |                       |                |                      | CE         | X      | D     | T     | F     | H | A      |
| WDH102       | 127.00 | 5.000  | 60000                         | 10000                 | 24             | 11.8                 | 234.95     | 196.85 | 19.05 | 9.53  | 38.1  | / | 161.93 |
| WDH104       | 152.40 | 6.000  | 60000                         | 10000                 | 20             | 8.7                  | 174.63     | 136.53 | 19.05 | 9.53  | 38.1  | / | 104.78 |
| WD110        | 152.40 | 6.000  | 51000                         | 8500                  | 20             | 12.0                 | 301.63     | 263.53 | 19.05 | 9.53  | 38.1  | / | 228.60 |
| WDH110       | 152.40 | 6.000  | 60000                         | 10000                 | 20             | 12.0                 | 301.63     | 263.53 | 19.05 | 9.53  | 38.1  | / | 228.60 |
| WD113        | 152.40 | 6.000  | 55000                         | 9200                  | 20             | 15.0                 | 317.50     | 269.88 | 22.23 | 12.7  | 38.1  | / | 228.60 |
| WDH113       | 152.40 | 6.000  | 70000                         | 11700                 | 20             | 15.0                 | 317.50     | 269.88 | 22.23 | 12.7  | 38.1  | / | 228.60 |
| WD120        | 152.40 | 6.000  | 70000                         | 11700                 | 20             | 19.4                 | 304.80     | 257.18 | 22.23 | 12.7  | 50.8  | / | 215.90 |
| WDH120       | 152.40 | 6.000  | 90000                         | 15000                 | 20             | 19.4                 | 304.80     | 257.18 | 22.23 | 12.7  | 50.8  | / | 215.90 |
| WD112        | 203.20 | 8.000  | 51000                         | 8500                  | 15             | 9.8                  | 301.63     | 263.53 | 19.05 | 9.53  | 38.1  | / | 228.60 |
| WDH112       | 203.20 | 8.000  | 60000                         | 10000                 | 15             | 9.8                  | 301.63     | 263.53 | 19.05 | 9.53  | 38.1  | / | 228.60 |
| WD116        | 203.20 | 8.000  | 55000                         | 9200                  | 15             | 14.5                 | 390.53     | 358.78 | 19.05 | 9.53  | 44.45 | / | 323.85 |
| WDH116       | 203.20 | 8.000  | 69000                         | 11500                 | 15             | 14.5                 | 390.53     | 358.78 | 19.05 | 9.53  | 44.45 | / | 323.85 |
| WD118        | 203.20 | 8.000  | 70000                         | 11700                 | 15             | 19.8                 | 425.45     | 377.83 | 22.23 | 12.7  | 50.8  | / | 336.55 |
| WDH118       | 203.20 | 8.000  | 90000                         | 15000                 | 15             | 19.8                 | 425.45     | 377.83 | 22.23 | 12.7  | 50.8  | / | 336.55 |
| WD122        | 203.20 | 8.000  | 70000                         | 11700                 | 15             | 16.0                 | 304.80     | 257.18 | 22.23 | 12.7  | 50.8  | / | 215.90 |
| WDH122       | 203.20 | 8.000  | 90000                         | 15000                 | 15             | 16.0                 | 304.80     | 257.18 | 22.23 | 12.7  | 50.8  | / | 215.90 |
| WD480        | 203.20 | 8.000  | 70000                         | 11700                 | 15             | 18.1                 | 371.48     | 323.85 | 22.23 | 12.7  | 50.8  | / | 279.40 |
| WDH480       | 203.20 | 8.000  | 90000                         | 15000                 | 15             | 18.1                 | 371.48     | 323.85 | 22.23 | 12.7  | 50.8  | / | 279.40 |
| WDH580       | 203.20 | 8.000  | 123000                        | 20500                 | 15             | 19.4                 | 371.48     | 323.85 | 25.40 | 12.7  | 50.8  | / | 279.40 |
| WDH680       | 203.20 | 8.000  | 134000                        | 22300                 | 15             | 21.4                 | 384.18     | 330.20 | 25.40 | 15.88 | 50.8  | / | 279.40 |

WD - Welded steel chain with rough-hardened pins and case hardened bushes

WDH - Welded steel chain - all components fully heat treated

# Timber Chain

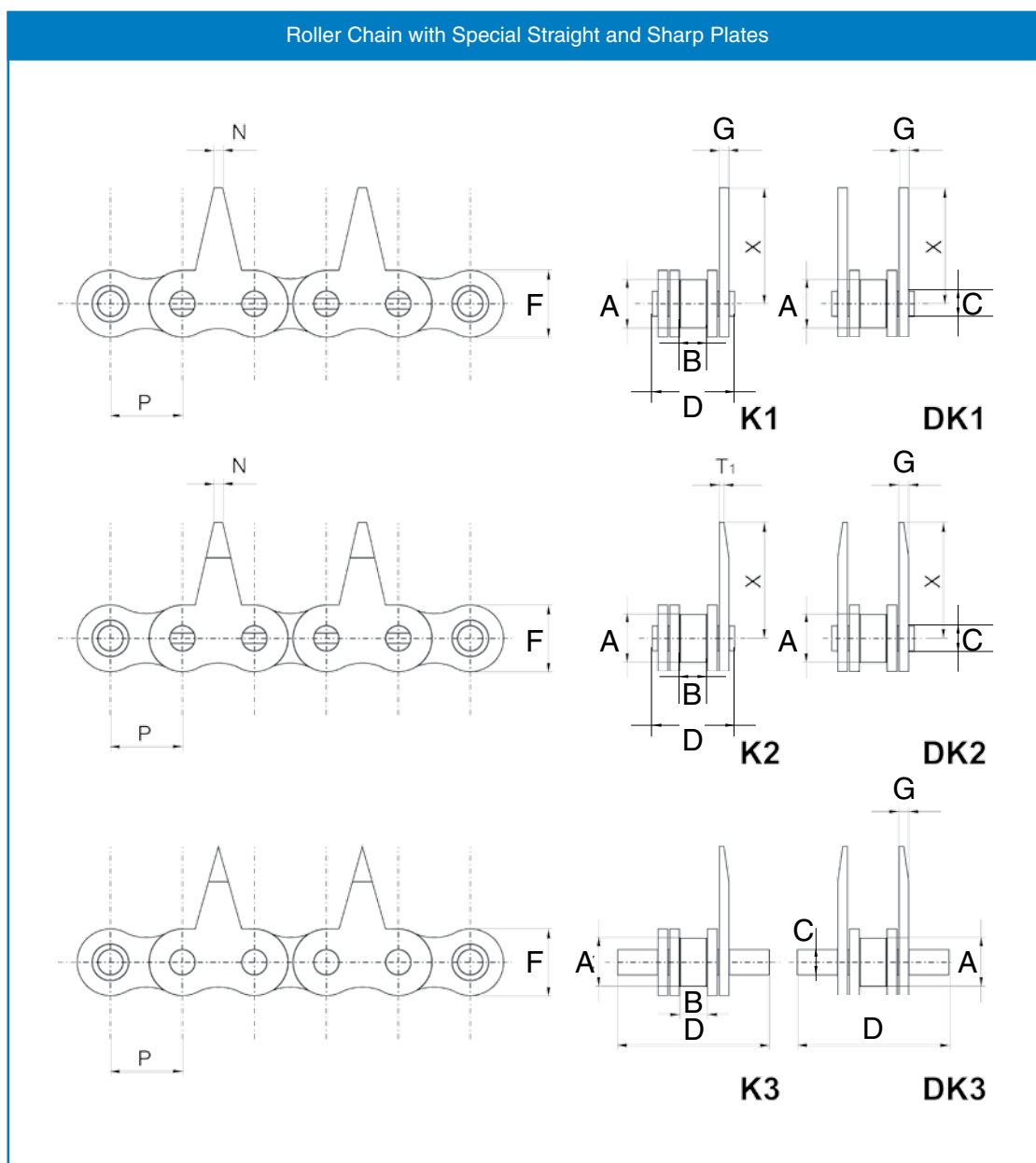
## Sharp Top Chain



| Chain number | Pitch<br>P | Roller diameter<br>A | With between inner plates<br>B | Pin diameter<br>C | Pin length<br>D | Side Plate Height<br>F | Transverse pitch<br>H | Tooth height<br>X | Tensile strength<br>kN |
|--------------|------------|----------------------|--------------------------------|-------------------|-----------------|------------------------|-----------------------|-------------------|------------------------|
| 16B-1Z       | 25.4       | 15.88                | 17.02                          | 8.28              | 36.1            | 21.0                   | -                     | 28                | 58                     |
| 16B-2Z       | 25.4       | 15.88                | 17.02                          | 8.28              | 68.0            | 21.0                   | 31.88                 | 28                | 110                    |
| 16B-3Z       | 25.4       | 15.88                | 17.02                          | 8.28              | 99.9            | 21.0                   | 31.88                 | 28                | 165                    |

# Timber Chain

## Sharp Top Chain



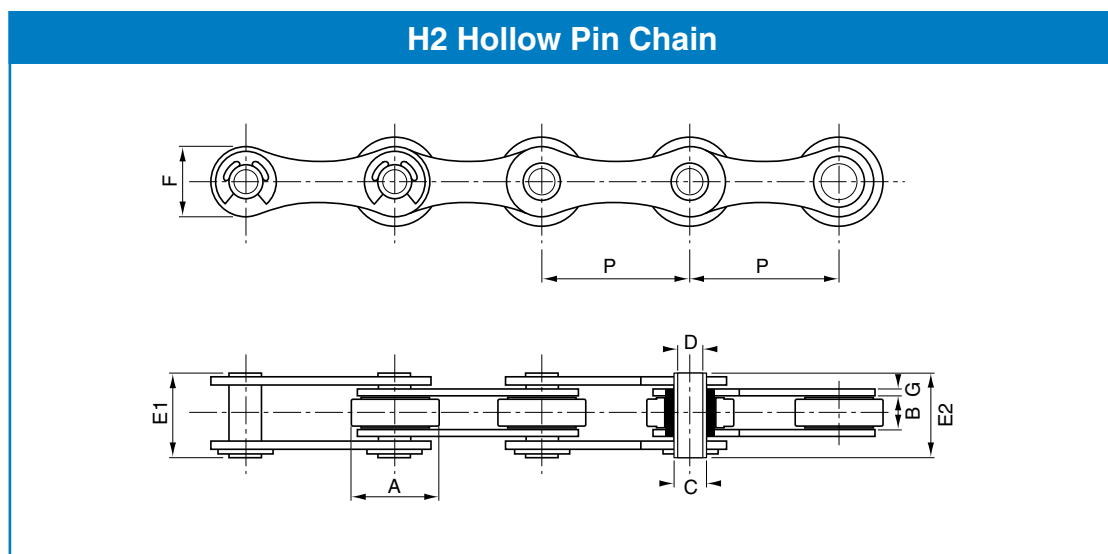
| Chain number | Pitch | Roller diameter | Width between inner plates | Pin diameter | Side plate height | Plate thickness | Pin length | Attachment height |      |     | Tensile strength |
|--------------|-------|-----------------|----------------------------|--------------|-------------------|-----------------|------------|-------------------|------|-----|------------------|
|              | P     | A               | B                          | C            | F                 | G               | L          | T1                | X    | N   | kN               |
| 08 B/K1      | 12.70 | 8.51            | 7.75                       | 4.45         | 10.80             | 1.60            | 16.70      | -                 | 14.5 | 1.2 | 18.2             |
| 08 B/K2      | 12.70 | 8.51            | 7.75                       | 4.45         | 10.80             | 1.60            | 16.70      | 0.3               | 14.5 | 1.2 | 18.2             |
| 12 B/K3      | 19.05 | 12.07           | 11.68                      | 5.71         | 16.13             | 1.85            | 29.35      | -                 | 14.5 | -   | 29.5             |

# Note

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# Food Industry Chain

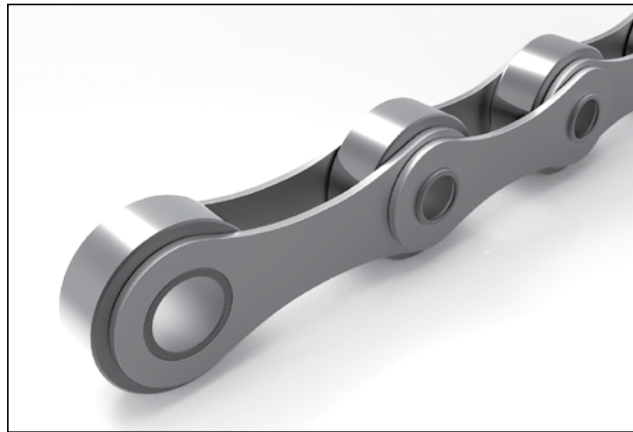
## H2 Series



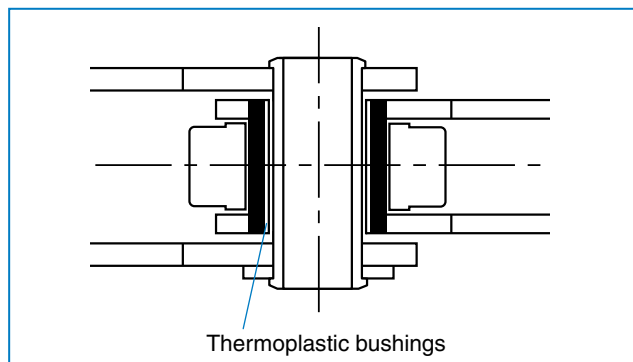
| Challenge chain number           | FK chain number  | Pitch inches | Pitch mm | Roller diameter | Width between inner plates | Pin outside diameter | Pin inside diameter | Pin Length |      | Side plate height | Plate thickness | Tensile strength | Weight (Type C3) |
|----------------------------------|------------------|--------------|----------|-----------------|----------------------------|----------------------|---------------------|------------|------|-------------------|-----------------|------------------|------------------|
|                                  |                  | P            | P        | A               | B                          | C                    | D                   | E1         | E2   | F                 | G               | kN               | kg/m             |
| <b>Steel</b>                     |                  |              |          |                 |                            |                      |                     |            |      |                   |                 |                  |                  |
| CH2-HP                           | FK1650HP         | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 55               | 2.15             |
| CH2-HP-D                         | FK1650HP-D       | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 55               | 1.55             |
| <b>Zinc Plated</b>               |                  |              |          |                 |                            |                      |                     |            |      |                   |                 |                  |                  |
| CH2-HP-ZP                        | FK1650HPZP       | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 55               | 2.15             |
| CH2-HP-ZP-D                      | FK1650HPZP-D     | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 55               | 1.55             |
| <b>Zinc Plated and Stainless</b> |                  |              |          |                 |                            |                      |                     |            |      |                   |                 |                  |                  |
| CH2-HP-ZPSS                      | FK1650HPZS400    | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 55               | 2.15             |
| CH2-HP-ZPSS-D                    | FK1650HPZS400-D  | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 55               | 1.55             |
| <b>Stainless</b>                 |                  |              |          |                 |                            |                      |                     |            |      |                   |                 |                  |                  |
| CH2-HP-SS                        | FK1650HPSS       | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 32               | 2.15             |
| CH2-HP-SS-D                      | FK1650HPSS-D     | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 32               | 1.55             |
| CH2-HP-SS400                     | FK1650HPSS400    | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 42               | 2.15             |
| CH2-HP-SS400-D                   | FK1650HPSS400-D  | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 42               | 1.55             |
| <b>Low Maintenance</b>           |                  |              |          |                 |                            |                      |                     |            |      |                   |                 |                  |                  |
| CH2-HP-ZP-TPB                    | FK1650HPZPK      | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 55               | 2.15             |
| CH2-HP-ZP-TPB-D                  | FK1650HPZPK-D    | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 55               | 1.55             |
| CH2-HP-SS-TPB                    | FK1650HPSSK      | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 32               | 2.15             |
| CH2-HP-SS-TPB-D                  | FK1650HPSSK-D    | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 32               | 1.55             |
| CH2-HP-SS400-TPB                 | FK1650HPSSK400   | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 42               | 2.15             |
| CH2-HP-SS400-TPB-D               | FK1650HPSSK400-D | 2.0          | 50.8     | 30              | 10.5                       | 11.4                 | 8.2                 | 27.5       | 28.8 | 26                | 3.1             | 42               | 1.55             |

# Food Industry Chain

H2 Hollow pin chains are widely used in many conveyor applications such as agriculture, food and packaging. H2 chain is manufactured to the highest standard for maximum performance. The chain-lengths are matched (paired) and clearly labeled.



**Low maintenance  
CH2 Series**  
with Thermoplastic  
bushings



## Versions:

- Steel
- Zinc
- Stainless
- Stainless 400
- PA6 roller
- Low maintenance

| Challenge chain number                                                                                                                   | Description                                                                                                                                                                                                                                                                | Material Requirement                                               |                                                                    |                                        |                                                   |                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------|---------------------------------------------------|--------------------------------------------------------------|
|                                                                                                                                          |                                                                                                                                                                                                                                                                            | Hollow pin                                                         | Bush                                                               | Liner bush                             | Roller                                            | Plate                                                        |
| <b>Steel</b><br>CH2-HP<br>CH2-HP-D                                                                                                       | Steel steel roller<br>Steel plastic roller                                                                                                                                                                                                                                 | ST-CH<br>ST-CH                                                     | ST-CH<br>ST-CH                                                     |                                        | ST-CH<br>PA6                                      | ST-HT<br>ST-HT                                               |
| <b>Zinc Plated</b><br>CH2-HP-ZP<br>CH2-HP-ZP-D                                                                                           | Steel steel roller Zinc Plated<br>Steel plastic roller Zinc Plated                                                                                                                                                                                                         | ST-CH-ZP<br>ST-CH-ZP                                               | ST-CH-ZP<br>ST-CH-ZP                                               |                                        | ST-CH-ZP<br>PA6                                   | ST-HT-ZP<br>ST-HT-ZP                                         |
| <b>Zinc Plated and SS</b><br>CH2-HP-ZPSS<br>CH2-HP-ZPSS-D                                                                                | Stainless steel<br>Stainless steel plastic roller                                                                                                                                                                                                                          | SS-400-HT<br>SS-400-HT                                             | SS-400-HT<br>SS-400-HT                                             |                                        | ST-CH-ZP<br>PA6                                   | ST-HT-ZP<br>ST-HT-ZP                                         |
| <b>Stainless</b><br>CH2-HP-SS<br>CH2-HP-SS-D<br>CH2-HP-SS400<br>CH2-HP-SS400-D                                                           | Stainless steel 400 series<br>Stainless steel 400 series plastic roller<br>Stainless steel 400 series<br>Stainless steel 400 series plastic roller                                                                                                                         | SS-304<br>SS-304<br>SS-400-HT<br>SS-400-HT                         | SS-304<br>SS-304<br>SS-400-HT<br>SS-400-HT                         |                                        | SS-304<br>PA6<br>SS-304<br>PA6                    | SS-304<br>SS-304<br>SS-304<br>SS-304                         |
| <b>Low Maintenance</b><br>CH2-HP-ZP-TPB<br>CH2-HP-ZP-TPB-D<br>CH2-HP-SS-TPB<br>CH2-HP-SS-TPB-D<br>CH2-HP-SS400-TPB<br>CH2-HP-SS400-TPB-D | Steel steel roller TPB Zinc Plated<br>Steel plastic roller TPB Zinc Plated<br>Stainless steel TPB Zinc Plated<br>Stainless steel plastic roller TPB Zinc Plated<br>Stainless steel 400 series TPB Zinc Plated<br>Stainless steel 400 series plastic roller TPB Zinc Plated | ST-CH-ZP<br>ST-CH-ZP<br>SS-304<br>SS-304<br>SS-400-HT<br>SS-400-HT | ST-CH-ZP<br>ST-CH-ZP<br>SS-304<br>SS-304<br>SS-400-HT<br>SS-400-HT | TPB<br>TPB<br>TPB<br>TPB<br>TPB<br>TPB | ST-CH-ZP<br>PA6<br>SS-304<br>PA6<br>SS-304<br>PA6 | ST-HT-ZP<br>ST-HT-ZP<br>SS-304<br>SS-304<br>SS-304<br>SS-304 |

## Key

**ST-CH** - Steel, case hardened  
**ST-CH-ZP** - Steel, case hardened, zinc plated  
**ST-HT** - Steel, through hardened  
**ST-HT-ZP** - Steel, through hardened, zinc plated

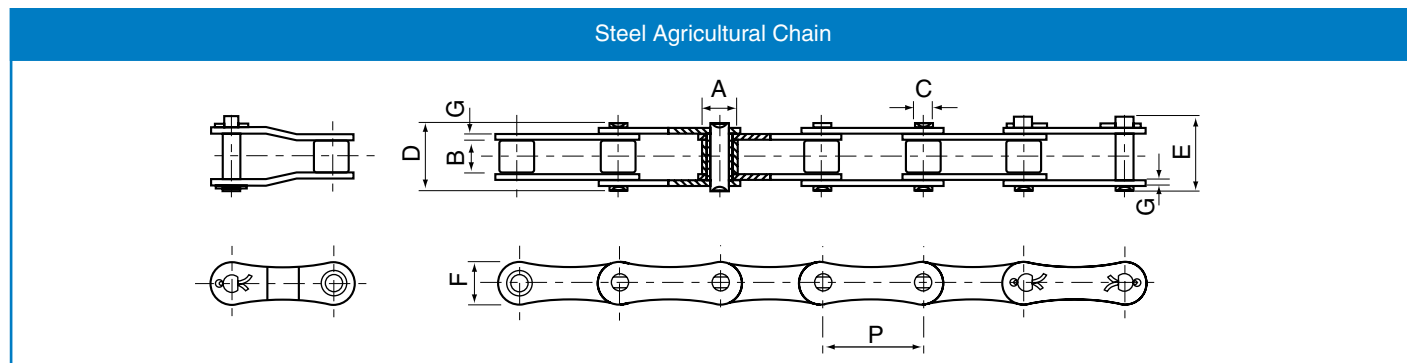
**SS-304** - Stainless steel 304  
**SS-400-HT** - Stainless steel 400 series, through hardened  
**PA6** - Nylon PA6  
**TPB** - Thermoplastic bushing

Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.



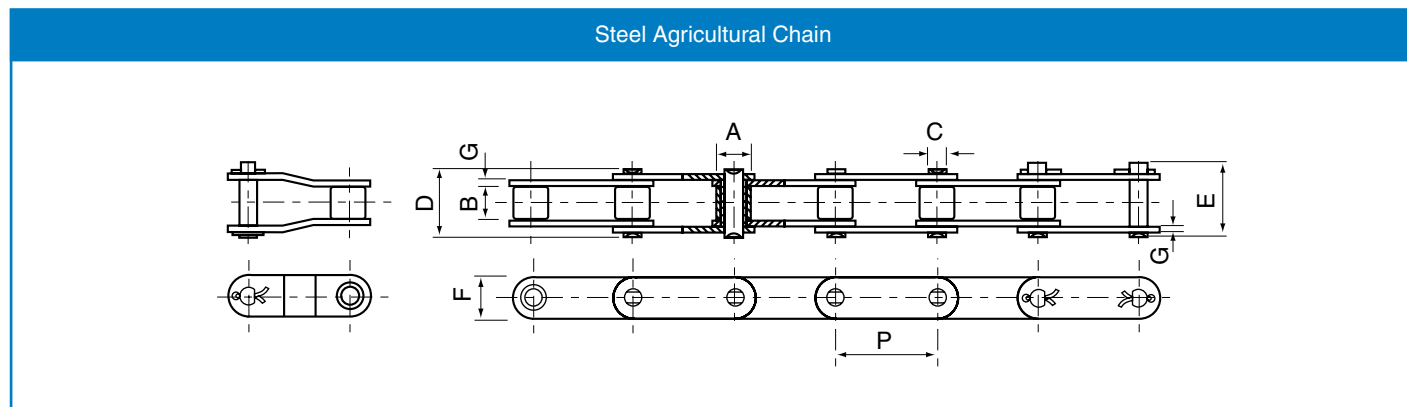
# Agricultural Chain

## Steel Agricultural Chain



| Chain number | Pitch<br>P | Roller diameter<br>A | Width between inner plates<br>B | Pin diameter<br>C | Pin length<br>D E |       | Side plate height<br>F | Plate thickness<br>G | Minimum tensile strength<br>kN | Average tensile strength<br>kN | Weight<br>kg/m |
|--------------|------------|----------------------|---------------------------------|-------------------|-------------------|-------|------------------------|----------------------|--------------------------------|--------------------------------|----------------|
| S32          | 29.21      | 11.43                | 15.88                           | 4.45              | 26.70             | 28.80 | 13.20                  | 1.80                 | 8.00                           | 21.60                          | 0.86           |
| S42          | 34.93      | 14.27                | 19.05                           | 7.00              | 34.30             | 37.00 | 19.80                  | 2.80                 | 27.00                          | 50.80                          | 1.60           |
| S45          | 41.40      | 15.24                | 22.23                           | 5.72              | 37.70             | 40.40 | 17.30                  | 2.80                 | 18.00                          | 36.10                          | 1.66           |
| S52          | 38.10      | 15.24                | 22.23                           | 5.72              | 37.70             | 40.40 | 17.30                  | 2.80                 | 18.00                          | 36.10                          | 1.68           |
| S55          | 41.40      | 17.78                | 22.23                           | 5.72              | 37.70             | 40.40 | 17.30                  | 2.80                 | 18.00                          | 36.10                          | 1.80           |
| S55X         | 41.40      | 15.88                | 20.00                           | 8.28              | 38.00             | 40.70 | 20.00                  | 3.00                 | 50.00                          | 55.00                          | 2.20           |
| S55R         | 41.40      | 17.78                | 22.23                           | 8.90              | 41.00             | 44.00 | 22.40                  | 3.50                 | 45.00                          | 73.10                          | 2.49           |
| S62          | 41.91      | 19.05                | 25.40                           | 5.72              | 40.30             | 43.00 | 17.30                  | 2.50                 | 27.00                          | 36.10                          | 1.87           |
| S77          | 58.34      | 18.26                | 22.23                           | 8.90              | 43.20             | 46.40 | 26.20                  | 4.00                 | 45.00                          | 73.10                          | 2.65           |
| S88          | 66.27      | 22.86                | 28.58                           | 8.90              | 49.80             | 53.00 | 26.20                  | 4.00                 | 45.00                          | 73.10                          | 3.25           |

## Steel Agricultural Chain



| Chain number | Pitch<br>P | Roller diameter<br>A | Width between inner plates<br>B | Pin diameter<br>C | Pin length<br>D E |       | Side plate height<br>F | Plate thickness<br>G | Minimum tensile strength<br>kN | Average tensile strength<br>kN | Weight<br>kg/m |
|--------------|------------|----------------------|---------------------------------|-------------------|-------------------|-------|------------------------|----------------------|--------------------------------|--------------------------------|----------------|
| 38.4         | 38.400     | 15.88                | 19.05                           | 6.92              | 33.80             | 37.00 | 17.30                  | 2.50                 | 25.00                          | 33.00                          | 1.65           |
| 38.4-V       | 38.400     | 15.88                | 18.00                           | 6.92              | 33.80             | 37.00 | 17.30                  | 3.00                 | 31.50                          | 40.00                          | 1.74           |
| 38.4-VB      | 38.400     | 15.88                | 19.05                           | 8.27              | 36.20             | 39.40 | 20.50                  | 3.00                 | 45.00                          | 50.00                          | 2.12           |
| CA550        | 41.400     | 16.87                | 19.81                           | 7.19              | 35.00             | 38.00 | 19.30                  | 2.80                 | 39.10                          | 51.20                          | 1.94           |
| CA555        | 41.400     | 16.87                | 12.70                           | 7.19              | 29.70             | 33.10 | 19.30                  | 3.10                 | 39.10                          | 56.00                          | 1.83           |
| CA557        | 41.400     | 17.78                | 20.24                           | 8.00              | 37.40             | 40.60 | 23.10                  | 3.10                 | 55.61                          | 74.30                          | 2.20           |
| CA620        | 42.010     | 17.91                | 24.51                           | 7.19              | 41.80             | 45.20 | 20.20                  | 3.25                 | 39.10                          | 55.10                          | 2.35           |
| CA650        | 50.800     | 25.00                | 27.80                           | 9.53              | 40.40             | 44.70 | 25.00                  | 4.00                 | 80.00                          | 95.50                          | 3.49           |
| CA2060H      | 38.100     | 11.91                | 12.70                           | 5.94              | 29.74             | 31.72 | 17.45                  | 3.25                 | 31.28                          | 40.50                          | 1.50           |
| CA2063H      | 38.100     | 11.89                | 12.70                           | 5.94              | 29.40             | 34.20 | 19.30                  | 3.25                 | 31.28                          | 40.50                          | 1.65           |

Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.

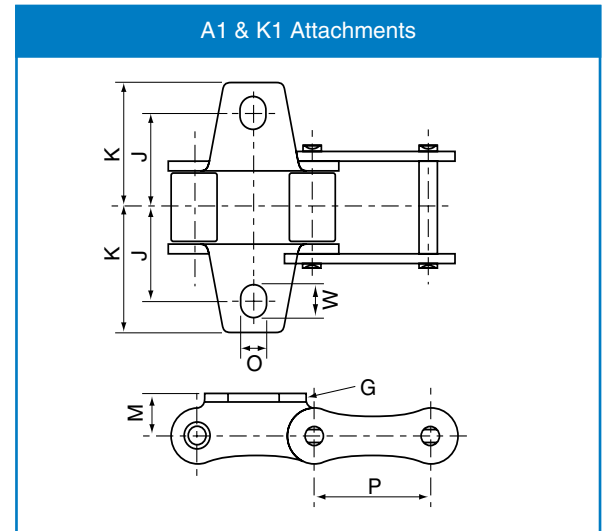
# Agricultural Chain Attachments

## S Series A1 & K1 Attachments

| Chain number | P     | G    | J     | K     | M     | O    | W     |
|--------------|-------|------|-------|-------|-------|------|-------|
| S32          | 29.21 | 1.80 | 21.50 | 30.50 | 8.60  | 5.30 | 6.90  |
| S42          | 34.93 | 2.80 | 27.00 | 37.45 | 14.00 | 8.30 | 11.50 |
| S45          | 41.40 | 2.80 | 27.00 | 37.50 | 11.40 | 8.50 | 11.70 |
| S52          | 38.10 | 2.80 | 29.40 | 39.00 | 11.40 | 8.30 | 9.90  |
| S55          | 41.40 | 2.80 | 27.00 | 37.50 | 11.40 | 8.50 | 11.70 |
| S62          | 41.91 | 2.50 | 33.40 | 47.70 | 11.40 | 6.50 | 13.00 |
| S77          | 58.34 | 4.00 | 38.10 | 50.80 | 20.80 | 8.40 | 11.70 |
| S88          | 66.27 | 4.00 | 48.50 | 59.70 | 20.80 | 8.40 | 10.00 |

**A1 = Attachment one side only**

**K1 = Attachment both sides**

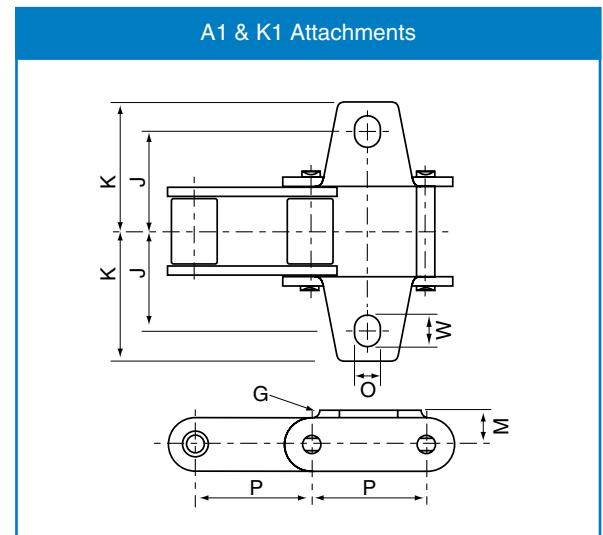


## 38.4 & CA Series A1 & K1 Attachments

| Chain number | P     | G    | J     | K     | M     | O     | W     |
|--------------|-------|------|-------|-------|-------|-------|-------|
| 38.4         | 38.40 | 2.50 | 29.00 | 41.50 | 15.40 | 9.00  |       |
| 38.4-V       | 38.40 | 3.00 | 28.75 | 41.00 | 15.40 | 9.00  |       |
| 38.4-VB      | 38.40 | 3.00 | 29.00 | 43.50 | 14.00 | 10.50 |       |
| CA550        | 41.40 | 2.80 | 26.25 | 38.10 | 12.70 | 8.30  | 10.00 |
| CA557        | 41.40 | 3.10 | 25.40 | 36.00 | 15.90 | 8.70  |       |

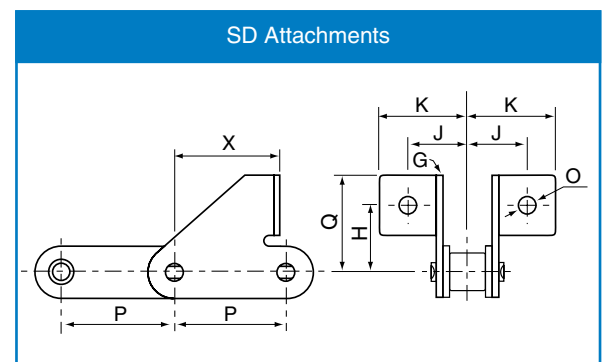
**A1 = Attachment one side only**

**K1 = Attachment both sides**



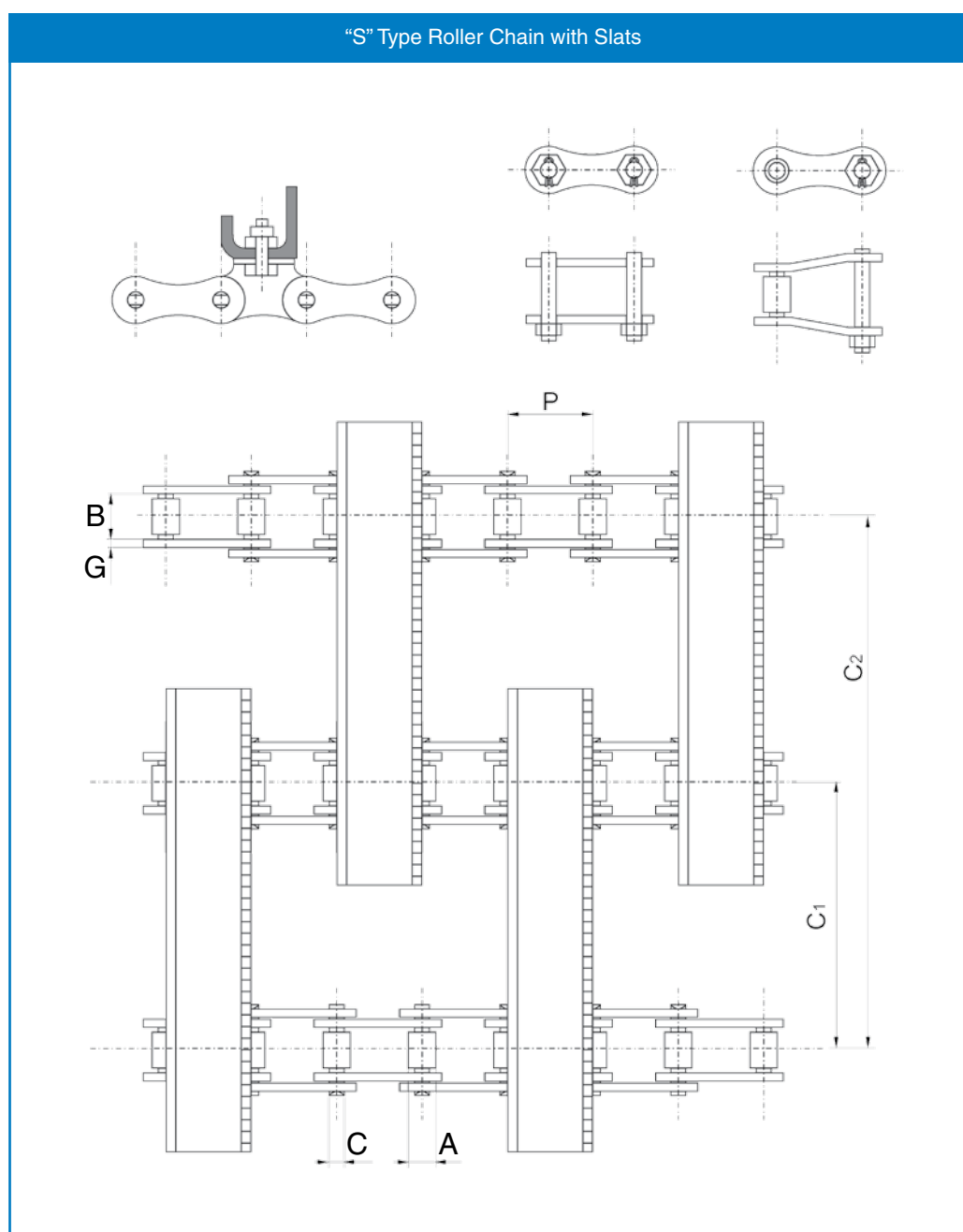
## S, 38.4 & CA Series SD Attachments

| Chain number | P     | G    | Q     | J     | K     | H     | X     | O    |
|--------------|-------|------|-------|-------|-------|-------|-------|------|
| S45          | 41.40 | 2.80 | 26.00 | 29.00 | 44.25 | 16.00 | 24.00 | 6.40 |
| S55          | 41.40 | 2.80 | 26.00 | 29.00 | 44.25 | 16.00 | 24.00 | 6.40 |
| 38.4         | 38.40 | 2.50 | 37.00 | 26.00 | 35.50 | 24.00 | 38.40 | 8.40 |
| 38.4-VB      | 38.40 | 3.00 | 34.00 | 26.00 | 35.50 | 25.00 | 32.40 | 6.50 |
| CA550        | 41.40 | 2.80 | 42.90 | 23.80 | 34.10 | 31.00 | 36.90 | 8.70 |



# Agricultural Chain Attachments

## “S” Type Roller Chain with Slats

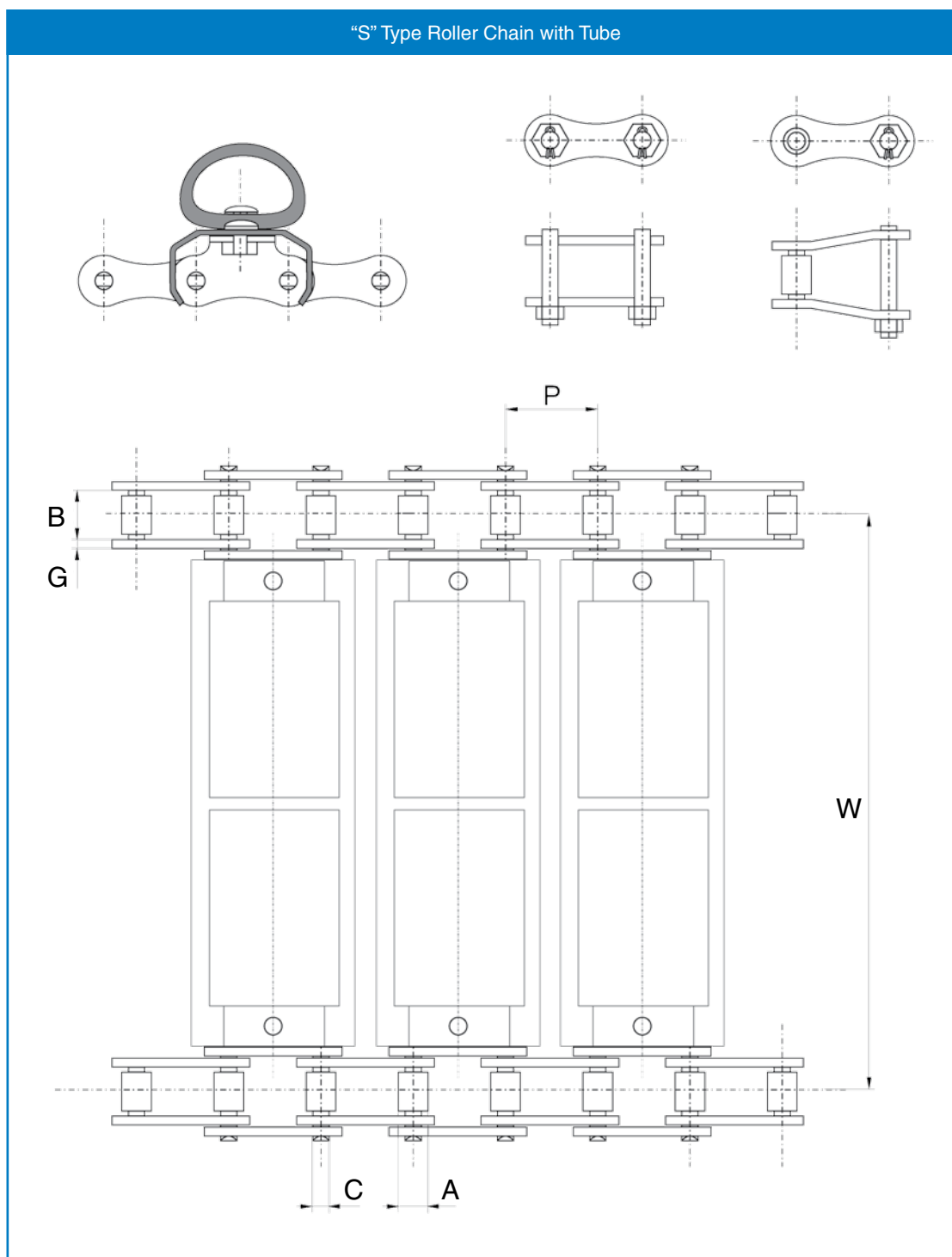


| Chain number | Pitch | Roller diameter | Width between inner plates | Pin diameter | Side plate thickness | Weight |      |      |
|--------------|-------|-----------------|----------------------------|--------------|----------------------|--------|------|------|
|              | P     | A               | B                          | C            | G                    | C1     | C2   | kg/m |
| S55X/TM      | 41.40 | 15.88           | 20.00                      | 8.28         | 3                    | 500    | 1000 | 24   |

**Note:** Attachment slat dimensions can vary according to customer requirements - Please provide required dimensions on enquiry

# Agricultural Chain Attachments

## “S” Type Roller Chain with Tube

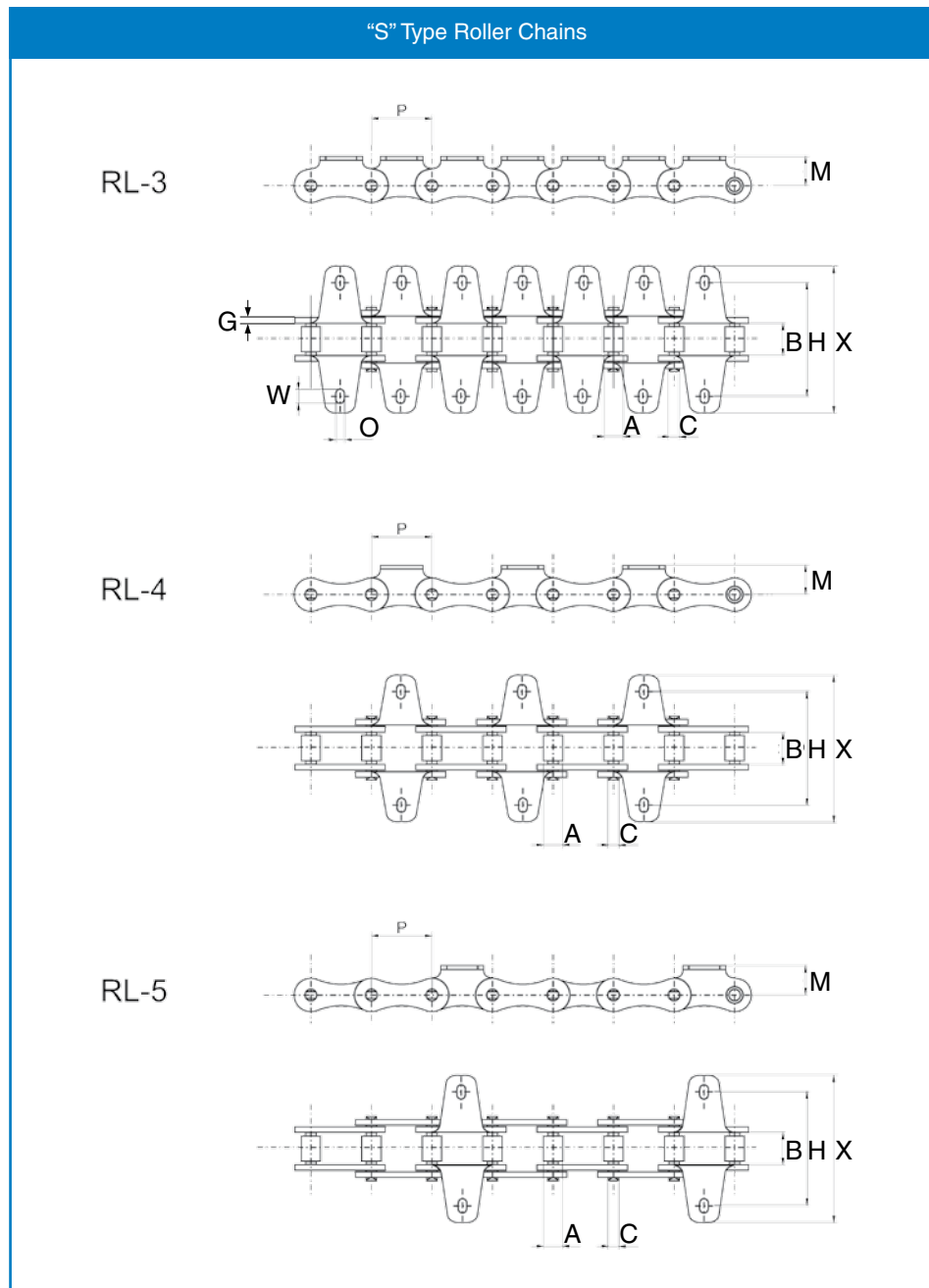


| Chain Number | Pitch | Roller diameter | Width between inner plates | Pin diameter | Side plate thickness |      |
|--------------|-------|-----------------|----------------------------|--------------|----------------------|------|
|              | P     | A               | B                          | C            | G                    | W    |
| S55X/TK-1    | 41.40 | 15.88           | 15.88                      | 8.28         | 3.0                  | 1372 |

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Agricultural Chain Attachments

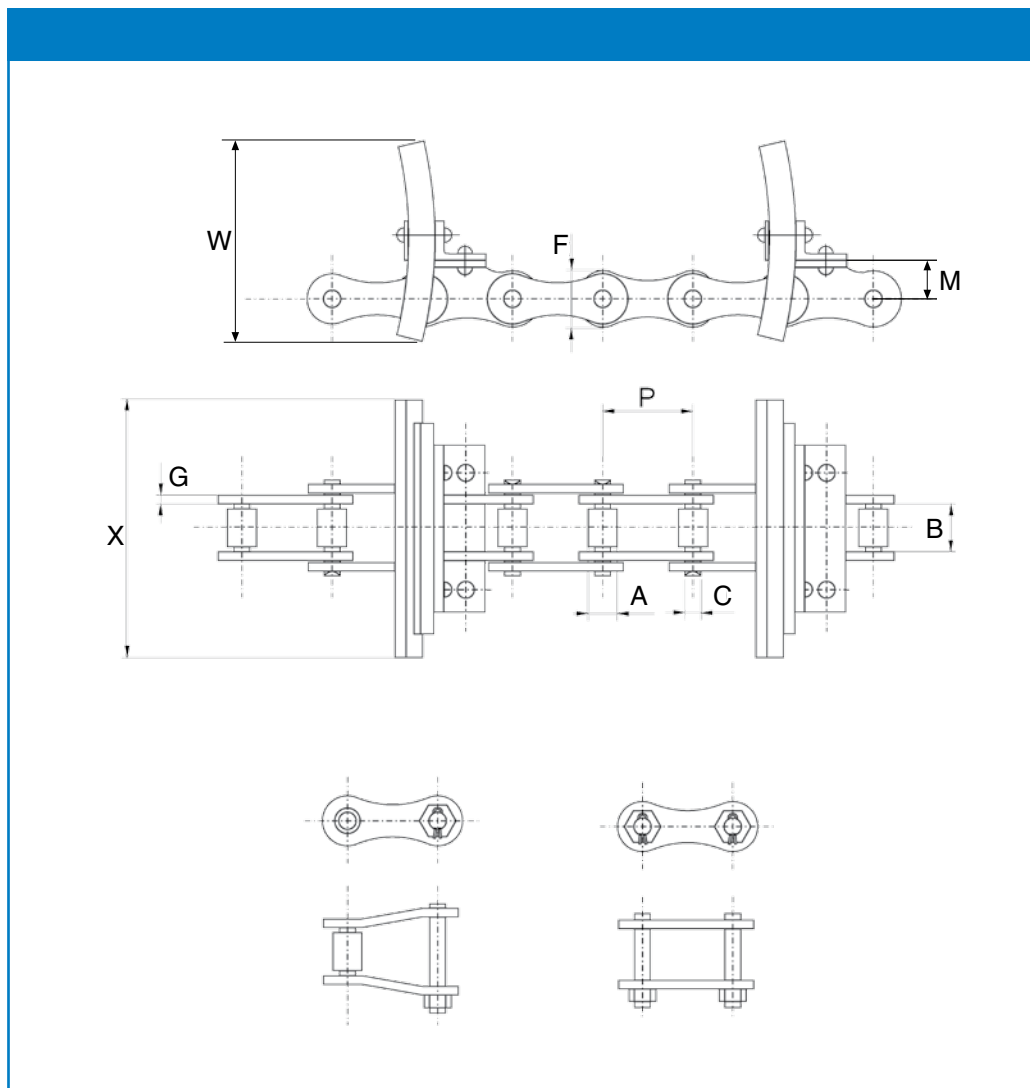
## “S” Type Roller Chains



| Chain number | Pitch | Roller diameter | Width between inner plates | Pin diameter | Side plate thickness | Attachment height |       |       |      |       | Average tensile strength |
|--------------|-------|-----------------|----------------------------|--------------|----------------------|-------------------|-------|-------|------|-------|--------------------------|
|              | P     | A               | B                          | C            | G                    | H                 | X     | M     | O    | W     | kN                       |
| S55X/RL-3    | 41.40 | 15.88           | 20.00                      | 8.28         | 3.00                 | 52.00             | 79.40 | 17.00 | 8.30 | 10.00 | 55.00                    |
| S55X/RL-4    | 41.40 | 15.88           | 20.00                      | 8.28         | 3.00                 | 52.00             | 79.40 | 17.00 | 8.30 | 10.00 | 55.00                    |
| S55X/RL-5    | 41.40 | 15.88           | 20.00                      | 8.28         | 3.00                 | 52.00             | 79.40 | 17.00 | 8.30 | 10.00 | 55.00                    |

# Agricultural Chain Attachments

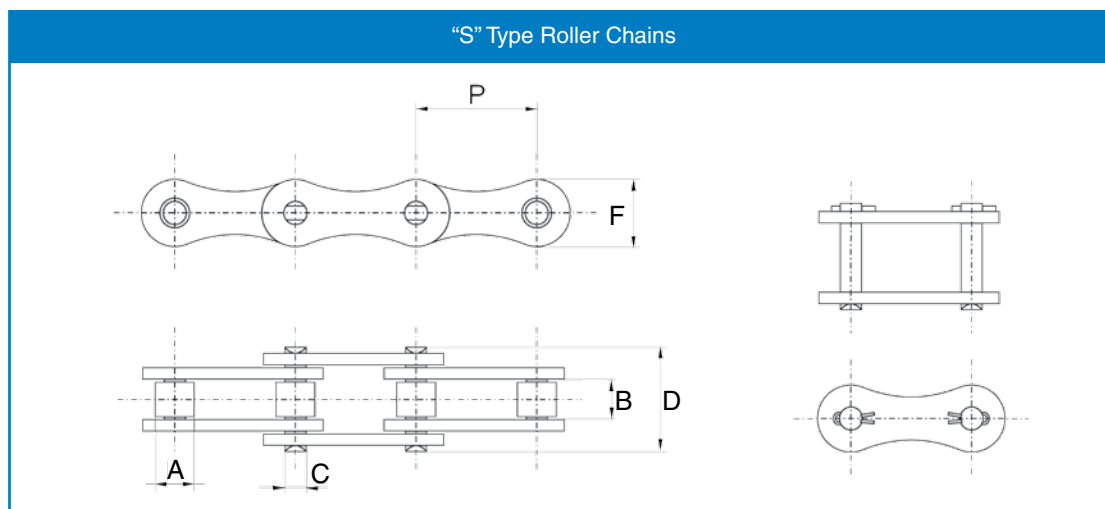
## “S” Type Roller Chains with Rubber Paddles



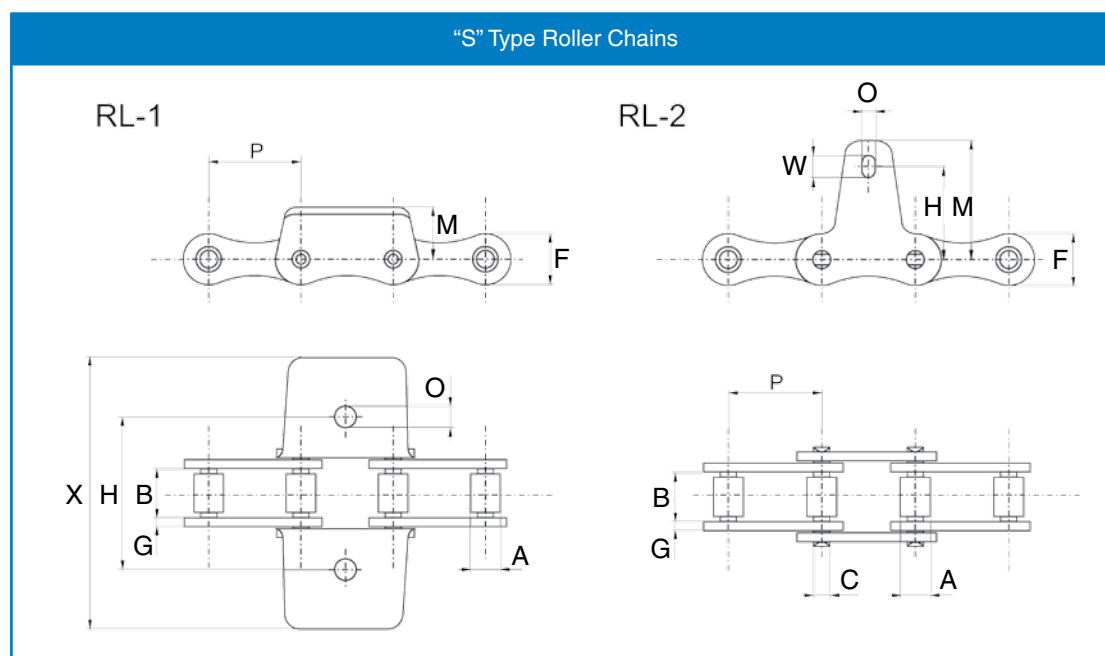
| Chain number | Pitch | Roller diameter | Width between inner plates | Pin diameter | Side plate height | Side plate thickness | Attachment height | Paddle width | Paddle height | Tensile strength | Weight |
|--------------|-------|-----------------|----------------------------|--------------|-------------------|----------------------|-------------------|--------------|---------------|------------------|--------|
|              | P     | A               | B                          | C            | F                 | G                    | M                 | X            | W             | kN               | kg/m   |
| S55X/TM -1   | 41.40 | 15.88           | 20.00                      | 8.28         | 20.00             | 3.00                 | 17.00             | 110.00       | 52.00         | 50.00            | 3.80   |
| S55X/TM -2   | 41.40 | 15.88           | 20.00                      | 8.28         | 20.00             | 3.00                 | 17.00             | 136.00       | 52.00         | 50.00            | 3.93   |
| S55X/TM -3   | 41.40 | 15.88           | 20.00                      | 8.28         | 20.00             | 3.00                 | 17.00             | 166.00       | 52.00         | 50.00            | 5.30   |

# Agricultural Chain Attachments

## “S” Type Roller Chains



| Chain     | Pitch | Roller diameter | Width between inner plates | Pin diameter | Side plate height | Pin length | Average tensile strength |
|-----------|-------|-----------------|----------------------------|--------------|-------------------|------------|--------------------------|
|           | P     | A               | B                          | C            | F                 | D          | kN                       |
| S55X/TM-1 | 41.40 | 15.88           | 20.00                      | 8.28         | 20.00             | 38.00      | 55.00                    |



| Chain     | Pitch | Roller diameter | Width between inner plates | Pin diameter | Side plate height | Side plate thickness | Attachment height |       |       |      | Average tensile strength |       |
|-----------|-------|-----------------|----------------------------|--------------|-------------------|----------------------|-------------------|-------|-------|------|--------------------------|-------|
|           | P     | A               | B                          | C            | F                 | G                    | H                 | X     | M     | O    | W                        | kN    |
| S55X RL-1 | 41.40 | 15.88           | 20.00                      | 8.28         | 20.00             | 3.00                 | 52.00             | 90.00 | 17.00 | 8.30 | -                        | 55.00 |
| S55X RL-2 | 41.40 | 15.88           | 20.00                      | 8.28         | 20.00             | 3.00                 | 23.70             | -     | 34.40 | 8.30 | 10.00                    | 55.00 |

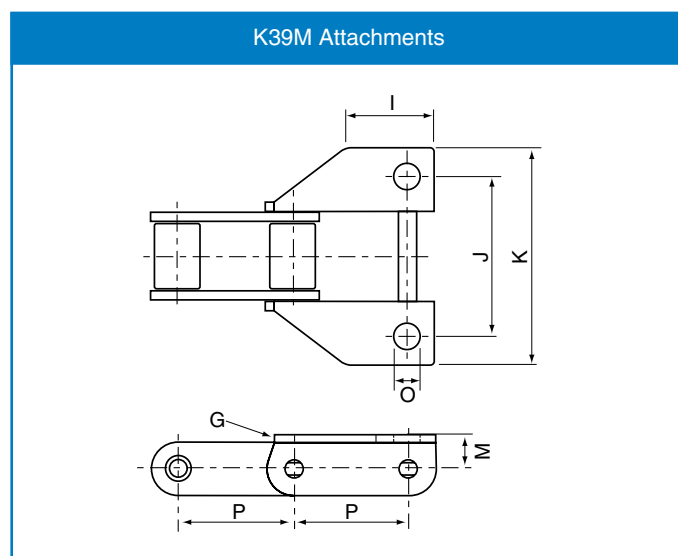
Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.



# Agricultural Chain Attachments

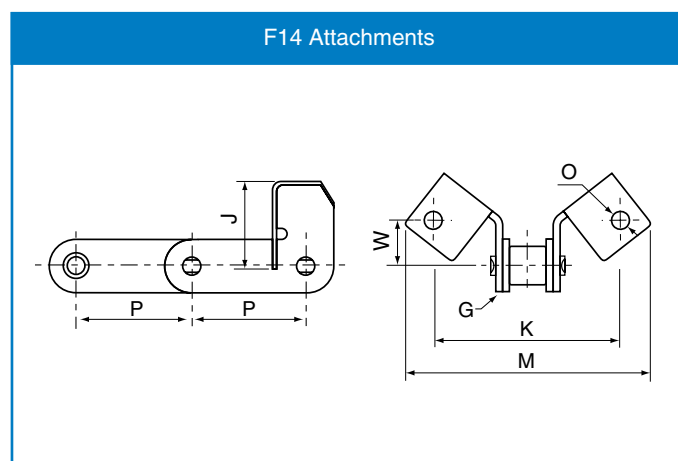
## CA Series K39M Attachments

| Chain number | P     | G    | I    | J     | K     | M     | O    |
|--------------|-------|------|------|-------|-------|-------|------|
| CA550        | 41.40 | 2.80 | 30.0 | 50.80 | 72.00 | 12.70 | 9.50 |
| CA557        | 41.40 | 3.10 | 38.1 | 53.94 | 76.20 | 14.60 | 9.90 |



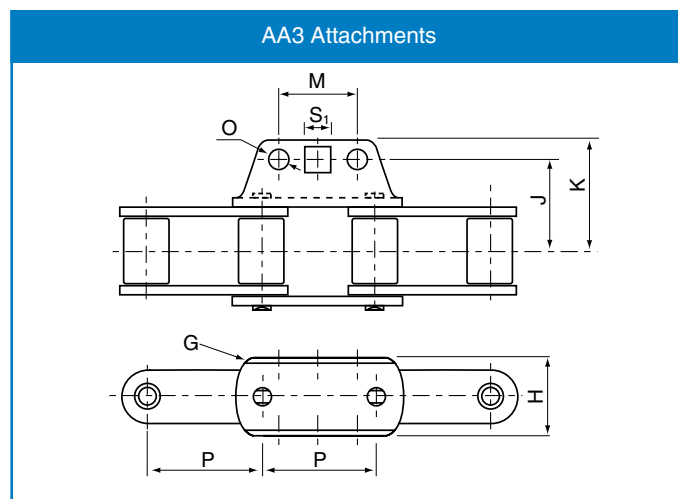
## CA Series F14 Attachments

| Chain number | P     | G    | J     | K     | M      | O    | W     |
|--------------|-------|------|-------|-------|--------|------|-------|
| CA550        | 41.40 | 2.80 | 31.75 | 79.40 | 101.60 | 8.33 | 15.90 |
| CA557        | 41.40 | 3.10 | 31.75 | 79.40 | 101.60 | 8.33 | 15.90 |



## CA Series AA3 Attachments

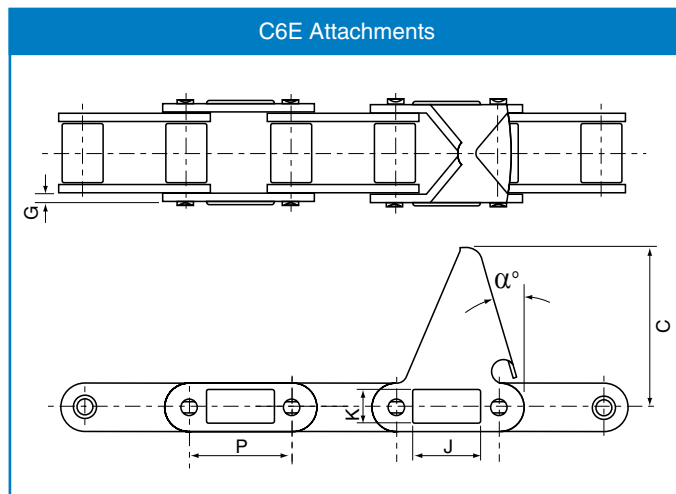
| Chain number | P     | G    | J     | K     | M     | H     | O    | S <sub>1</sub> |
|--------------|-------|------|-------|-------|-------|-------|------|----------------|
| CA557        | 41.40 | 3.10 | 31.90 | 43.29 | 30.20 | 31.06 | 8.20 | 9.73           |



# Agricultural Chain Attachments

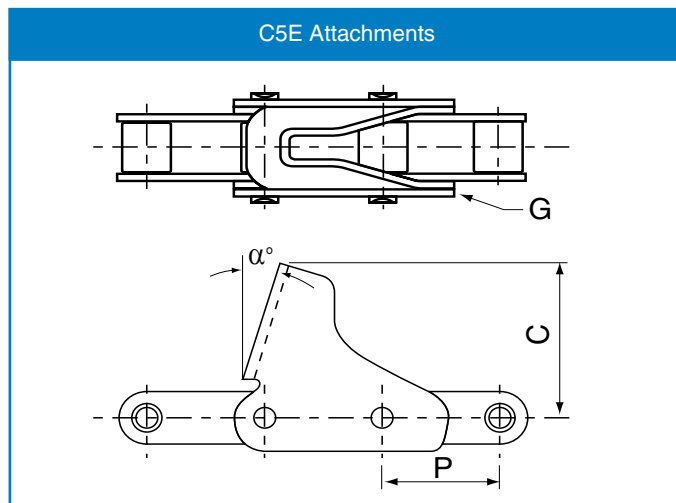
## CA Series C6E Attachments

| Chain number | P     | G    | C     | J     | K     | $\alpha^\circ$ |
|--------------|-------|------|-------|-------|-------|----------------|
| CA550        | 41.40 | 2.80 | 55.60 | 23.60 | 13.50 | 20.00          |
| CA555        | 41.40 | 3.10 | 63.50 | 23.60 | 13.50 | 15.00          |
| C2060H       | 38.10 | 3.25 | 63.50 | -     | -     | 22.50          |



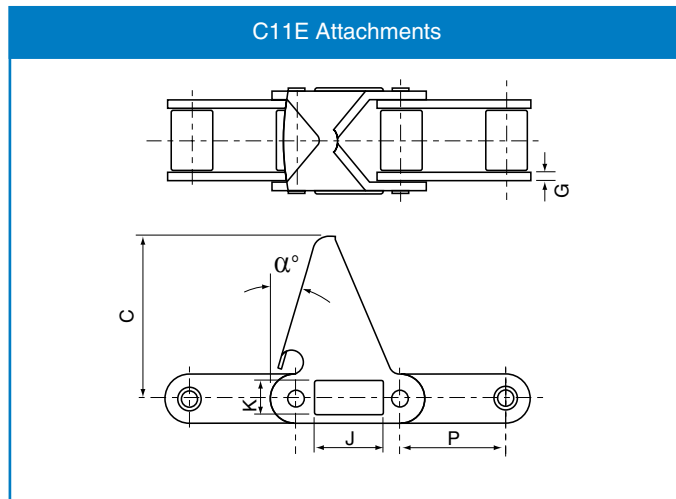
## CA Series C5E Attachments

| Chain number | P     | G    | C     | $\alpha^\circ$ |
|--------------|-------|------|-------|----------------|
| CA550        | 41.40 | 2.80 | 59.00 | 15.00          |
| CA555        | 41.40 | 3.10 | 57.15 | 15.00          |



## CA Series C11E Attachments

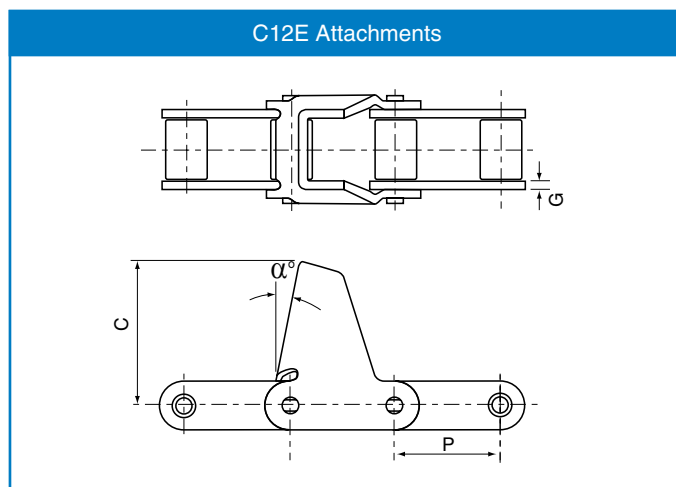
| Chain number | P     | G    | C     | J     | K     | $\alpha^\circ$ |
|--------------|-------|------|-------|-------|-------|----------------|
| CA550        | 41.40 | 2.80 | 59.00 | 23.60 | 13.50 | 15.00          |



# Agricultural Chain Attachments

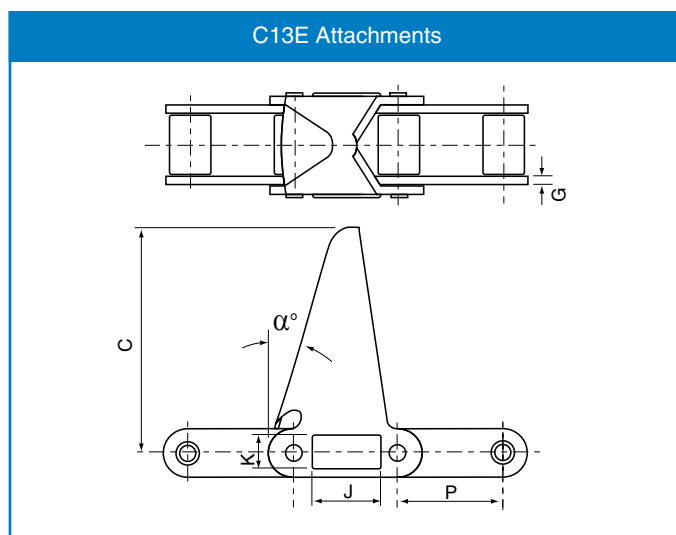
## CA Series C12E Attachments

| Chain number | P     | G    | C     | $\alpha^\circ$ |
|--------------|-------|------|-------|----------------|
| CA550        | 41.40 | 2.80 | 59.00 | 9.00           |



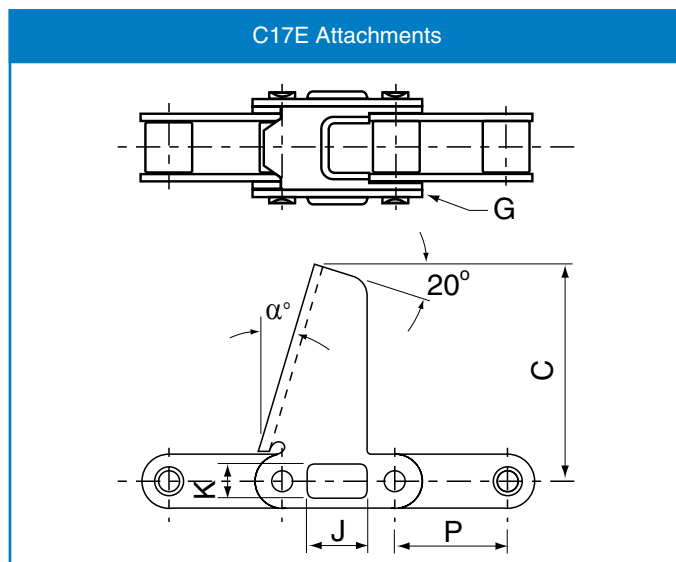
## CA Series C13E Attachments

| Chain number | P     | G    | C     | J     | K     | $\alpha^\circ$ |
|--------------|-------|------|-------|-------|-------|----------------|
| CA550        | 41.40 | 2.80 | 92.10 | 23.60 | 13.50 | 15.00          |



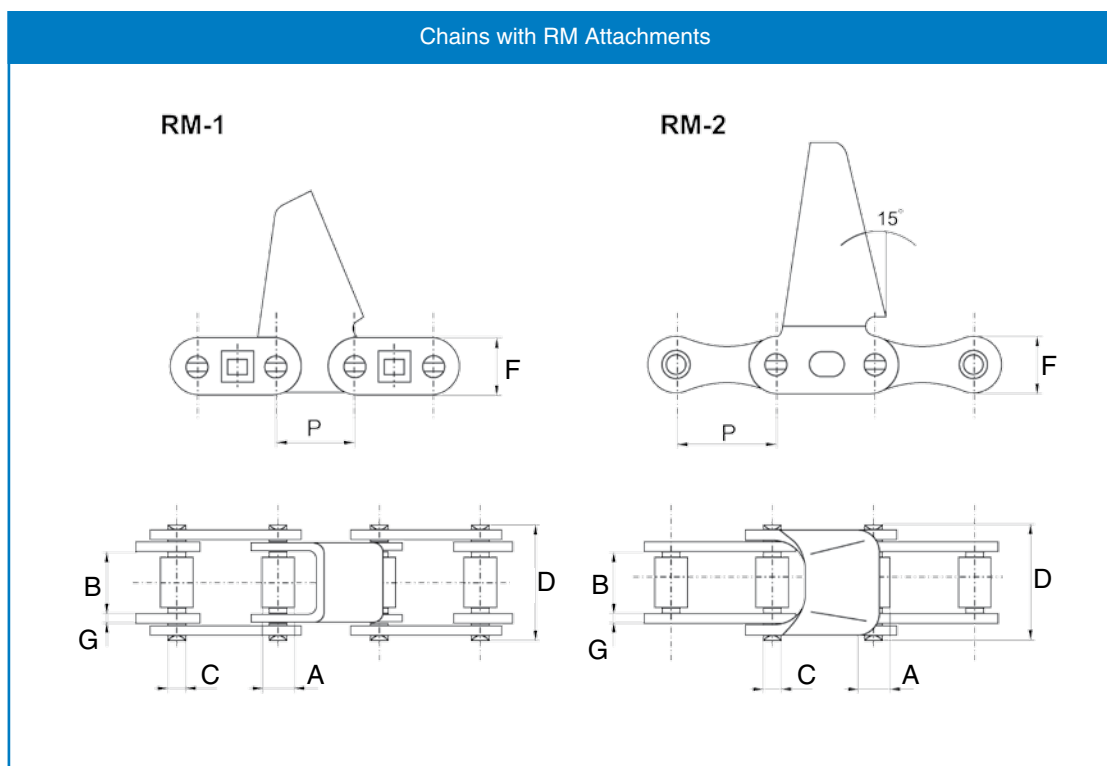
## CA Series C17E Attachments

| Chain number | P     | G    | C     | J     | K     | $\alpha^\circ$ |
|--------------|-------|------|-------|-------|-------|----------------|
| CA550        | 41.40 | 2.80 | 76.20 | 23.60 | 13.50 | 15.00          |



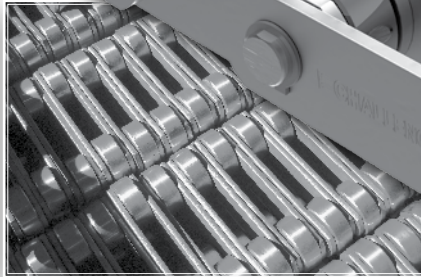
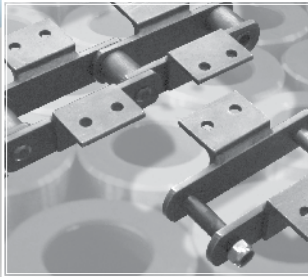
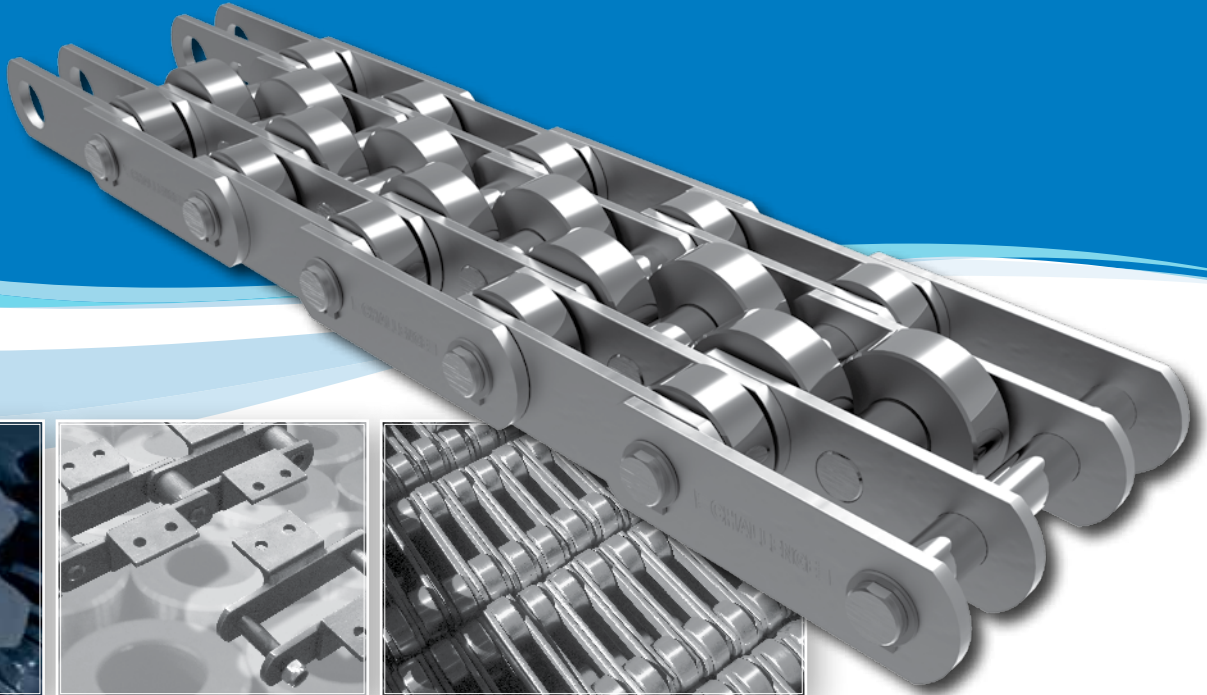
# Agricultural Chain Attachments

## Chains with RM Attachments



| Model | Pitch | Roller diameter | Width between inner plates | Pin diameter | Pin length | Side plate height | Plate thickness | Minimum tensile strength |
|-------|-------|-----------------|----------------------------|--------------|------------|-------------------|-----------------|--------------------------|
|       | P     | A               | B                          | C            | D          | F                 | G               | kN                       |
| RM1   | 30.00 | 15.88           | 20.00                      | 8.28         | 35.80      | 20.70             | 3.00            | 40.00                    |
| RM2   | 30.00 | 15.88           | 20.00                      | 8.28         | 38.00      | 20.00             | 3.00            | 40.00                    |

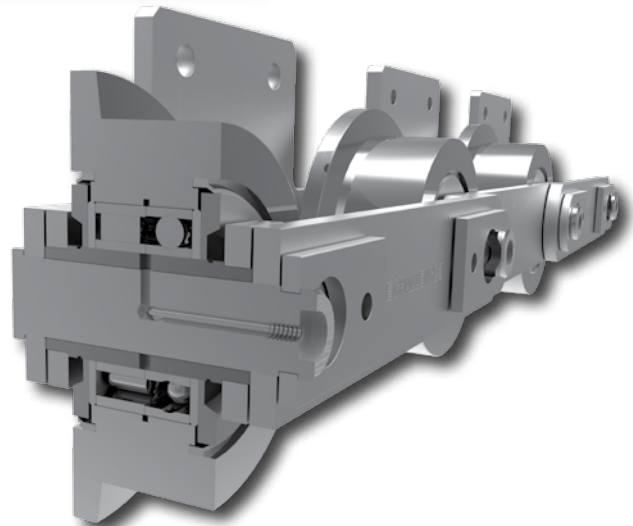
# Conveyor Chains



## Here's a Challenge:

**European-quality Conveyor chains manufactured in our dedicated plant in the industrialised east coast of China supplying a global market.**

- Specialists in the production of spin riveted chains
- High grade induction hardened alloy steel pins
- State-of-the-art European machines giving the best rivet on any standard chain



# Conveyor Chain

## The Benefits of Challenge Spin Riveted Conveyor Chain

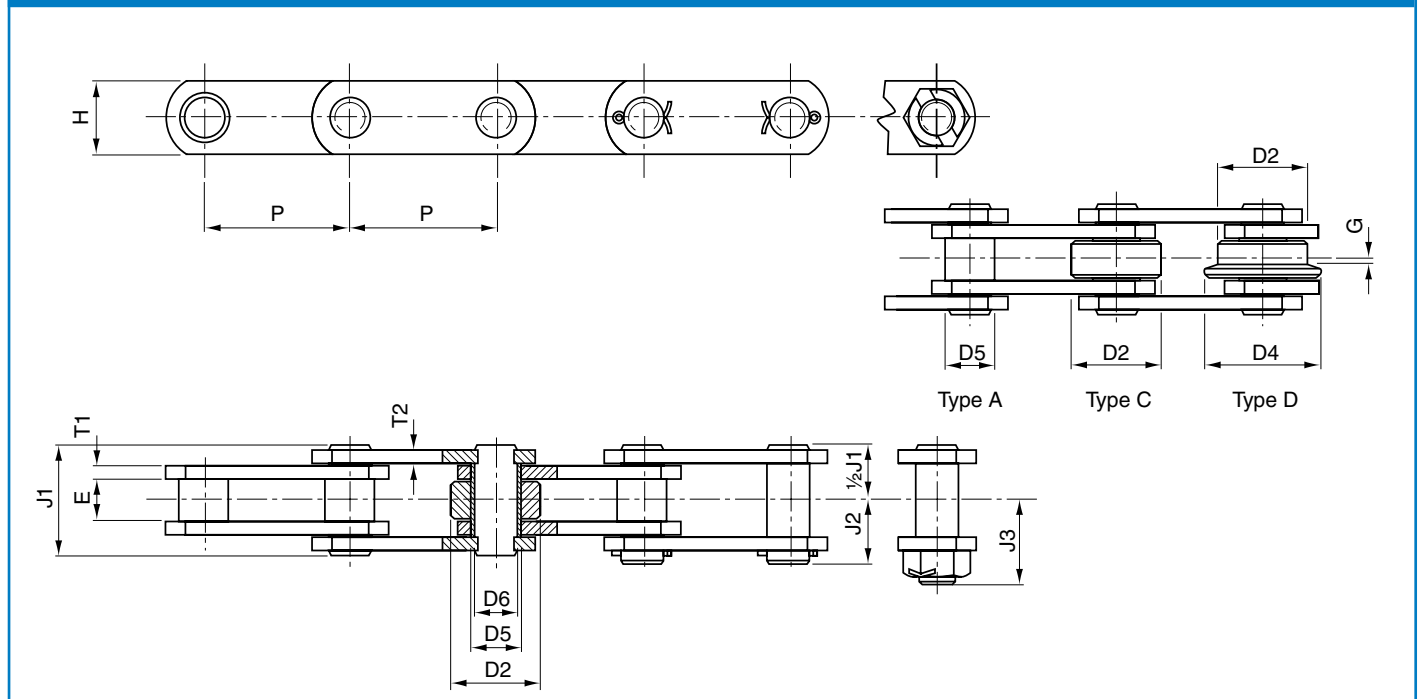
- **Material** – High quality steels used throughout
- **Link plates cropped from high carbon cold drawn steel**  
To avoid internal stresses associated with guillotined steel, Challenge produces all plates from high tolerance, on size, cold drawn steel bars resulting in a plate better able to withstand fatigue and shock loads.
- **Bushes with location shoulders and interference fit**  
For precise assembly; control on inner width and prevention of bush rotation. Bush shoulder length extended to form clearance between inner and outer plates and provide uniform lubrication; increased strength and life. This reduces the possibility of chain seizure.
- **Case Hardened Alloy steel bushes precision machined from seamless tube**  
Ensuring minimum distortion and superior concentricity.
- **Optional Stainless Steel or Nitride treated liner bushes**
- **Hardened Rollers with grinding**  
Grinding the outer diameter gives excellent wear resistance and good load carrying qualities plus reduced wear on sprockets and better visual result.
- **Alloy Steel Seamless Tube used for all Hollow Pins;**  
For wear and shock resistance.  
Spin Riveted (not coned) for stronger rivet and reduced pin-end stress.
- **Pins with location shoulders and interference fit**  
Precise positioning of outer plates adds to strength whilst ensuring accuracy of attachment positioning..
- **Spin Riveted Induction Hardened Pins in Alloy Steel**  
For optimum life and the strongest rivet in any standard chain..
- **Holes precision punched on dedicated progression tooling**  
Guarantees consistently high tolerance pitch control and strong, fatigue resistant chain.
- **Attachment and options**  
CNC welded and integral attachments, special bushes, bearings. Zinc and Nickel plated parts, molykoted pins, bushes, and rollers. Plastic rollers, flanged rollers, hardened plates, stainless parts, liner bushes etc. All specials produced in highest quality - fast turnaround.
- **Shot peened to produce a strong surface and reduce fatigue**
- **Challenge has invested heavily in CNC controlled machinery for optimum batch component conformity.**
- **Attachment plates jig assembled maintains position and squareness.**

# Conveyor Chain

## Z Series

## BS Conveyor Chain (BS 4116 Part 4)

Z Series Solid Pin



## Solid Pin

| Chain number | Minimum Breaking Load, lbf | Pitch Inches P | Pitch mm P | E    | H    | T1  | T2  | J1   | J2   | J3 | D2    | D4    | D5   | D6    | G   | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|----------------------------|----------------|------------|------|------|-----|-----|------|------|----|-------|-------|------|-------|-----|------------------|----------------------|----------------------|
| Z40          | 7500                       | 2.0            | 50.8       | 15.2 | 25.4 | 3.8 | 3.8 | 39.5 | 22   | 29 | 31.75 | 40    | 19   | 14    | 2.5 | 40               | 50                   | 4                    |
| "            | "                          | 2.5            | 63.5       | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 3.5                  |
| "            | "                          | 3.0            | 76.2       | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 3.2                  |
| "            | "                          | 3.5            | 88.9       | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 3                    |
| "            | "                          | 4.0            | 101.6      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 2.8                  |
| "            | "                          | 5.0            | 127.0      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 2.6                  |
| "            | "                          | 6.0            | 152.4      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 2.4                  |
| Z100         | 15000                      | 3.0            | 76.2       | 19   | 38.1 | 5.1 | 3.8 | 46   | 28   | 38 | 47.63 | 60    | 25.4 | 19    | 3.5 | 100              | 130                  | 7.7                  |
| "            | "                          | 3.5            | 88.9       | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 7                    |
| "            | "                          | 4.0            | 101.6      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 6.5                  |
| "            | "                          | 5.0            | 127.0      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 5.8                  |
| "            | "                          | 6.0            | 152.4      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 5.3                  |
| "            | "                          | 7.0            | 177.8      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 5                    |
| "            | "                          | 8.0            | 203.2      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 4.7                  |
| Z160         | 30000                      | 4.0            | 101.6      | 25.4 | 50.8 | 7.1 | 5.1 | 59   | 34.5 | 49 | 66.7  | 82    | 34.9 | 26.97 | 3.5 | 156              | 200                  | 14.3                 |
| "            | "                          | 5.0            | 127.0      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 12.5                 |
| "            | "                          | 6.0            | 152.4      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 11.3                 |
| "            | "                          | 7.0            | 177.8      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 10.5                 |
| "            | "                          | 8.0            | 203.2      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 9.8                  |
| "            | "                          | 9.0            | 228.6      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 9.3                  |
| "            | "                          | 10.0           | 254.0      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 9                    |
| Z300         | 45000                      | 6.0            | 152.4      | 38   | 65   | 10  | 8   | 82.5 | 47   | 65 | 88.9  | 107.9 | 41.3 | 31.75 | 8.5 | 300              | 380                  | 24.3                 |
| "            | "                          | 7.0            | 177.8      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 22                   |
| "            | "                          | 8.0            | 203.2      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 21                   |
| "            | "                          | 10.0           | 254.0      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 18                   |
| "            | "                          | 12.0           | 304.8      | "    | "    | "   | "   | "    | "    | "  | "     | "     | "    | "     | "   | "                | "                    | 16.5                 |

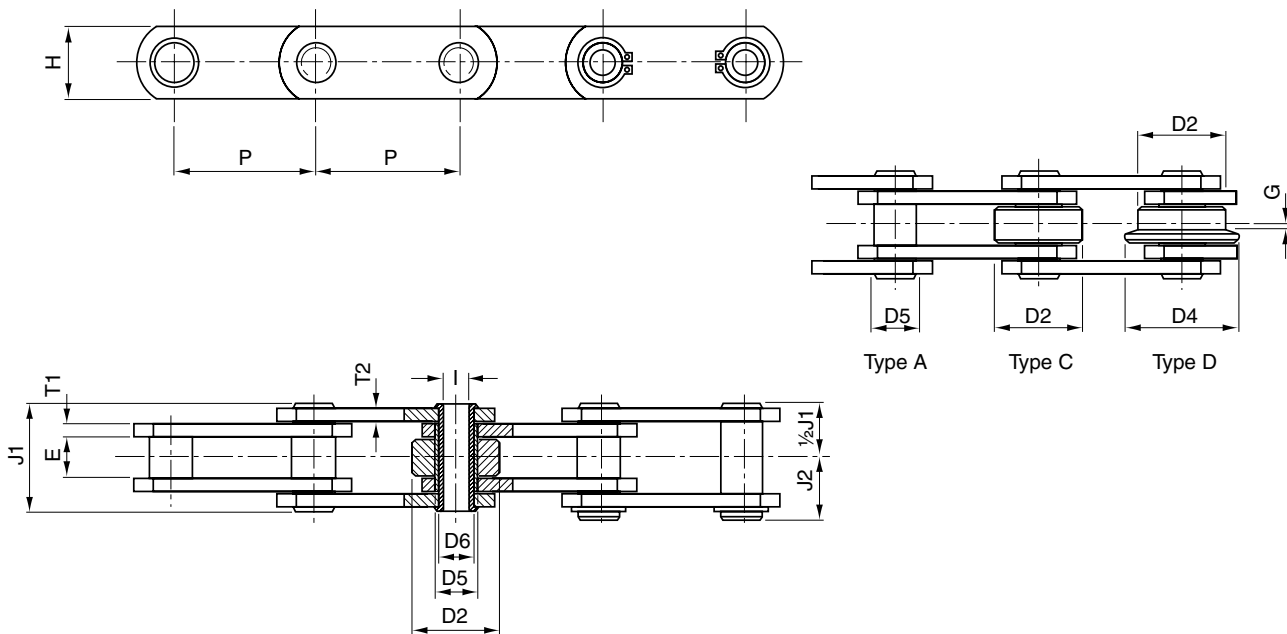


# Conveyor Chain

## ZC Series

## BS Conveyor Chain (BS 4116 Part 4)

ZC Series Hollow Pin



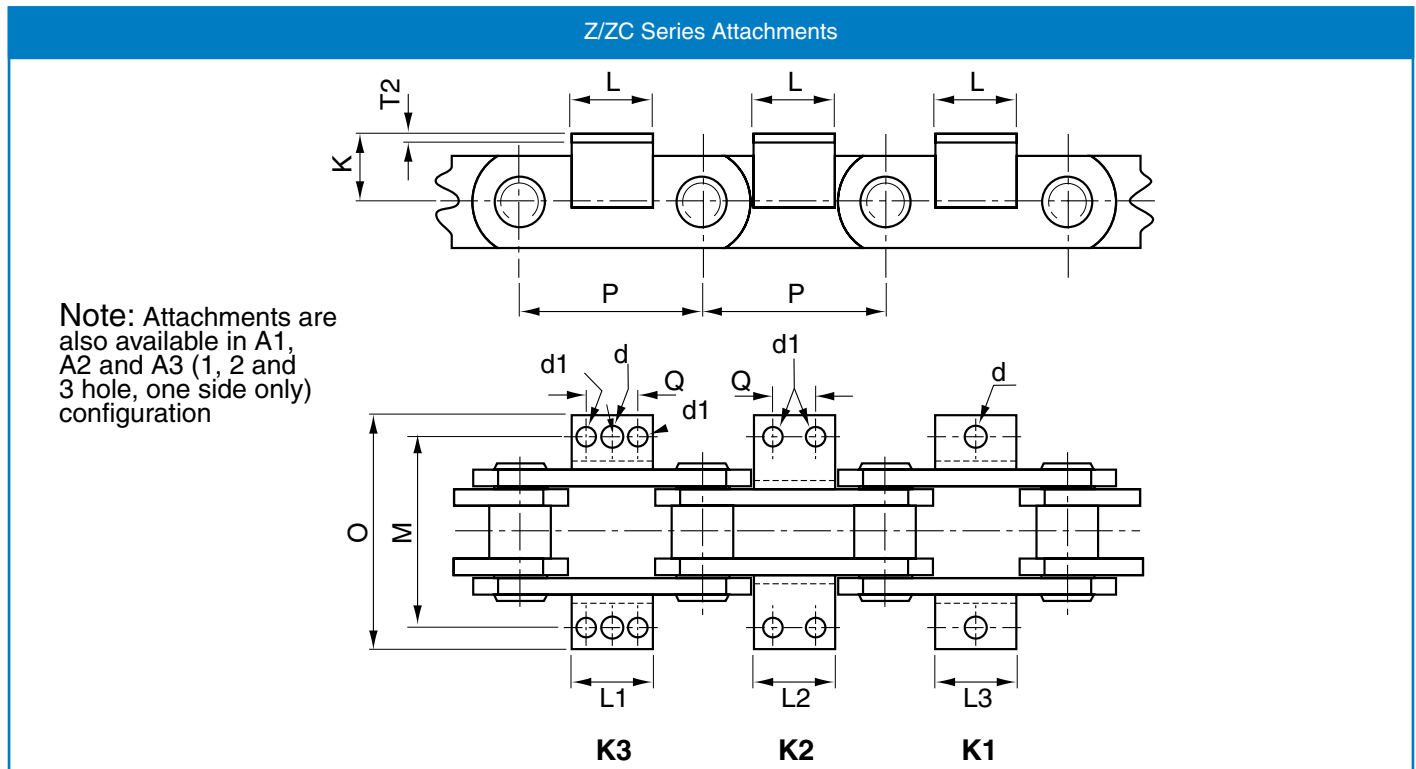
## Hollow Pin

| Chain number | Minimum Breaking Load, lbf | Pitch Inches P | Pitch mm P | E    | I    | H    | T1  | T2  | J1   | J2   | D2    | D4    | D5   | D6    | G   | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|----------------------------|----------------|------------|------|------|------|-----|-----|------|------|-------|-------|------|-------|-----|------------------|----------------------|----------------------|
| Z21          | 4500                       | 1.5            | 38.1       | 12.7 | 6.5  | 18   | 2.5 | 2.5 | 26   | 14.5 | 31.75 | /     | 11   | 9     | /   | 21               | /                    | 2.2                  |
| "            | "                          | 2.0            | 50.8       | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 1.7                  |
| "            | "                          | 2.5            | 63.5       | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 1.6                  |
| "            | "                          | 3.0            | 76.2       | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 1.4                  |
| Z40          | 6000                       | 2.0            | 50.8       | 15.2 | 10.3 | 25.4 | 3.8 | 3.8 | 37.2 | 21.5 | 31.75 | 40    | 19   | 14    | 2.5 | 40               | 50                   | 3.6                  |
| "            | "                          | 2.5            | 63.5       | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 3.2                  |
| "            | "                          | 3.0            | 76.2       | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 3.0                  |
| "            | "                          | 3.5            | 88.9       | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 2.8                  |
| "            | "                          | 4.0            | 101.6      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 2.6                  |
| "            | "                          | 5.0            | 127.0      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 2.4                  |
| "            | "                          | 6.0            | 152.4      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 2.3                  |
| Z60          | 12000                      | 3.0            | 76.2       | 19   | 13.2 | 38.1 | 5.1 | 3.8 | 44   | 24.5 | 47.63 | 60    | 25.4 | 19    | 3.5 | 60               | 120                  | 7.0                  |
| "            | "                          | 3.5            | 88.9       | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 6.4                  |
| "            | "                          | 4.0            | 101.6      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 6.0                  |
| "            | "                          | 5.0            | 127.0      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 5.3                  |
| "            | "                          | 6.0            | 152.4      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 4.9                  |
| "            | "                          | 7.0            | 177.8      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 4.6                  |
| "            | "                          | 8.0            | 203.2      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 4.4                  |
| Z150         | 24000                      | 4.0            | 101.6      | 25.4 | 19.6 | 50.8 | 7.1 | 5.1 | 57   | 32   | 66.7  | 82    | 34.9 | 26.97 | 3.5 | 150              | 190                  | 12.8                 |
| "            | "                          | 5.0            | 127.0      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 11.3                 |
| "            | "                          | 6.0            | 152.4      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 11.0                 |
| "            | "                          | 7.0            | 177.8      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 9.5                  |
| "            | "                          | 8.0            | 203.2      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 9.0                  |
| "            | "                          | 9.0            | 228.6      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 8.6                  |
| "            | "                          | 10.0           | 254.0      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 8.2                  |
| Z300         | 36000                      | 6.0            | 152.4      | 38   | 23   | 65   | 10  | 8   | 83   | 44   | 88.9  | 107.9 | 41.3 | 31.75 | 8.5 | 300              | 380                  | 22.3                 |
| "            | "                          | 7.0            | 177.8      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 20.2                 |
| "            | "                          | 8.0            | 203.2      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 18.8                 |
| "            | "                          | 10.0           | 254.0      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 16.4                 |
| "            | "                          | 12.0           | 304.8      | "    | "    | "    | "   | "   | "    | "    | "     | "     | "    | "     | "   | "                | "                    | 15.2                 |

# Conveyor Chain Attachments

## Z/ZC Series Attachments

## BS Conveyor Chain (BS 4116 Part 4)



## Conveyor Attachments

| Chain Number | Minimum Breaking Load lbf | Pitch Inches P | Pitch mm P | Attachment Type | K    | M    | L1    | L2    | L3    | d    | d1   | O   | Q      | Average Weight (Each) kg |
|--------------|---------------------------|----------------|------------|-----------------|------|------|-------|-------|-------|------|------|-----|--------|--------------------------|
| ZC40/Z40     | 6000/7500                 | 2.0            | 50.8       | K1              | 19   | 76.2 | 19.0  | -     | -     | 10.6 | -    | 129 | -      | 0.10                     |
| "            | "                         | 2.5            | 63.5       | "               | "    | "    | 19.0  | -     | -     | "    | -    | 112 | -      | 0.10                     |
| "            | "                         | 3.0            | 76.2       | "               | "    | "    | 28.0  | -     | -     | "    | -    | 136 | -      | 0.10                     |
| "            | "                         | 3.5            | 88.9       | "               | "    | "    | 28.0  | -     | -     | "    | -    | 112 | -      | 0.10                     |
| "            | "                         | 4.0            | 101.6      | K1,K2,K3        | "    | "    | 56.0  | 56.0  | 64.0  | "    | 9.2  | 110 | 31.8   | 0.10                     |
| "            | "                         | 5.0            | 127.0      | "               | "    | "    | 56.0  | 56.0  | 85.0  | "    | "    | 112 | 31.8   | 0.20                     |
| "            | "                         | 6.0            | 152.4      | "               | "    | "    | 83.8  | 83.8  | 88.0  | "    | "    | 112 | 57.2   | 0.20                     |
| ZC100/Z100   | 12000/15000               | 3.0            | 76.2       | K1              | 31.8 | 88.9 | 35.0  | -     | -     | 14   | -    | 130 | -      | 0.12                     |
| "            | "                         | 3.5            | 88.9       | "               | "    | "    | 35.0  | -     | -     | "    | -    | "   | -      | 0.12                     |
| "            | "                         | 4.0            | 101.6      | K1,K2,K3        | "    | "    | 35.0  | 56.0  | 64.0  | "    | 11   | "   | 31.8   | 0.10                     |
| "            | "                         | 5.0            | 127.0      | "               | "    | "    | 56.0  | 56.0  | 64.0  | "    | "    | "   | 31.8   | 0.30                     |
| "            | "                         | 6.0            | 152.4      | "               | "    | "    | 56.0  | 84.0  | 90.0  | "    | "    | "   | 57.2   | 0.32                     |
| "            | "                         | 7.0            | 177.8      | "               | "    | "    | 56.0  | 127.0 | 130.0 | "    | "    | "   | 89     | 0.40                     |
| "            | "                         | 8.0            | 203.2      | "               | "    | "    | 56.0  | 127.0 | 130.0 | "    | "    | "   | 89     | 0.40                     |
| ZC160/Z160   | 24000/30000               | 5.0            | 127.0      | K1,K2           | 38.1 | 108  | 56.0  | 56.0  | -     | -    | 12.7 | -   | 31.7   | 0.30                     |
| "            | "                         | 6.0            | 152.4      | "               | "    | 7.1  | "     | 84.0  | -     | -    | "    | 154 | 57.2   | 0.38                     |
| "            | "                         | 7.0            | 177.8      | "               | "    | 7.1  | "     | 108.0 | -     | -    | "    | "   | 69.85  | 0.38                     |
| "            | "                         | 8.0            | 203.2      | "               | "    | 7.1  | "     | 127.0 | -     | -    | "    | "   | 88.9   | 0.60                     |
| "            | "                         | 9.0            | 228.6      | "               | "    | 7.1  | "     | 168.0 | -     | -    | "    | "   | 133.35 | 0.69                     |
| "            | "                         | 10.0           | 254.0      | "               | "    | 7.1  | "     | 168.0 | -     | -    | "    | "   | 133.35 | 0.75                     |
| ZC300/Z300   | 36000/45000               | 6.0            | 152.4      | K1              | 65   | 10   | 70.0  |       |       | 17.0 | /    | 200 | 38.1   | 0.50                     |
| "            | "                         | 7.0            | 177.8      | "               | "    | "    | 70.0  |       |       | "    | /    | "   | 38.1   | 0.50                     |
| "            | "                         | 8.0            | 203.2      | K1,K2           | "    | "    | 100.0 |       |       | "    | 14   | "   | 76.2   | 0.70                     |
| "            | "                         | 10.0           | 254.0      | "               | "    | "    | 152.4 |       |       | "    | "    | "   | 90     | 0.90                     |
| "            | "                         | 12.0           | 304.8      | "               | "    | "    | 225.0 |       |       | "    | "    | "   | 190    | 1.60                     |
| Z300/60      | 60000                     | 6.0            | 152.4      | K1              | 65   | 10   | 70.0  |       |       | 17.0 | /    | 200 | 38.1   | 0.50                     |
| "            | "                         | 7.0            | 177.8      | "               | "    | "    | 70.0  |       |       | "    | /    | "   | 38.1   | 0.50                     |
| "            | "                         | 8.0            | 203.2      | K1,K2           | "    | "    | 100.0 |       |       | "    | 14   | "   | 76.2   | 0.70                     |
| "            | "                         | 10.0           | 254.0      | "               | "    | "    | 152.4 |       |       | "    | "    | "   | 90     | 0.90                     |
| "            | "                         | 12.0           | 304.8      | "               | "    | "    | 225.0 |       |       | "    | "    | "   | 190    | 1.60                     |

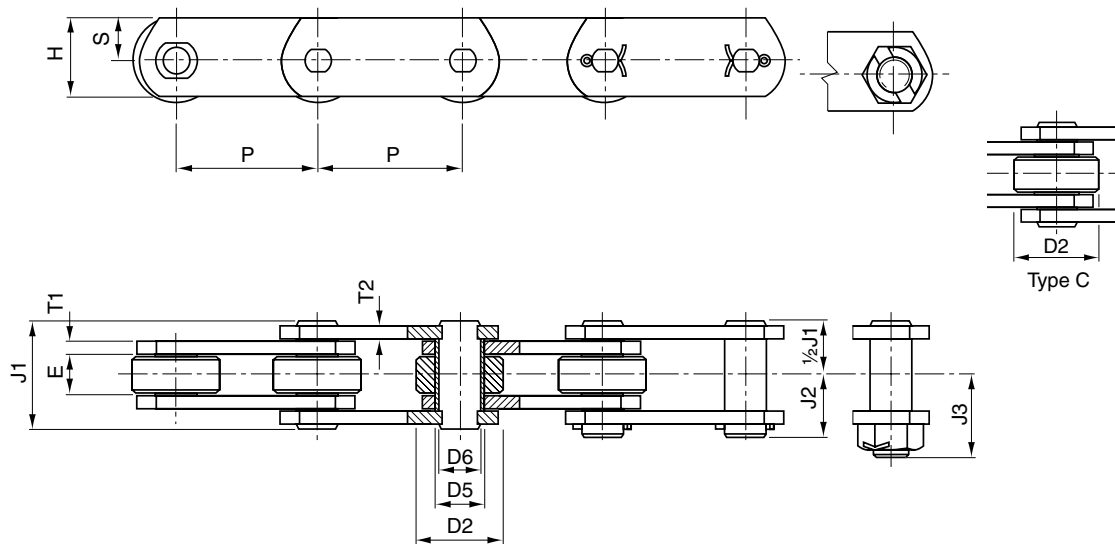
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Conveyor Chain

## ZE Series

## BS Conveyor Chain (BS 4116 Part 4)

ZE Series Deep Link



## Deep Link

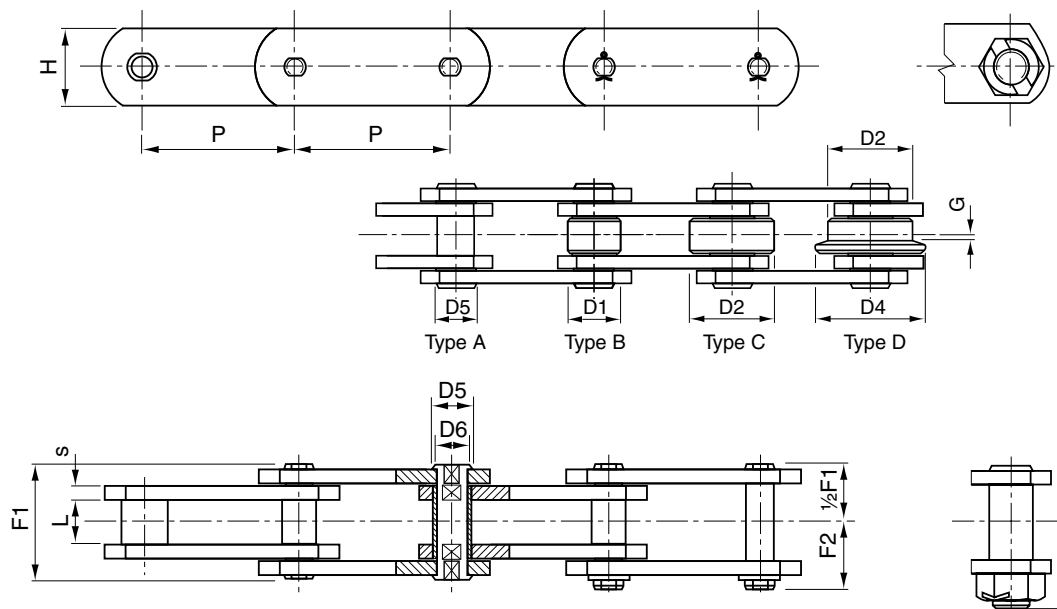
| Chain Number | Minimum Breaking Load, lbf | Pitch Inches P | Pitch mm P | E    | H    | S  | T1  | T2  | J1   | J2   | J3 | D2    | D5   | D6    | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|----------------------------|----------------|------------|------|------|----|-----|-----|------|------|----|-------|------|-------|------------------|----------------------|----------------------|
| ZE40         | 7500                       | 2.0            | 50.8       | 15.2 | 38.1 | 27 | 3.8 | 3.8 | 39.5 | 22   | 29 | 31.75 | 19   | 14    | 40               | 60                   | 5.0                  |
| "            | "                          | 2.5            | 63.5       | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 4.6                  |
| "            | "                          | 3.0            | 76.2       | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 4.2                  |
| "            | "                          | 3.5            | 88.9       | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 4.0                  |
| "            | "                          | 4.0            | 101.6      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 3.8                  |
| "            | "                          | 5.0            | 127.0      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 3.5                  |
| "            | "                          | 6.0            | 152.4      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 3.3                  |
| ZE100        | 15000                      | 3.0            | 76.2       | 19   | 50.8 | 30 | 5.1 | 3.8 | 46   | 28   | 38 | 47.63 | 25.4 | 19    | 100              | 160                  | 8.9                  |
| "            | "                          | 3.5            | 88.9       | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 8.4                  |
| "            | "                          | 4.0            | 101.6      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 7.6                  |
| "            | "                          | 5.0            | 127.0      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 6.8                  |
| "            | "                          | 6.0            | 152.4      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 6.3                  |
| "            | "                          | 7.0            | 177.8      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 5.9                  |
| "            | "                          | 8.0            | 203.2      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 5.7                  |
| ZE160        | 30000                      | 4.0            | 101.6      | 25.4 | 70   | 45 | 7.1 | 5.1 | 59   | 34.5 | 49 | 66.7  | 34.9 | 26.97 | 156              | 200                  | 17.5                 |
| "            | "                          | 5.0            | 127.0      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 15.4                 |
| "            | "                          | 6.0            | 152.4      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 13.8                 |
| "            | "                          | 7.0            | 177.8      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 12.8                 |
| "            | "                          | 8.0            | 203.2      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 12.0                 |
| "            | "                          | 9.0            | 228.6      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 11.3                 |
| "            | "                          | 10.0           | 254.0      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 10.5                 |
| ZE300        | 45000                      | 6.0            | 152.4      | 38   | 90   | 60 | 10  | 8   | 82.5 | 47   | 65 | 88.9  | 41.3 | 31.75 | 300              | 380                  | 32.0                 |
| "            | "                          | 7.0            | 177.8      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 29.5                 |
| "            | "                          | 8.0            | 203.2      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 27.0                 |
| "            | "                          | 10.0           | 254.0      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 24.5                 |
| "            | "                          | 12.0           | 304.8      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 23.0                 |
| ZE300/60     | 60000                      | 6.0            | 152.4      | 38   | 90   | 60 | 10  | 8   | 84   | 52   | 71 | 88.9  | 41.3 | 31.75 | 300              | 380                  | 32.0                 |
| "            | "                          | 7.0            | 177.8      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 29.5                 |
| "            | "                          | 8.0            | 203.2      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 27.0                 |
| "            | "                          | 10.0           | 254.0      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 24.5                 |
| "            | "                          | 12.0           | 304.8      | "    | "    | "  | "   | "   | "    | "    | "  | "     | "    | "     | "                | "                    | 23.0                 |

# Conveyor Chain

## M Series

## Metric Conveyor Chain (DIN 8167)

M Series Solid Pin



## Solid Pin

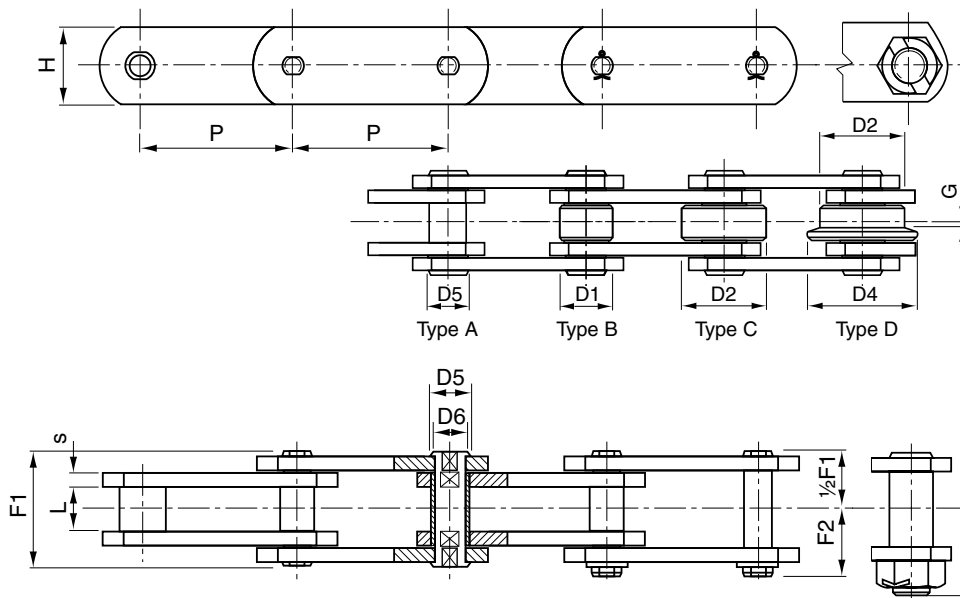
| Chain number | Pitch P | L  | G   | H  | S   | F1   | F2   | D1   | D2 | D4 | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|---------|----|-----|----|-----|------|------|------|----|----|----|----|------------------|----------------------|----------------------|
| M 20         | 40      | 16 | 3.5 | 18 | 2.5 | 33.0 | 19.0 | 12.5 | 25 | 32 | 9  | 6  | 20               | 32                   | 2.4                  |
| "            | 50      | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 2.0                  |
| "            | 63      | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 1.8                  |
| "            | 80      | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 1.6                  |
| M28          | 50      | 18 | 4.0 | 20 | 3   | 36.0 | 20.5 | 15.0 | 30 | 36 | 10 | 7  | 28               | 42                   | 3.3                  |
| "            | 63      | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 2.8                  |
| "            | 80      | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 2.5                  |
| "            | 100     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 2.1                  |
| M 40         | 63      | 20 | 4.5 | 25 | 4   | 40.5 | 24.0 | 18.0 | 36 | 45 | 11 | 8  | 40               | 60                   | 4.4                  |
| "            | 80      | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 3.7                  |
| "            | 100     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 3.2                  |
| "            | 125     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 2.9                  |
| M 56         | 63      | 24 | 7.0 | 30 | 4   | 45.0 | 26.0 | 21.0 | 42 | 50 | 15 | 10 | 56               | 85                   | 6.8                  |
| "            | 80      | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 5.7                  |
| "            | 100     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 5.0                  |
| "            | 125     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 4.4                  |
| "            | 160     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 3.9                  |
| M 80         | 80      | 28 | 7.0 | 35 | 5   | 54.5 | 30.5 | 25.0 | 50 | 60 | 18 | 12 | 80               | 125                  | 9.2                  |
| "            | 100     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 7.9                  |
| "            | 125     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 6.9                  |
| "            | 160     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 6.0                  |
| "            | 200     | "  | "   | "  | "   | "    | "    | "    | "  | "  | "  | "  | "                | "                    | 5.3                  |

# Conveyor Chain

## M Series

## Metric Conveyor Chain (DIN 8167)

M Series Solid Pin



## Solid Pin

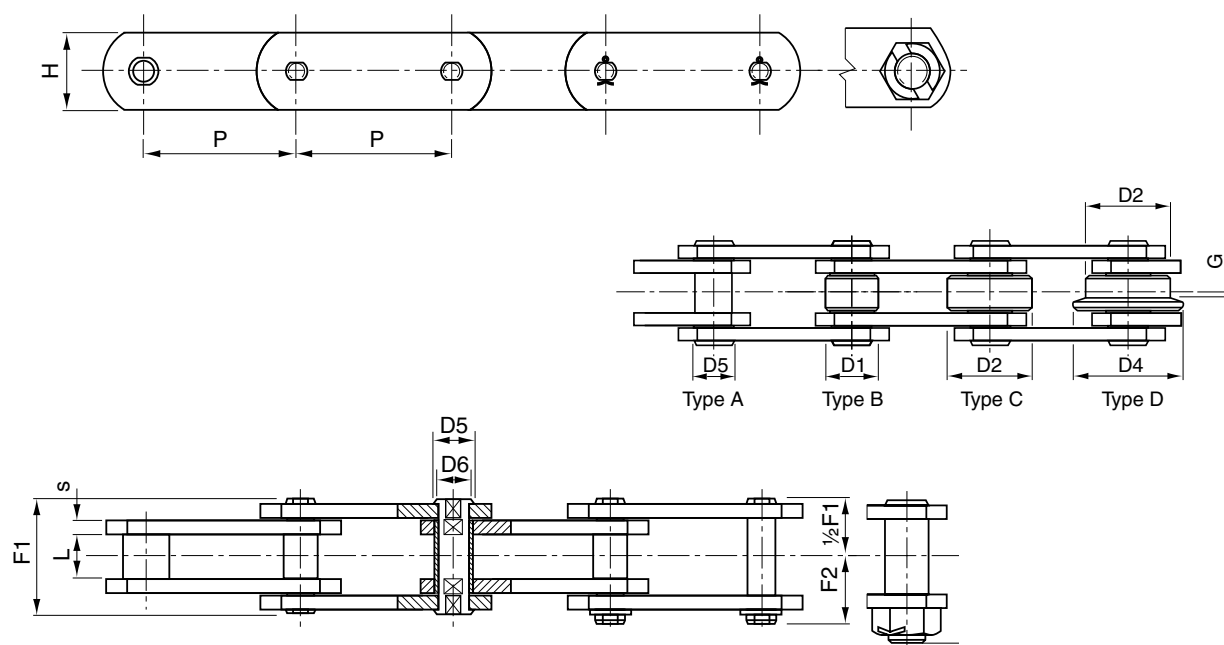
| Chain number | Pitch P | L  | G    | H  | S  | F1 | F2   | D1 | D2  | D4  | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|---------|----|------|----|----|----|------|----|-----|-----|----|----|------------------|----------------------|----------------------|
| M 112        | 80      | 32 | 7.5  | 40 | 6  | 63 | 36.0 | 30 | 60  | 75  | 21 | 15 | 112              | 175                  | 14.0                 |
| "            | 100     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 12.0                 |
| "            | 125     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 10.4                 |
| "            | 160     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 9.0                  |
| "            | 200     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 7.9                  |
| M 160        | 100     | 37 | 8.5  | 50 | 7  | 72 | 41.5 | 36 | 70  | 90  | 25 | 18 | 160              | 260                  | 18.9                 |
| "            | 125     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 16.3                 |
| "            | 160     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 14.0                 |
| "            | 200     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 12.2                 |
| "            | 250     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 11.0                 |
| M 224        | 125     | 43 | 10.0 | 60 | 8  | 84 | 47.0 | 42 | 85  | 105 | 30 | 21 | 224              | 340                  | 25.8                 |
| "            | 160     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 22.0                 |
| "            | 200     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 19.0                 |
| "            | 250     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 16.7                 |
| "            | 315     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 14.9                 |
| M 315        | 160     | 48 | 10.5 | 70 | 10 | 97 | 55.0 | 50 | 100 | 124 | 36 | 25 | 315              | 520                  | 33.3                 |
| "            | 200     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 28.7                 |
| "            | 250     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 25.2                 |
| "            | 315     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 22.3                 |
| "            | 400     | "  | "    | "  | "  | "  | "    | "  | "   | "   | "  | "  | "                | "                    | 20.0                 |

# Conveyor Chain

## M Series

## Metric Conveyor Chain (DIN 8167)

### M Series Solid Pin



### Solid Pin

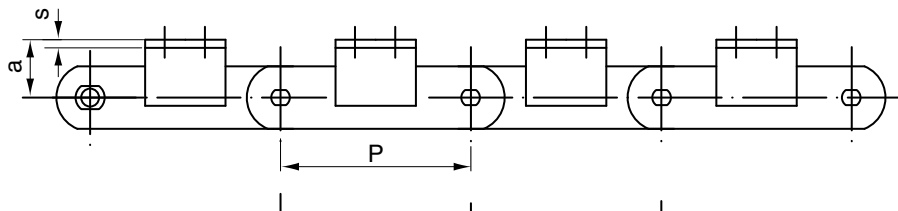
| Chain number | Pitch P | L  | G    | H   | S  | F1  | F2   | D1 | D2  | D4  | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|---------|----|------|-----|----|-----|------|----|-----|-----|----|----|------------------|----------------------|----------------------|
| M 450        | 200     | 56 | 11.5 | 80  | 12 | 114 | 67.0 | 60 | 120 | 149 | 42 | 30 | 450              | 700                  | 40.5                 |
| "            | 250     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 39.5                 |
| "            | 315     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 34.5                 |
| "            | 400     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 30.5                 |
| M 630        | 250     | 67 | 15.0 | 100 | 14 | 137 | 87.5 | 70 | 140 | 170 | 50 | 36 | 630              | 900                  | 64.0                 |
| "            | 315     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 55.5                 |
| "            | 400     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 49.0                 |
| "            | 500     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 43.6                 |
| M 900        | 250     | 78 | 17.0 | 120 | 16 | 153 | 95.0 | 85 | 170 | 210 | 60 | 44 | 900              | 1250                 | 98.3                 |
| "            | 315     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 84.2                 |
| "            | 400     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 72.5                 |
| "            | 500     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 63.8                 |
| "            | 600     | "  | "    | "   | "  | "   | "    | "  | "   | "   | "  | "  | "                | "                    | 56.6                 |

# Conveyor Chain Attachments

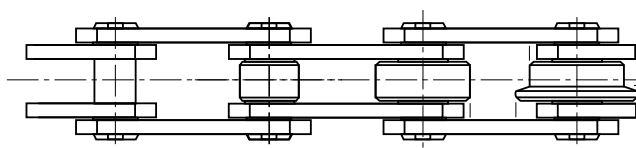
## M Series Attachments

## Metric Conveyor Chain (DIN 8167)

M Series Attachments



Note: Attachments are also available with 1, 2 or 3 holes and in K1, K2 and K3 (both sides) configuration

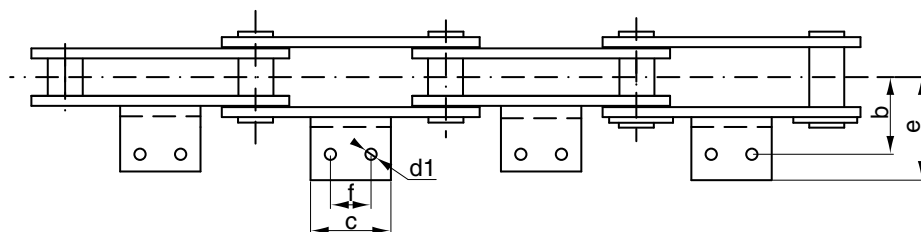


Type A

Type B

Type C

Type D



| Chain Number | Pitch P | a  | b  | c   | d1  | e  | f   | Welded or Integral attachment | Chain Weight - Excluding Attachments kg/metre |        |        |        | Attachment Weight (A2) kg each |
|--------------|---------|----|----|-----|-----|----|-----|-------------------------------|-----------------------------------------------|--------|--------|--------|--------------------------------|
|              |         |    |    |     |     |    |     |                               | Type A                                        | Type B | Type C | Type D |                                |
| M 20         | 40      | 16 | 27 | 14  | 6.6 | 40 | *   | 25x3                          | 1.10                                          | 1.3    | 2.4    | 2.5    | 0.02                           |
| "            | 50      | "  | "  | 14  | "   | "  | *   |                               | 1.01                                          | 1.3    | 2.0    | 2.1    | 0.02                           |
| "            | 63      | "  | "  | 35  | "   | "  | 20  |                               | 0.99                                          | 1.2    | 1.8    | 1.9    | 0.04                           |
| "            | 80      | "  | "  | 50  | "   | "  | 35  |                               | 0.90                                          | 1.1    | 1.6    | 1.6    | 0.06                           |
| M 28         | 50      | 20 | 32 | 20  | 9   | 47 | *   | 20x3                          | 1.60                                          | 1.9    | 3.3    | 3.4    | 0.02                           |
| "            | 63      | "  | "  | 20  | "   | "  | *   | 30x3                          | 1.50                                          | 1.7    | 2.8    | 2.9    | 0.02                           |
| "            | 80      | "  | "  | 45  | "   | "  | 25  | "                             | 1.40                                          | 1.6    | 2.5    | 2.6    | 0.05                           |
| "            | 100     | "  | "  | 60  | "   | "  | 40  | "                             | 1.30                                          | 1.5    | 2.1    | 2.2    | 0.08                           |
| M 40         | 63      | 25 | 35 | 31  | 9   | 50 | *   | 30x4                          | 2.25                                          | 2.6    | 4.4    | 4.6    | 0.04                           |
| "            | 80      | "  | "  | 45  | "   | "  | 20  | "                             | 2.00                                          | 2.3    | 3.7    | 3.9    | 0.07                           |
| "            | 100     | "  | "  | 60  | "   | "  | 40  | "                             | 1.90                                          | 2.1    | 3.2    | 3.4    | 0.10                           |
| "            | 125     | "  | "  | 85  | "   | "  | 65  | "                             | 1.80                                          | 2.0    | 2.9    | 3.0    | 0.15                           |
| M 56         | 63      | 30 | 44 | 22  | 11  | 61 | *   | 40x4                          | 3.40                                          | 3.9    | 6.8    | 7.2    | 0.05                           |
| "            | 80      | "  | "  | 30  | "   | "  | *   | "                             | 3.00                                          | 3.4    | 5.7    | 6.0    | 0.07                           |
| "            | 100     | "  | "  | 50  | "   | "  | 25  | "                             | 2.80                                          | 3.1    | 5.0    | 5.2    | 0.12                           |
| "            | 125     | "  | "  | 75  | "   | "  | 50  | "                             | 2.60                                          | 2.9    | 4.4    | 4.5    | 0.18                           |
| "            | 160     | "  | "  | 110 | "   | "  | 85  | "                             | 2.54                                          | 2.7    | 3.9    | 4.1    | 0.27                           |
| M 80         | 80      | 35 | 48 | 30  | 11  | 65 | *   | 40x4                          | 4.70                                          | 5.4    | 9.2    | 9.4    | 0.07                           |
| "            | 100     | "  | "  | 50  | "   | "  | 25  | "                             | 4.30                                          | 4.8    | 7.9    | 8.0    | 0.12                           |
| "            | 125     | "  | "  | 75  | "   | "  | 50  | "                             | 4.00                                          | 4.4    | 6.9    | 7.0    | 0.18                           |
| "            | 160     | "  | "  | 110 | "   | "  | 85  | "                             | 3.70                                          | 4.0    | 6.0    | 6.1    | 0.27                           |
| "            | 200     | "  | "  | 150 | "   | "  | 125 | "                             | 3.50                                          | 3.8    | 5.3    | 5.4    | 0.36                           |

\* Attachment With One Hole

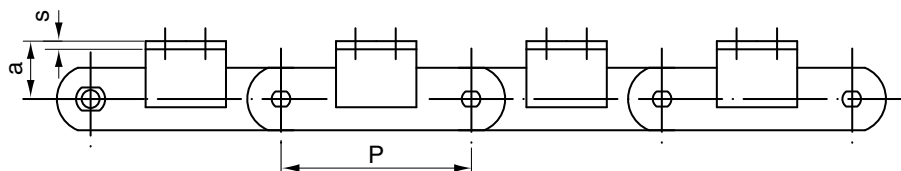


# Conveyor Chain Attachments

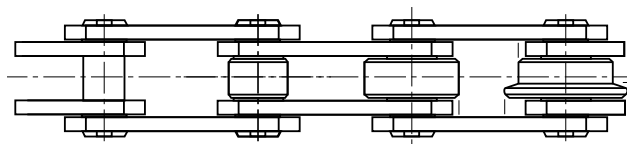
## M Series Attachments

## Metric Conveyor Chain (DIN 8167)

M Series Attachments



Note: Attachments are also available with 1, 2 or 3 holes and in K1, K2 and K3 (both sides) configuration

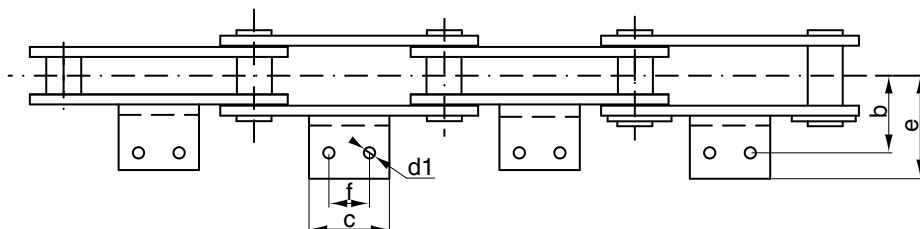


Type A

Type B

Type C

Type D

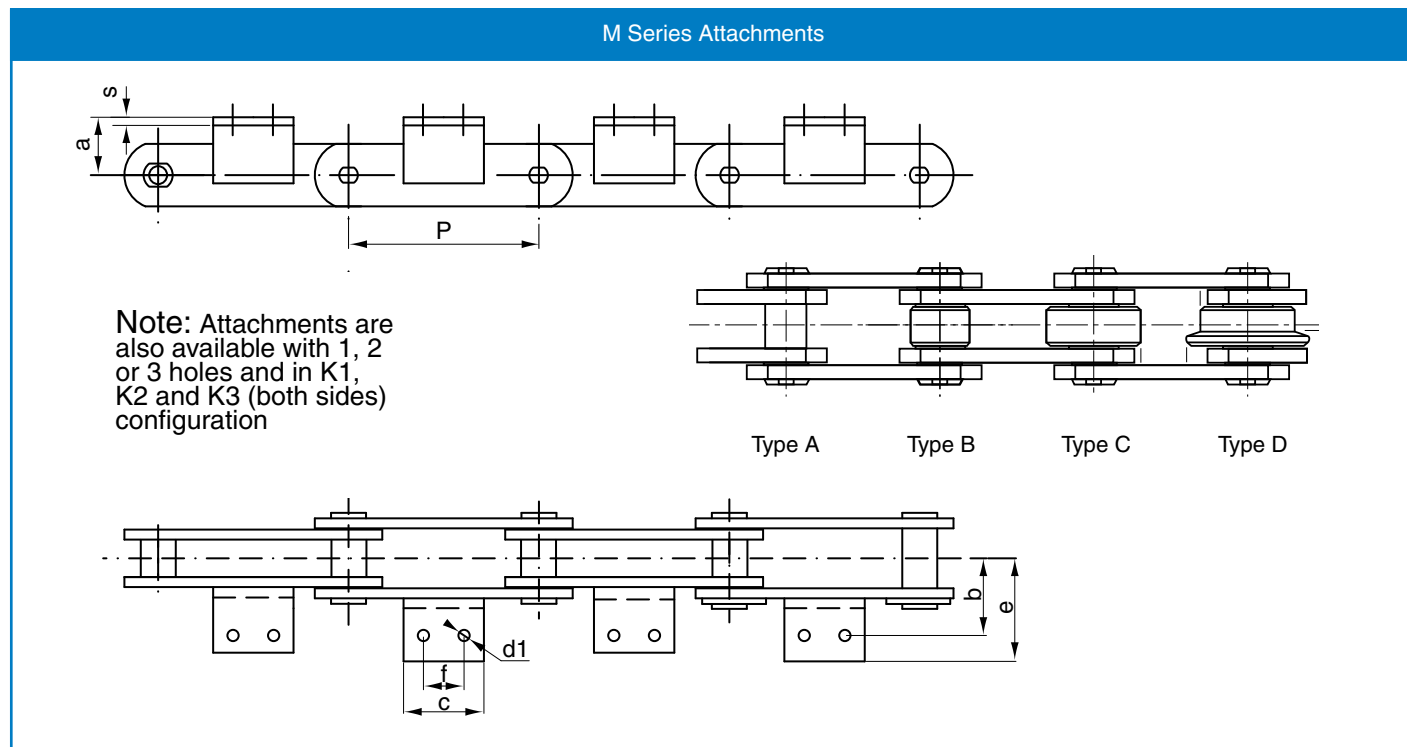


| Chain Number | Pitch P | a  | b  | c   | d1 | e   | f   | Welded or Integral attachment | Chain Weight - Excluding Attachments kg/metre |        |        |        | Attachment Weight (A2) kg each |
|--------------|---------|----|----|-----|----|-----|-----|-------------------------------|-----------------------------------------------|--------|--------|--------|--------------------------------|
|              |         |    |    |     |    |     |     |                               | Type A                                        | Type B | Type C | Type D |                                |
| M 112        | 80      | 40 | 55 | 28  | 14 | 80  | *   | 50x6                          | 6.8                                           | 8.0    | 14.0   | 14.7   | 0.13                           |
| "            | 100     | "  | "  | 40  | "  | "   | *   | "                             | 6.2                                           | 7.2    | 12.0   | 12.5   | 0.18                           |
| "            | 125     | "  | "  | 65  | "  | "   | 35  | "                             | 5.7                                           | 6.5    | 10.4   | 10.8   | 0.30                           |
| "            | 160     | "  | "  | 95  | "  | "   | 65  | "                             | 5.3                                           | 5.9    | 9.0    | 9.3    | 0.44                           |
| "            | 200     | "  | "  | 130 | "  | "   | 100 | "                             | 5.0                                           | 5.5    | 7.9    | 8.2    | 0.59                           |
| M 160        | 100     | 45 | 62 | 30  | 14 | 85  | *   | 50x6                          | 9.7                                           | 11.2   | 18.9   | 20.2   | 0.13                           |
| "            | 125     | "  | "  | 50  | "  | "   | 25  | "                             | 8.9                                           | 10.0   | 16.3   | 18.1   | 0.23                           |
| "            | 160     | "  | "  | 80  | "  | "   | 50  | "                             | 8.2                                           | 9.1    | 14.0   | 15.4   | 0.37                           |
| "            | 200     | "  | "  | 115 | "  | "   | 85  | "                             | 7.6                                           | 8.4    | 12.2   | 13.4   | 0.53                           |
| "            | 250     | "  | "  | 175 | "  | "   | 145 | "                             | 7.3                                           | 7.9    | 11.0   | 12.0   | 0.80                           |
| M 224        | 125     | 55 | 70 | 35  | 18 | 100 | *   | 63x8                          | 13.0                                          | 14.8   | 25.8   | 26.6   | 0.30                           |
| "            | 160     | "  | "  | 60  | "  | "   | *   | "                             | 12.0                                          | 13.4   | 22.0   | 22.7   | 0.43                           |
| "            | 200     | "  | "  | 100 | "  | "   | 65  | "                             | 11.0                                          | 12.1   | 19.0   | 19.5   | 0.71                           |
| "            | 250     | "  | "  | 160 | "  | "   | 125 | "                             | 10.3                                          | 11.2   | 16.7   | 17.1   | 1.13                           |
| "            | 315     | "  | "  | 230 | "  | "   | 190 | "                             | 9.8                                           | 10.5   | 14.9   | 15.2   | 1.60                           |
| M 315        | 160     | 65 | 80 | 35  | 18 | 115 | *   | 70x8                          | 18.3                                          | 20.4   | 33.3   | 34.6   | 0.32                           |
| "            | 200     | "  | "  | 85  | "  | "   | 50  | "                             | 16.7                                          | 18.4   | 28.7   | 29.7   | 0.66                           |
| "            | 250     | "  | "  | 140 | "  | "   | 100 | "                             | 15.6                                          | 17.0   | 25.2   | 26.0   | 1.10                           |
| "            | 315     | "  | "  | 190 | "  | "   | 155 | "                             | 14.6                                          | 15.7   | 22.3   | 22.9   | 1.46                           |
| "            | 400     | "  | "  | 205 | "  | "   | 155 | "                             | 13.9                                          | 14.8   | 20.0   | 20.5   | 1.46                           |

# Conveyor Chain Attachments

## M Series Attachments

## Metric Conveyor Chain (DIN 8167)



| Chain Number | Pitch P | a   | b   | c   | d1 | e   | f   | Welded or Integral attachment | Chain Weight - Excluding Attachments kg/metre |        |        |        | Attachment Weight (A2) kg each |
|--------------|---------|-----|-----|-----|----|-----|-----|-------------------------------|-----------------------------------------------|--------|--------|--------|--------------------------------|
|              |         |     |     |     |    |     |     |                               | Type A                                        | Type B | Type C | Type D |                                |
| M 450        | 200     | 75  | 90  | 50  | 18 | 125 | *   | 70x9                          | 24.0                                          | 27.0   | 40.5   | 47.0   | 0.33                           |
| "            | 250     | "   | "   | 125 | "  | "   | 85  | "                             | 22.0                                          | 24.9   | 39.5   | 41.0   | 1.00                           |
| "            | 315     | "   | "   | 195 | "  | "   | 155 | "                             | 21.0                                          | 23.0   | 34.5   | 36.0   | 1.60                           |
| "            | 400     | "   | "   | 280 | "  | "   | 240 | "                             | 19.6                                          | 21.2   | 30.5   | 31.4   | 2.30                           |
| M 630        | 250     | 90  | 115 | 50  | 24 | 165 | *   | 100x12                        | 36.0                                          | 40.8   | 64.0   | 66.9   | 0.90                           |
| "            | 315     | "   | "   | 150 | "  | "   | 100 | "                             | 33.4                                          | 36.6   | 55.5   | 57.7   | 2.70                           |
| "            | 400     | "   | "   | 240 | "  | "   | 190 | "                             | 31.5                                          | 33.9   | 49.0   | 50.7   | 4.30                           |
| "            | 500     | "   | "   | 350 | "  | "   | 300 | "                             | 29.6                                          | 31.6   | 43.6   | 45.0   | 6.20                           |
| M 900        | 250     | 110 | 140 | 60  | 30 | 195 | *   | 120x15                        | 49.7                                          | 56.5   | 98.3   | 104.5  | 1.60                           |
| "            | 315     | "   | "   | 125 | "  | "   | 65  | "                             | 45.5                                          | 51.8   | 84.2   | 89.7   | 3.30                           |
| "            | 400     | "   | "   | 215 | "  | "   | 155 | "                             | 42.0                                          | 46.2   | 72.5   | 76.9   | 5.70                           |
| "            | 500     | "   | "   | 300 | "  | "   | 240 | "                             | 39.3                                          | 42.7   | 63.8   | 67.6   | 8.00                           |
| "            | 600     | "   | "   | 350 | "  | "   | 300 | "                             | 37.3                                          | 39.9   | 56.6   | 58.9   | 8.00                           |

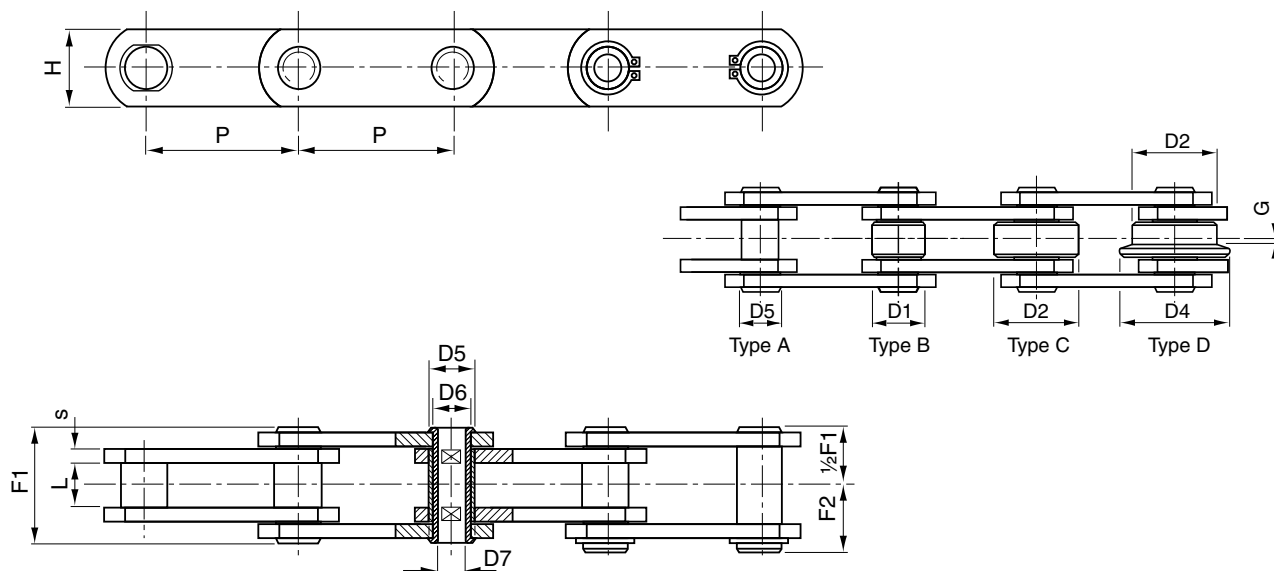
\* Attachment With One Hole

# Conveyor Chain

## MC Series Hollow Pin

## Metric Conveyor Chain (DIN 8167)

MC Series Hollow Pin



## Hollow Pin

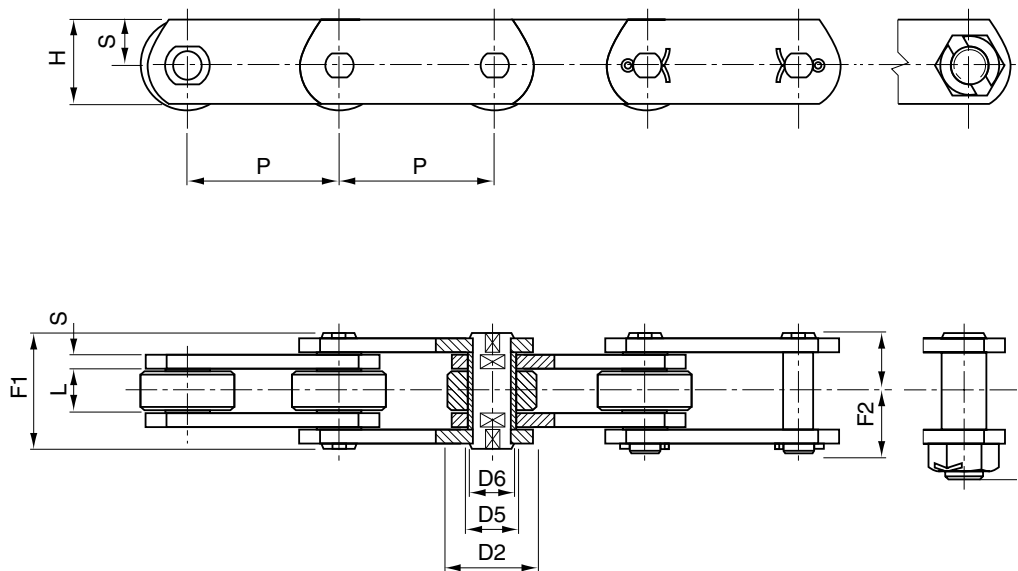
| Chain number | Pitch P | L  | G    | H  | S | F1   | F2   | D1 | D2  | D4  | D5 | D6   | D7   | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|---------|----|------|----|---|------|------|----|-----|-----|----|------|------|------------------|----------------------|----------------------|
| MC 28        | 50      | 20 | 4.5  | 25 | 3 | 36.0 | 20.5 | 25 | 36  | 45  | 17 | 13.0 | 8.2  | 28               | 40                   | 4.3                  |
| "            | 63      | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 3.8                  |
| "            | 80      | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 3.2                  |
| "            | 100     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 2.8                  |
| "            | 125     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 2.5                  |
| MC 56        | 63      | 24 | 7.0  | 35 | 4 | 45.0 | 25.0 | 30 | 50  | 60  | 21 | 15.5 | 10.2 | 56               | 90                   | 8.5                  |
| "            | 80      | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 7.2                  |
| "            | 100     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 6.2                  |
| "            | 125     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 5.4                  |
| "            | 160     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 4.7                  |
| MC 112       | 80      | 32 | 8.5  | 50 | 6 | 62.5 | 33.0 | 42 | 70  | 85  | 29 | 22.0 | 14.3 | 112              | 180                  | 16.6                 |
| "            | 100     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 14.0                 |
| "            | 125     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 11.2                 |
| "            | 160     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 10.2                 |
| "            | 200     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 8.9                  |
| "            | 250     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 7.9                  |
| MC 224       | 125     | 43 | 10.5 | 70 | 8 | 83.0 | 44.0 | 60 | 100 | 120 | 42 | 30.0 | 20.3 | 224              | 350                  | 32.3                 |
| "            | 160     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 27.1                 |
| "            | 200     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 23.5                 |
| "            | 250     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 20.6                 |
| "            | 315     | "  | "    | "  | " | "    | "    | "  | "   | "   | "  | "    | "    | "                | "                    | 17.2                 |

# Conveyor Chain

## MT/ME Series Deep Link

## Metric Conveyor Chain (DIN 8167)

MT/ME Series Deep Link



## Deep Link

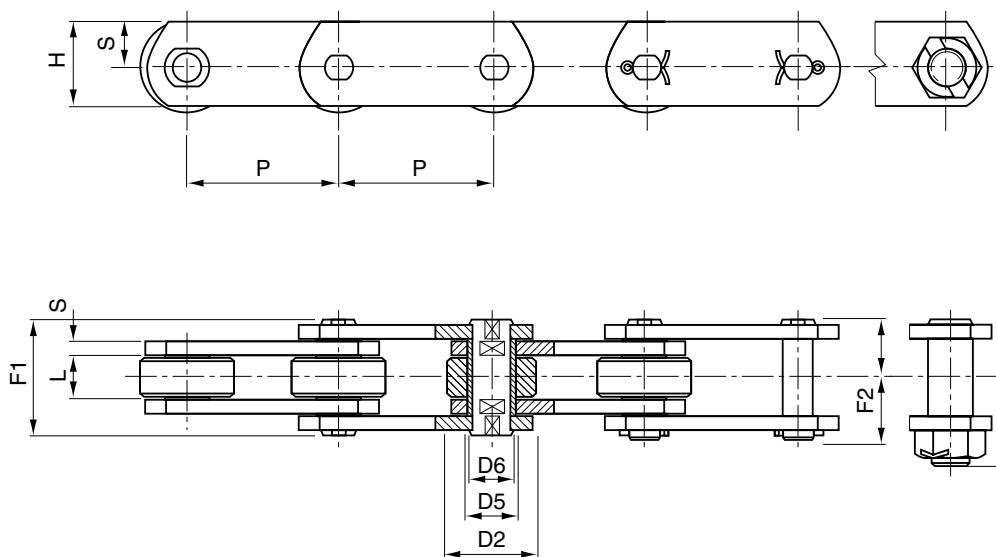
| Chain Number | Pitch P | L  | S   | H  | H1   | F1   | F2   | D2 | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|---------|----|-----|----|------|------|------|----|----|----|------------------|----------------------|----------------------|
| ME 20        | 40      | 16 | 2.5 | 25 | 16.0 | 33.0 | 19.0 | 25 | 9  | 6  | 20               | 32                   | 3.0                  |
| "            | 50      | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 2.6                  |
| "            | 63      | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 2.3                  |
| "            | 80      | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 2.0                  |
| ME 28        | 50      | 18 | 3.0 | 30 | 20.0 | 36.0 | 20.5 | 30 | 10 | 7  | 28               | 42                   | 4.1                  |
| "            | 63      | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 3.5                  |
| "            | 80      | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 3.1                  |
| "            | 100     | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 2.8                  |
| ME 40        | 63      | 20 | 4.0 | 35 | 22.5 | 40.5 | 24.0 | 36 | 11 | 8  | 40               | 60                   | 5.5                  |
| "            | 80      | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 4.8                  |
| "            | 100     | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 4.2                  |
| "            | 125     | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 3.7                  |
| ME 56        | 63      | 24 | 4.0 | 45 | 30.0 | 45.0 | 26.0 | 42 | 15 | 10 | 56               | 85                   | 8.3                  |
| "            | 80      | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 7.0                  |
| "            | 100     | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 6.1                  |
| "            | 125     | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 5.4                  |
| ME 80        | 80      | 28 | 5.0 | 50 | 32.5 | 54.5 | 30.5 | 50 | 18 | 12 | 80               | 125                  | 11.0                 |
| "            | 100     | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 9.5                  |
| "            | 125     | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 8.5                  |
| "            | 160     | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 7.2                  |
| "            | 200     | "  | "   | "  | "    | "    | "    | "  | "  | "  | "                | "                    | 6.0                  |

# Conveyor Chain

## MT/ME Series

## Metric Conveyor Chain (DIN 8167)

MT/ME Series Deep Link



## Deep Link

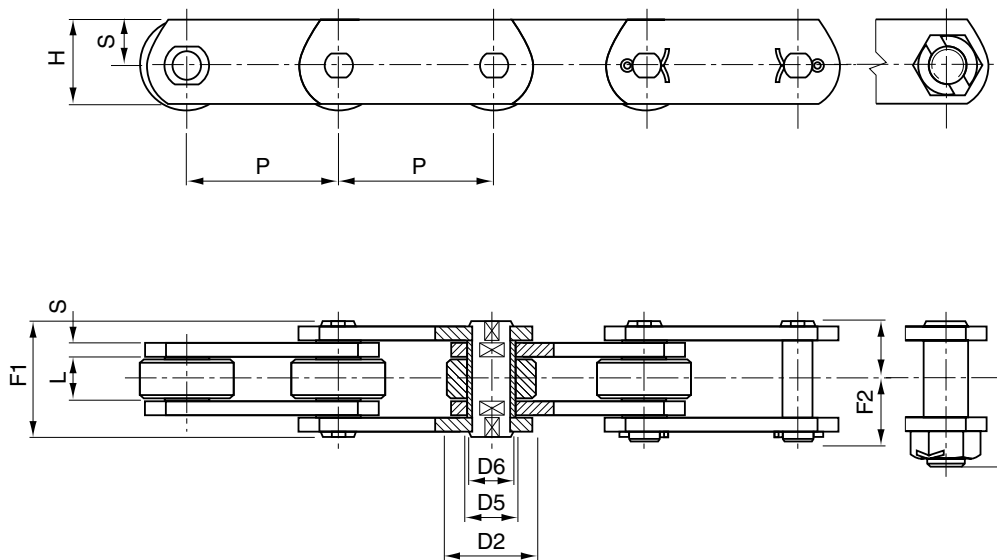
| Chain Number | Pitch P | L  | S  | H   | H1 | F1 | F2   | D2  | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight kg/m |
|--------------|---------|----|----|-----|----|----|------|-----|----|----|------------------|----------------------|-------------|
| ME 112       | 80      | 32 | 6  | 60  | 40 | 63 | 36.0 | 60  | 21 | 15 | 112              | 175                  | 17.0        |
| "            | 100     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 14.5        |
| "            | 125     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 13.0        |
| "            | 160     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 11.0        |
| "            | 200     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 10.0        |
| ME 160       | 100     | 37 | 7  | 70  | 45 | 72 | 41.5 | 70  | 25 | 18 | 160              | 260                  | 21.5        |
| "            | 125     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 19.0        |
| "            | 160     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 17.0        |
| "            | 200     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 15.0        |
| "            | 250     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 13.5        |
| ME 224       | 125     | 43 | 8  | 90  | 60 | 84 | 47.0 | 85  | 30 | 21 | 224              | 340                  | 32.5        |
| "            | 160     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 27.5        |
| "            | 200     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 23.0        |
| "            | 250     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 21.0        |
| "            | 315     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 19.0        |
| ME 315       | 160     | 48 | 10 | 100 | 65 | 97 | 55.0 | 100 | 36 | 25 | 315              | 520                  | 43.0        |
| "            | 200     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 37.0        |
| "            | 250     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 32.0        |
| "            | 315     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 28.6        |
| "            | 400     | "  | "  | "   | "  | "  | "    | "   | "  | "  | "                | "                    | 25.5        |

# Conveyor Chain

## MT/ME Series

## Metric Conveyor Chain (DIN 8167)

MT/ME series Deep Link



## Deep Link

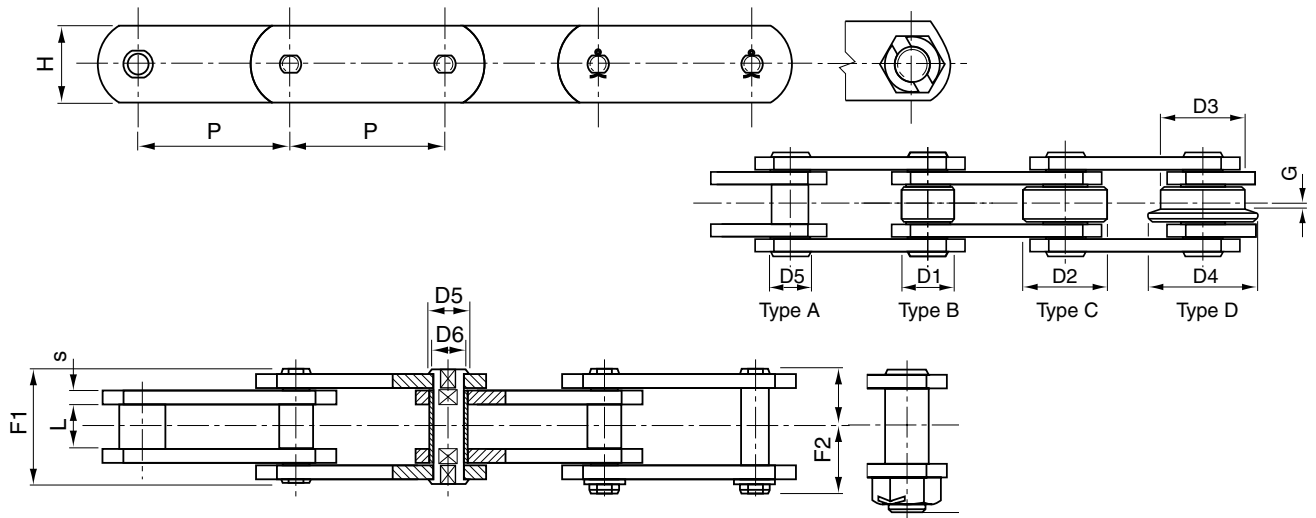
| Chain Number | Pitch P | L  | S  | H   | H1  | F1  | F2   | D2  | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight kg/m |
|--------------|---------|----|----|-----|-----|-----|------|-----|----|----|------------------|----------------------|-------------|
| ME 450       | 200     | 56 | 12 | 120 | 80  | 114 | 67.0 | 120 | 42 | 30 | 450              | 700                  | 47          |
| "            | 250     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 41          |
| "            | 315     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 36          |
| "            | 400     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 32          |
| ME 630       | 250     | 66 | 14 | 140 | 90  | 137 | 87.5 | 140 | 50 | 36 | 630              | 900                  | 71          |
| "            | 315     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 62.5        |
| "            | 400     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 56          |
| "            | 500     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 50.6        |
| "            | 600     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 46.5        |
| ME 900       | 250     | 78 | 16 | 180 | 120 | 153 | 95.0 | 170 | 60 | 44 | 900              | 1,250                | 108.5       |
| "            | 315     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 94.5        |
| "            | 400     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 82.5        |
| "            | 500     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 73.8        |
| "            | 600     | "  | "  | "   | "   | "   | "    | "   | "  | "  | "                | "                    | 66.7        |

# Conveyor Chain

## FV/C Series

## Metric Conveyor Chain (DIN 8165)

### FV/C Series Solid Pin



### Solid Pin

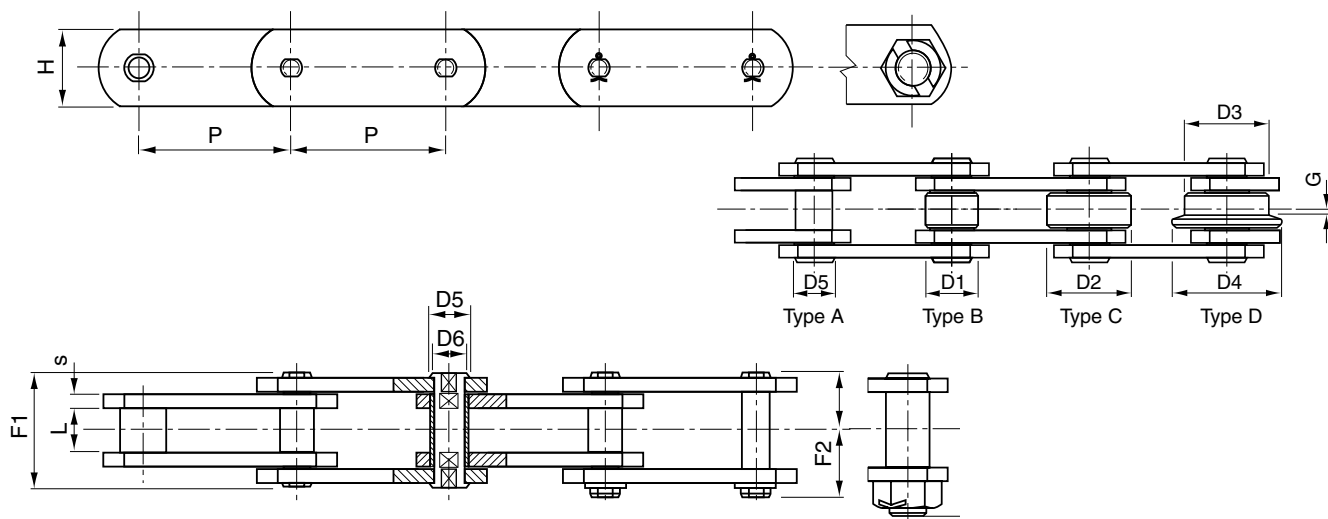
| DIN Number | Chain number | Pitch P | L  | G   | H  | S | F1 | F2 | D1 | D2 | D3 | D4 | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|------------|--------------|---------|----|-----|----|---|----|----|----|----|----|----|----|----|------------------|----------------------|----------------------|
| FV40       | C42          | 50      | 18 | 4   | 25 | 3 | 36 | 21 | 20 | 32 | 40 | 50 | 15 | 10 | 42               | 47                   | 4.0                  |
| "          | "            | 63      | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 3.3                  |
| "          | "            | 80      | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 3.0                  |
| "          | "            | 100     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 2.6                  |
| "          | "            | 125     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 2.3                  |
| FV63       | C64          | 63      | 22 | 5   | 30 | 4 | 45 | 26 | 26 | 40 | 50 | 63 | 18 | 12 | 64               | 75                   | 6.4                  |
| "          | "            | 80      | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 5.3                  |
| "          | "            | 100     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 4.7                  |
| "          | "            | 125     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 4.0                  |
| "          | "            | 160     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 3.5                  |
| FV90       | C100         | 63      | 25 | 6.5 | 35 | 5 | 53 | 30 | 30 | 48 | 63 | 78 | 20 | 14 | 100              | 115                  | 10.0                 |
| "          | "            | 80      | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 8.6                  |
| "          | "            | 100     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 7.3                  |
| "          | "            | 125     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 6.5                  |
| "          | "            | 160     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 5.8                  |
| "          | "            | 200     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 4.8                  |
| "          | "            | 250     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 4.6                  |
| FV112      | C120         | 100     | 30 | 7.5 | 40 | 6 | 62 | 35 | 32 | 55 | 72 | 90 | 22 | 16 | 120              | 170                  | 11.2                 |
| "          | "            | 125     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 9.6                  |
| "          | "            | 160     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 8.3                  |
| "          | "            | 200     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 7.5                  |
| "          | "            | 250     | "  | "   | "  | " | "  | "  | "  | "  | "  | "  | "  | "  | "                | "                    | 6.7                  |

# Conveyor Chain

## FV/C Series

## Metric Conveyor Chain (DIN 8165)

### FV/C Series Solid Pin



## Solid Pin

| DIN Number | Chain number | Pitch P | L  | G  | H  | S  | F1  | F2 | D1 | D2 | D3  | D4  | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|------------|--------------|---------|----|----|----|----|-----|----|----|----|-----|-----|----|----|------------------|----------------------|----------------------|
| FV140      | C145         | 100     | 35 | 9  | 45 | 6  | 67  | 38 | 36 | 60 | 80  | 100 | 26 | 18 | 145              | 180                  | 14.3                 |
| "          | "            | 125     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 12.3                 |
| "          | "            | 160     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 10.5                 |
| "          | "            | 200     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 9.0                  |
| "          | "            | 250     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 8.3                  |
| FV180      | C190         | 125     | 45 | 13 | 50 | 8  | 86  | 49 | 42 | 70 | 100 | 125 | 30 | 20 | 190              | 250                  | 18.9                 |
| "          | "            | 160     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 16.7                 |
| "          | "            | 200     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 14.8                 |
| "          | "            | 250     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 13.0                 |
| "          | "            | 315     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 11.6                 |
| FV250      | C275         | 160     | 55 | 15 | 60 | 8  | 97  | 55 | 50 | 80 | 125 | 155 | 36 | 26 | 275              | 300                  | 23.8                 |
| "          | "            | 200     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 20.6                 |
| "          | "            | 250     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 17.9                 |
| "          | "            | 315     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 15.8                 |
| "          | "            | 400     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 13.9                 |
| FV315      | C370         | 160     | 65 | 18 | 70 | 10 | 113 | 70 | 60 | 90 | 140 | 175 | 42 | 30 | 370              | 480                  | 33.3                 |
| "          | "            | 200     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 28.9                 |
| "          | "            | 250     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 25.3                 |
| "          | "            | 315     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 22.4                 |
| "          | "            | 400     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "                | "                    | 20.2                 |

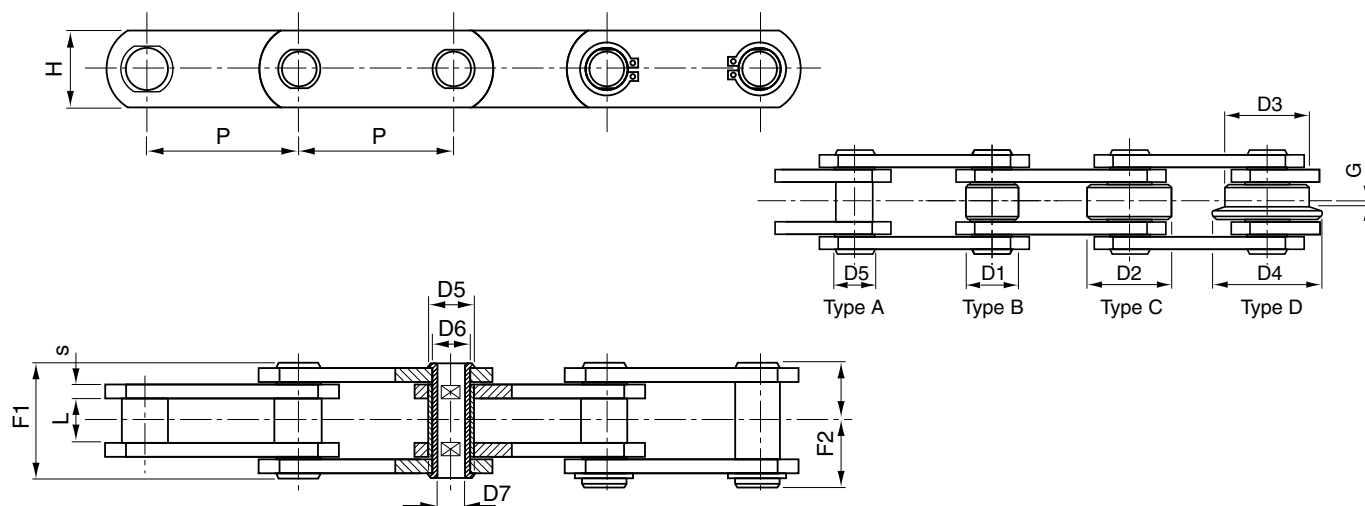


# Conveyor Chain

## FV/CC Series

## Metric Conveyor Chain (DIN 8165)

FV/CC Series Hollow Pin



## Hollow Pin

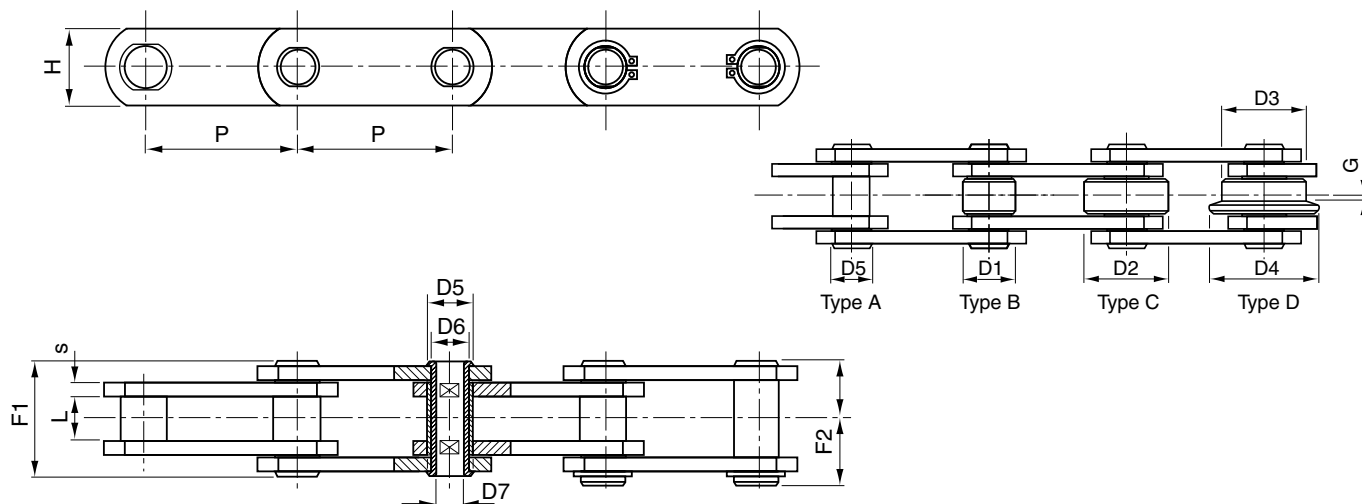
| DIN Number | Chain number | Pitch P | L  | G   | H  | S | F1 | F2 | D1 | D2 | D3 | D4  | D5 | D6 | D7 | Breaking Load kN | Weight (Type C) kg/m |
|------------|--------------|---------|----|-----|----|---|----|----|----|----|----|-----|----|----|----|------------------|----------------------|
| FV63       | CC46         | 63      | 22 | 5   | 30 | 4 | 45 | 28 | 26 | 40 | 50 | 63  | 18 | 12 | 8  | 46               | 5.7                  |
| "          | "            | 80      | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 4.9                  |
| "          | "            | 100     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 4.3                  |
| "          | "            | 125     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 3.8                  |
| "          | "            | 160     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 3.4                  |
| FV90       | CC73         | 63      | 25 | 6.5 | 35 | 5 | 53 | 30 | 30 | 48 | 63 | 78  | 20 | 14 | 10 | 73               | 9.1                  |
| "          | "            | 80      | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 7.8                  |
| "          | "            | 100     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 6.8                  |
| "          | "            | 125     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 5.6                  |
| "          | "            | 160     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 5.3                  |
| "          | "            | 200     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 4.7                  |
| "          | "            | 250     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 4.3                  |
| FV112      | CC90         | 100     | 30 | 7.5 | 40 | 6 | 62 | 32 | 32 | 55 | 72 | 90  | 22 | 16 | 11 | 90               | 10.2                 |
| "          | "            | 125     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 8.9                  |
| "          | "            | 160     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 7.8                  |
| "          | "            | 200     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 7.0                  |
| "          | "            | 250     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 6.3                  |
| FV140      | CC110        | 100     | 35 | 9   | 45 | 6 | 67 | 35 | 36 | 60 | 80 | 100 | 26 | 18 | 12 | 110              | 12.9                 |
| "          | "            | 125     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 11.2                 |
| "          | "            | 160     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 9.7                  |
| "          | "            | 200     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 8.6                  |
| "          | "            | 250     | "  | "   | "  | " | "  | "  | "  | "  | "  | "   | "  | "  | "  | "                | 7.7                  |

# Conveyor Chain

## FV/CC Series

## Metric Conveyor Chain (DIN 8165)

### FV/CC Series Hollow Pin



## Hollow Pin

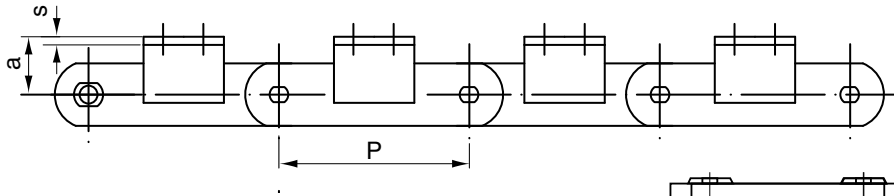
| DIN Number | Chain number | Pitch P | L  | G  | H  | S  | F1  | F2 | D1 | D2 | D3  | D4  | D5 | D6 | D7 | Breaking Load kN | Weight (Type C) kg/m |
|------------|--------------|---------|----|----|----|----|-----|----|----|----|-----|-----|----|----|----|------------------|----------------------|
| FV180      | CC145        | 125     | 45 | 13 | 50 | 8  | 86  | 45 | 42 | 70 | 100 | 125 | 30 | 20 | 14 | 145              | 18.2                 |
| "          | "            | 160     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 15.6                 |
| "          | "            | 200     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 13.8                 |
| "          | "            | 250     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 12.3                 |
| "          | "            | 315     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 11.0                 |
| FV250      | CC215        | 160     | 55 | 15 | 60 | 8  | 97  | 55 | 50 | 80 | 125 | 155 | 36 | 26 | 18 | 215              | 20.5                 |
| "          | "            | 200     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 18.0                 |
| "          | "            | 250     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 15.9                 |
| "          | "            | 315     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 14.2                 |
| FV315      | CC295        | 160     | 65 | 18 | 70 | 10 | 117 | 63 | 60 | 90 | 140 | 175 | 42 | 30 | 20 | 295              | 34.1                 |
| "          | "            | 200     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 29.5                 |
| "          | "            | 250     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 25.8                 |
| "          | "            | 315     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 22.8                 |
| "          | "            | 400     | "  | "  | "  | "  | "   | "  | "  | "  | "   | "   | "  | "  | "  | "                | 20.2                 |

# Conveyor Chain Attachments

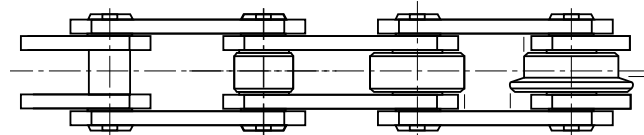
## FV Series Attachments

## Metric Conveyor Chain (DIN 8165)

FV Series Attachments



Note: Attachments are also available with 1, 2 or 3 holes and in K1, K2 and K3 (both sides) configuration

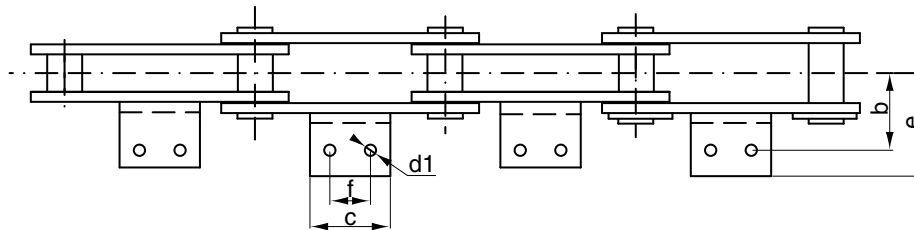


Type A

Type B

Type C

Type D



| DIN Number | Chain Number | Pitch P | a  | b  | c   | d1   | e    | f  | Welded or Integral attachment | Chain Weight - Excluding Attachments kg/metre |        |        |        | Attachment Weight (A2) kg each |
|------------|--------------|---------|----|----|-----|------|------|----|-------------------------------|-----------------------------------------------|--------|--------|--------|--------------------------------|
|            |              |         |    |    |     |      |      |    |                               | Type A                                        | Type B | Type C | Type D |                                |
| FV40       | C42          | 50      | 20 | 25 | 45  | 6.5  | 64.0 | *  | 25x3                          | 2.4                                           | 2.9    | 4.0    | 5.6    | 0.050                          |
| "          | "            | 63      | "  | "  | 31  | "    | 40.5 | *  |                               | 2.0                                           | 2.4    | 3.3    | 4.5    | 0.036                          |
| "          | "            | 80      | "  | "  | 45  | "    | "    | 25 |                               | 1.9                                           | 2.2    | 3.0    | 3.9    | 0.050                          |
| "          | "            | 100     | "  | "  | 50  | "    | "    | 30 |                               | 1.7                                           | 2.0    | 2.6    | 3.3    | 0.056                          |
| "          | "            | 125     | "  | "  | 60  | "    | "    | 30 |                               | 1.6                                           | 1.9    | 2.3    | 3.0    | 0.067                          |
| FV63       | C64          | 63      | 30 | 34 | 40  | 8.4  | 50.0 | *  | 30x4                          | 3.8                                           | 4.5    | 6.4    | 8.9    | 0.063                          |
| "          | "            | 80      | "  | "  | 45  | "    | "    | 25 |                               | 3.2                                           | 3.8    | 5.3    | 7.2    | 0.095                          |
| "          | "            | 100     | "  | "  | 50  | "    | "    | 30 |                               | 3.0                                           | 3.5    | 4.7    | 6.2    | 0.110                          |
| "          | "            | 125     | "  | "  | 60  | "    | "    | 40 |                               | 2.7                                           | 3.0    | 4.0    | 5.3    | 0.140                          |
| "          | "            | 160     | "  | "  | 70  | "    | "    | 50 |                               | 2.4                                           | 2.7    | 3.5    | 4.4    | 0.170                          |
| FV90       | C100         | 63      | 35 | 40 | 30  | 8.4  | 64.0 | *  | 40x4                          | 5.6                                           | 6.8    | 10.0   | 14.7   | 0.072                          |
| "          | "            | 80      | "  | "  | 45  | "    | "    | 25 |                               | 5.1                                           | 6.0    | 8.6    | 12.3   | 0.110                          |
| "          | "            | 100     | "  | "  | 50  | "    | "    | 30 |                               | 4.5                                           | 5.3    | 7.3    | 10.3   | 0.130                          |
| "          | "            | 125     | "  | "  | 60  | "    | "    | 40 |                               | 4.2                                           | 4.8    | 6.5    | 8.8    | 0.160                          |
| "          | "            | 160     | "  | "  | 70  | "    | "    | 50 |                               | 4.0                                           | 4.5    | 5.8    | 7.6    | 0.200                          |
| "          | "            | 200     | "  | "  | 80  | "    | "    | 60 |                               | 3.5                                           | 3.8    | 4.8    | 5.8    | 0.240                          |
| "          | "            | 250     | "  | "  | 85  | "    | "    | 65 |                               | 3.4                                           | 3.7    | 4.6    | 5.4    | 0.210                          |
| FV112      | C120         | 100     | 40 | 50 | 50  | 11.0 | 70.0 | 30 | 40x5                          | 6.7                                           | 7.7    | 11.2   | 18.8   | 0.200                          |
| "          | "            | 125     | "  | "  | 65  | "    | "    | 40 |                               | 6.0                                           | 6.8    | 9.6    | 15.7   | 0.270                          |
| "          | "            | 160     | "  | "  | 75  | "    | "    | 50 |                               | 5.5                                           | 6.1    | 8.3    | 13.0   | 0.310                          |
| "          | "            | 200     | "  | "  | 90  | "    | "    | 65 |                               | 5.2                                           | 5.7    | 7.5    | 11.3   | 0.400                          |
| "          | "            | 250     | "  | "  | 105 | "    | "    | 80 |                               | 4.9                                           | 5.3    | 6.7    | 9.8    | 0.500                          |

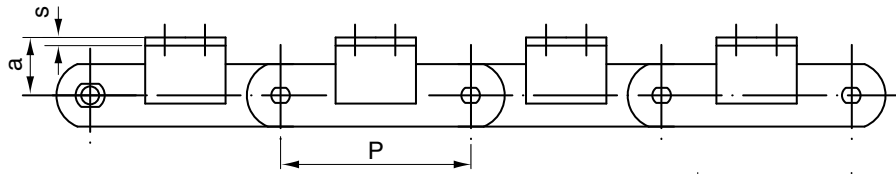
\* Attachment With One Hole

# Conveyor Chain Attachments

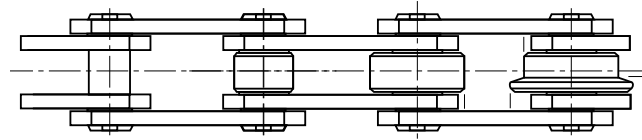
## FV Series Attachments

## Metric Conveyor Chain (DIN 8165)

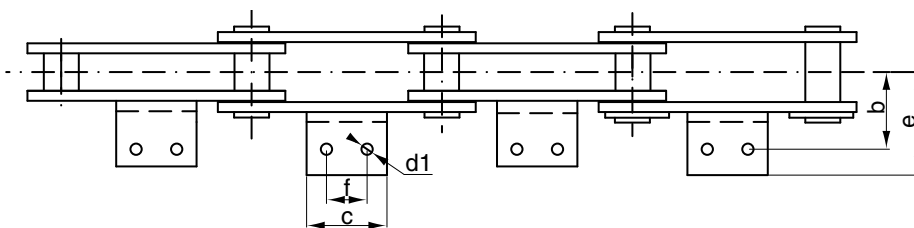
FV Series Attachments



**Note:** Attachments are also available with 1, 2 or 3 holes and in K1, K2 and K3 (both sides) configuration



Type A      Type B      Type C      Type D



| DIN Number | Chain Number | Pitch P | a  | b  | c   | d1 | e   | f   | Welded or Integral attachment | Chain Weight - Excluding Attachments<br>kg/metre |        |        |        | Attachment Weight (A2)<br>kg each |
|------------|--------------|---------|----|----|-----|----|-----|-----|-------------------------------|--------------------------------------------------|--------|--------|--------|-----------------------------------|
|            |              |         |    |    |     |    |     |     |                               | Type A                                           | Type B | Type C | Type D |                                   |
| FV140      | C145         | 100     | 45 | 50 | 55  | 11 | 81  | 30  | 50x6                          | 8.2                                              | 9.5    | 14.3   | 21.4   | 0.23                              |
| "          | "            | 125     | "  | "  | 65  | "  | "   | 40  | "                             | 7.4                                              | 8.5    | 12.3   | 18.0   | 0.30                              |
| "          | "            | 160     | "  | "  | 75  | "  | "   | 50  | "                             | 6.7                                              | 7.5    | 10.5   | 14.9   | 0.36                              |
| "          | "            | 200     | "  | "  | 90  | "  | "   | 65  | "                             | 6.0                                              | 6.7    | 9.0    | 12.8   | 0.45                              |
| "          | "            | 250     | "  | "  | 105 | "  | "   | 80  | "                             | 5.8                                              | 6.3    | 8.3    | 11.0   | 0.54                              |
| FV180      | C190         | 125     | 45 | 64 | 63  | 13 | 91  | 35  | 63x8                          | 10.5                                             | 12.4   | 18.9   | 31.3   | 0.32                              |
| "          | "            | 160     | "  | "  | 80  | "  | "   | 50  | "                             | 10.2                                             | 11.7   | 16.7   | 26.5   | 0.41                              |
| "          | "            | 200     | "  | "  | 95  | "  | "   | 65  | "                             | 9.6                                              | 10.8   | 14.8   | 25.9   | 0.52                              |
| "          | "            | 250     | "  | "  | 110 | "  | "   | 80  | "                             | 8.9                                              | 9.8    | 13.0   | 19.3   | 0.62                              |
| "          | "            | 315     | "  | "  | 130 | "  | "   | 100 | "                             | 8.3                                              | 9.0    | 11.6   | 16.6   | 0.72                              |
| FV250      | C275         | 160     | 55 | 69 | 80  | 14 | 106 | 50  | 63x8                          | 13.4                                             | 16.4   | 23.8   | 45.9   | 0.57                              |
| "          | "            | 200     | "  | "  | 95  | "  | "   | 65  | "                             | 12.3                                             | 14.7   | 20.6   | 38.3   | 0.71                              |
| "          | "            | 250     | "  | "  | 110 | "  | "   | 80  | "                             | 11.3                                             | 13.3   | 17.9   | 32.1   | 0.85                              |
| "          | "            | 315     | "  | "  | 130 | "  | "   | 100 | "                             | 10.5                                             | 12.0   | 15.8   | 27.0   | 1.00                              |
| "          | "            | 400     | "  | "  | 130 | "  | "   | 100 | "                             | 9.8                                              | 10.7   | 13.9   | 23.8   | 1.00                              |
| FV315      | C370         | 160     | 60 | 85 | 50  | 14 | 130 | *   | 70x8                          | 20.4                                             | 24.9   | 33.3   | 67.8   | 0.52                              |
| "          | "            | 200     | "  | "  | 95  | "  | "   | 65  | "                             | 18.5                                             | 22.1   | 28.9   | 56.4   | 0.98                              |
| "          | "            | 250     | "  | "  | 110 | "  | "   | 80  | "                             | 17.0                                             | 20.0   | 25.3   | 47.3   | 1.13                              |
| "          | "            | 315     | "  | "  | 130 | "  | "   | 100 | "                             | 15.9                                             | 18.2   | 22.4   | 39.9   | 1.34                              |
| "          | "            | 400     | "  | "  | 130 | "  | "   | 100 | "                             | 15.0                                             | 16.8   | 20.2   | 34.0   | 1.34                              |

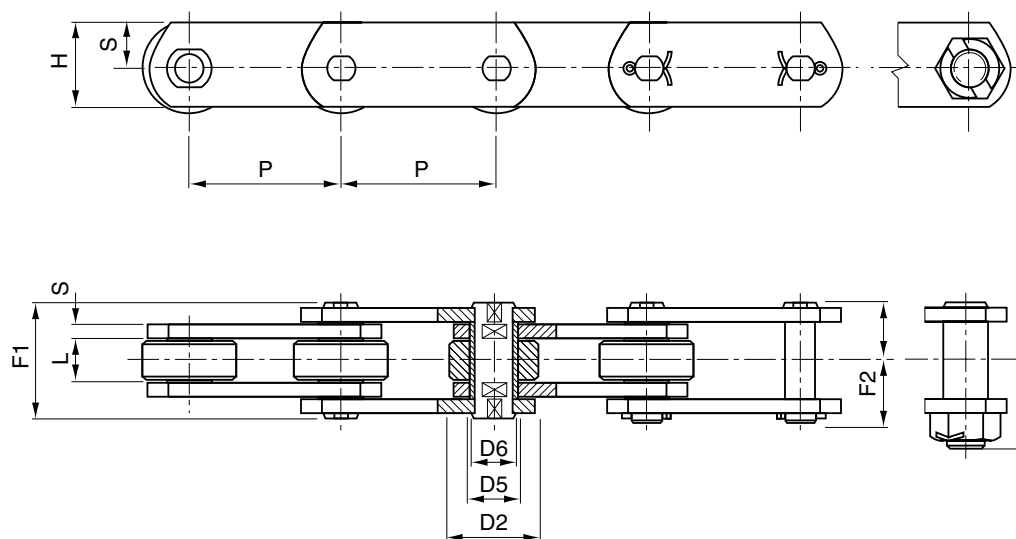
\* Attachment With One Hole

# Conveyor Chain

## FVT/CE Series

## Metric Conveyor Chain (DIN 8165)

FVT/CE Series Deep Link



## Deep Link

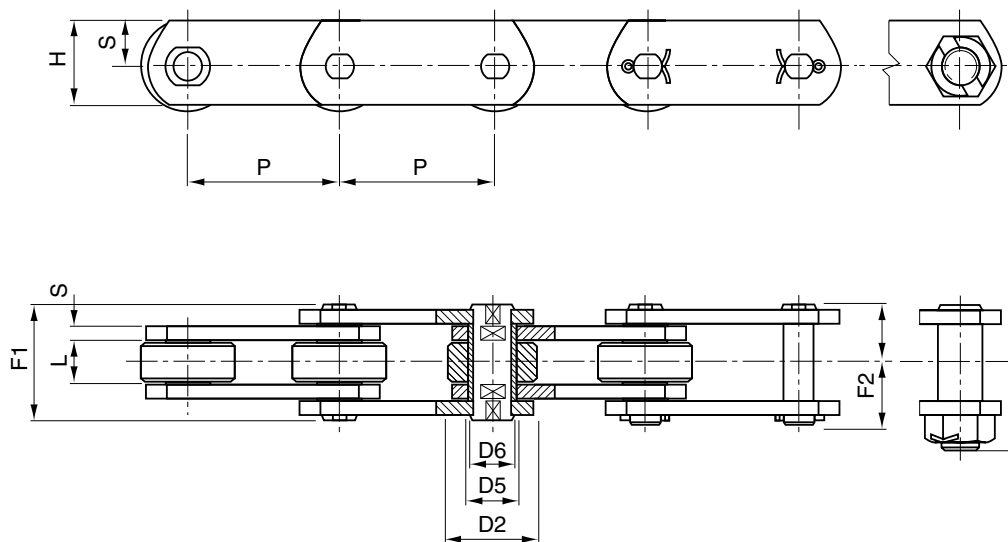
| DIN Number | Chain number | P Pitch | L  | H  | H1   | S | F1 | F2 | D2 | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight kg/m |
|------------|--------------|---------|----|----|------|---|----|----|----|----|----|------------------|----------------------|-------------|
| FVT40      | CE42         | 50      | 18 | 35 | 22.5 | 3 | 36 | 21 | 32 | 15 | 10 | 42               | 47                   | 5.0         |
| "          | "            | 63      | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 4.3         |
| "          | "            | 80      | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 3.8         |
| "          | "            | 100     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 3.4         |
| "          | "            | 125     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 3.0         |
| FVT63      | CE64         | 63      | 22 | 40 | 25   | 4 | 45 | 26 | 40 | 18 | 12 | 64               | 75                   | 7.5         |
| "          | "            | 80      | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 6.5         |
| "          | "            | 100     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 5.7         |
| "          | "            | 125     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 5.1         |
| "          | "            | 160     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 4.5         |
| FVT90      | CE100        | 63      | 25 | 45 | 27.5 | 5 | 53 | 30 | 48 | 20 | 14 | 100              | 115                  | 11.7        |
| "          | "            | 80      | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 10.0        |
| "          | "            | 100     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 8.7         |
| "          | "            | 125     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 7.7         |
| "          | "            | 160     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 6.8         |
| "          | "            | 200     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 5.8         |
| "          | "            | 250     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 5.4         |
| FVT112     | CE120        | 100     | 30 | 50 | 30   | 6 | 62 | 35 | 55 | 22 | 16 | 120              | 170                  | 12.7        |
| "          | "            | 125     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 11.7        |
| "          | "            | 160     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 9.7         |
| "          | "            | 200     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 8.7         |
| "          | "            | 250     | "  | "  | "    | " | "  | "  | "  | "  | "  | "                | "                    | 8.0         |

# Conveyor Chain

## FVT/CE Series

## Metric Conveyor Chain (DIN 8165)

FVT/CE Series Deep Link



## Deep Link

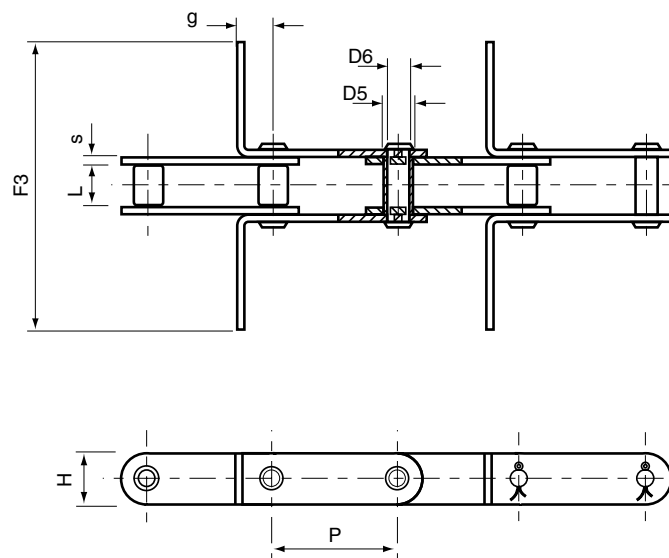
| DIN Number | Chain Number | P Pitch | L  | H  | H1   | S  | F1 | F2 | D2 | D5 | D6 | Breaking Load kN | HT Breaking Load, kN | Weight kg/m |
|------------|--------------|---------|----|----|------|----|----|----|----|----|----|------------------|----------------------|-------------|
| FVT140     | CE145        | 100     | 35 | 60 | 37.5 | 6  | 67 | 38 | 60 | 25 | 18 | 145              | 180                  | 16.8        |
| "          | "            | 125     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 14.6        |
| "          | "            | 160     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 12.6        |
| "          | "            | 200     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 11.3        |
| "          | "            | 250     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 10.1        |
| FVT180     | CE190        | 125     | 45 | 70 | 45   | 8  | 86 | 49 | 70 | 30 | 20 | 190              | 250                  | 24.2        |
| "          | "            | 160     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 20.8        |
| "          | "            | 200     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 18.4        |
| "          | "            | 250     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 16.5        |
| "          | "            | 315     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 14.9        |
| FVT250     | CE275        | 160     | 55 | 80 | 50   | 8  | 97 | 55 | 80 | 36 | 26 | 275              | 300                  | 28.2        |
| "          | "            | 200     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 24.5        |
| "          | "            | 250     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 21.7        |
| "          | "            | 315     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 19.3        |
| FVT315     | CE295        | 160     | 65 | 90 | 55   | 10 | 26 | 70 | 90 | 42 | 30 | 370              | 480                  | 39.9        |
| "          | "            | 200     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 34.8        |
| "          | "            | 250     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 30.6        |
| "          | "            | 315     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 27.3        |
| "          | "            | 400     | "  | "  | "    | "  | "  | "  | "  | "  | "  | "                | "                    | 24.5        |

# Conveyor Chain

## FV/CR Series

## Metric Conveyor Chain (DIN 8165)

Scraper Chain



Note: Scraper length F3 is available in various lengths. Please provide required length on enquiry.

## Scraper Chain

| DIN Number | Chain Number | Pitch P | L  | H  | S | g  | F3 | D5 | D6 | Breaking Load kN | Weight kg/m |
|------------|--------------|---------|----|----|---|----|----|----|----|------------------|-------------|
| FV40       | CR42         | 80      | 18 | 25 | 3 | 25 | *  | 15 | 10 | 42               | 1.9         |
| "          | "            | 100     | "  | "  | " | "  | *  | "  | "  | "                | 1.7         |
| "          | "            | 125     | "  | "  | " | "  | *  | "  | "  | "                | 1.6         |
| FV63       | CR64         | 100     | 22 | 30 | 4 | 25 | *  | 18 | 12 | 64               | 3.0         |
| "          | "            | 125     | "  | "  | " | "  | *  | "  | "  | "                | 2.7         |
| "          | "            | 150     | "  | "  | " | "  | *  | "  | "  | "                | 2.4         |
| FV90       | CR100        | 100     | 25 | 35 | 5 | 30 | *  | 20 | 14 | 100              | 4.5         |
| "          | "            | 125     | "  | "  | " | "  | *  | "  | "  | "                | 4.2         |
| "          | "            | 150     | "  | "  | " | "  | *  | "  | "  | "                | 4.0         |
| FV112      | CR120        | 100     | 30 | 40 | 6 | 35 | *  | 22 | 16 | 120              | 6.7         |
| "          | "            | 125     | "  | "  | " | "  | *  | "  | "  | "                | 6.0         |
| "          | "            | 150     | "  | "  | " | "  | *  | "  | "  | "                | 5.5         |
| FV140      | CR145        | 100     | 35 | 45 | " | 38 | *  | 26 | 18 | 145              | 7.4         |
| "          | "            | 125     | "  | "  | " | "  | *  | "  | "  | "                | 6.7         |
| "          | "            | 150     | "  | "  | " | "  | *  | "  | "  | "                | 6.0         |
| FV180      | CR190        | 125     | 45 | 50 | 8 | 44 | *  | 30 | 20 | 190              | 10.5        |
| "          | "            | 150     | "  | "  | " | "  | *  | "  | "  | "                | 10.2        |
| "          | "            | 200     | "  | "  | " | "  | *  | "  | "  | "                | 9.6         |
| FV250      | CR275        | 125     | 55 | 60 | " | 50 | *  | 36 | 26 | 275              | 13.4        |
| "          | "            | 150     | "  | "  | " | "  | *  | "  | "  | "                | 12.3        |
| "          | "            | 200     | "  | "  | " | "  | *  | "  | "  | "                | 11.3        |

# Conveyor Chain Attachments

## Attachment Chain Designations

### Attachment Chain Designations

# M1-01

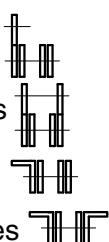
#### Attachment Orientation

M = Vertical one side

MK = Vertical both sides

A = Horizontal one side

K = Horizontal both sides



#### Mounting Holes

1 = Single Hole

2 = Double

3 = Triple



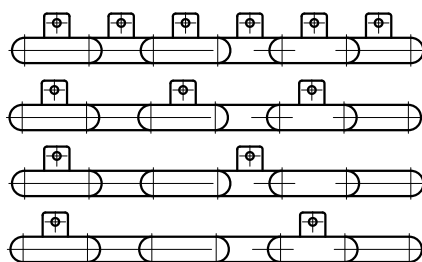
#### Frequency

01 = Every side plate

02 = Every other side plate

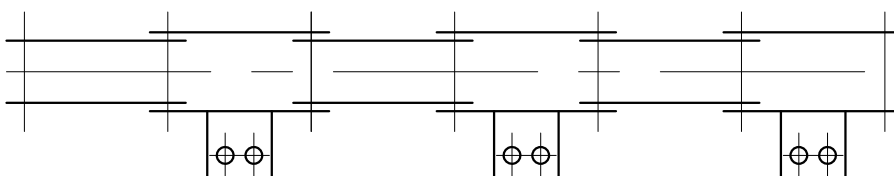
03 = Every third side plate

04 = Every fourth side plate

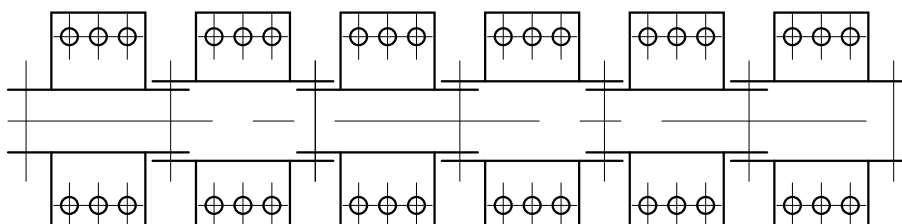


## Examples

A2-02



K3-01

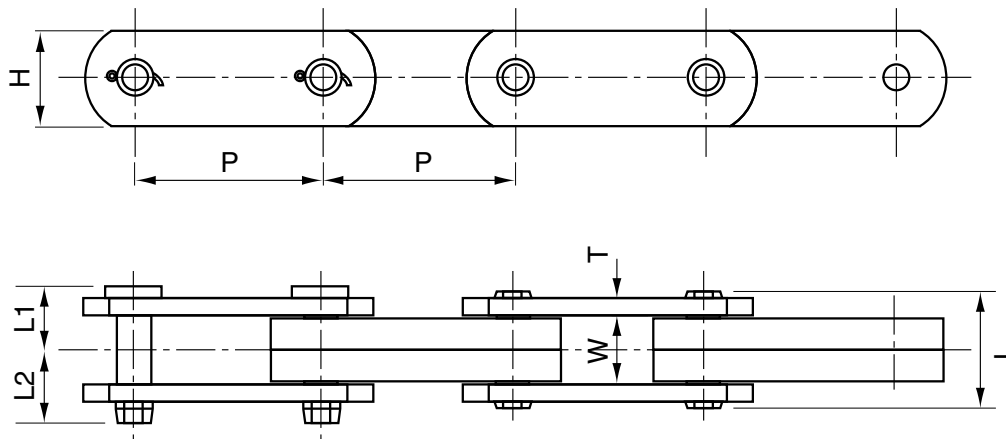




# Block Chain

## NF Block Chain

NF Block Chain



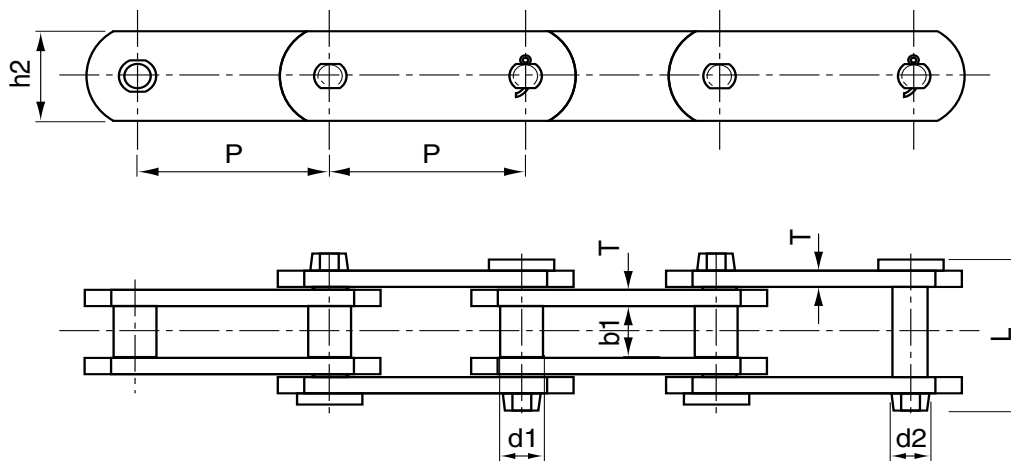
| Chain number | Chain pitch | Roller diameter | Width between inner plates | Bearing pin diameter | Pin length |       |       | Side plate height | Plate thickness | Tensile strength | Approx weight |
|--------------|-------------|-----------------|----------------------------|----------------------|------------|-------|-------|-------------------|-----------------|------------------|---------------|
|              | P           | R               | W                          | D                    | L          | L1    | L2    | H                 | T               | kN(kgf)          | kg/m          |
| NF 30150     | 150.00      | /               | 23.3                       | /                    | 47.0       | 24.00 | 32.00 | 38.1              | 7.9             | 309(31500)       | 7.0           |
| NF 30200     | 200.00      | /               | 23.3                       | /                    | 47.0       | 24.00 | 32.00 | 38.1              | 7.9             | 309(31500)       | 6.6           |
| NF 40150     | 150.00      | /               | 26.5                       | /                    | 50.0       | 25.50 | 33.50 | 44.5              | 7.9             | 397(40500)       | 9.0           |
| NF 40200     | 200.00      | /               | 26.5                       | /                    | 50.0       | 25.50 | 33.50 | 44.5              | 7.9             | 397(40500)       | 8.5           |
| NF 56200     | 200.00      | /               | 29.5                       | /                    | 57.0       | 29.50 | 40.50 | 54                | 9.5             | 554(56500)       | 12.3          |
| NF 56250     | 250.00      | /               | 29.5                       | /                    | 57.0       | 29.50 | 40.50 | 54                | 9.5             | 554(56500)       | 12.0          |
| NF 63200     | 200.00      | /               | 31.5                       | /                    | 59.0       | 30.50 | 41.50 | 57                | 9.5             | 618(63000)       | 13.7          |
| NF 63250     | 250.00      | /               | 31.5                       | /                    | 59.0       | 30.50 | 41.50 | 57                | 9.5             | 618(63000)       | 13.0          |
| NF 70200     | 200.00      | /               | 33.5                       | /                    | 61.0       | 31.50 | 42.50 | 63.5              | 9.5             | 721(73500)       | 16.2          |
| NF 70250     | 250.00      | /               | 33.5                       | /                    | 61.0       | 31.50 | 42.50 | 63.5              | 9.5             | 721(73500)       | 15.5          |
| NF 90200     | 200.00      | /               | 38                         | /                    | 68.0       | 34.50 | 45.50 | 72                | 10.5            | 907(92500)       | 21.0          |
| NF 90250     | 250.00      | /               | 38                         | /                    | 68.0       | 34.50 | 45.50 | 72                | 10.5            | 907(92500)       | 20.0          |
| NF115250     | 250.00      | /               | 40                         | /                    | 76.0       | 38.00 | 49.00 | 76.2              | 12.7            | 1120(114000)     | 25.0          |
| NF115300     | 300.00      | /               | 40                         | /                    | 76.0       | 38.00 | 49.00 | 76.2              | 12.7            | 1120(114000)     | 24.0          |
| NF140250     | 250.00      | /               | 47.5                       | /                    | 84.0       | 44.00 | 54.00 | 85                | 14              | 1400(143000)     | 32.0          |
| NF140300     | 300.00      | /               | 47.5                       | /                    | 84.0       | 44.00 | 54.00 | 85                | 14              | 1400(143000)     | 31.0          |
| NF180300     | 300.00      | /               | 52.5                       | /                    | 94.0       | 48.50 | 58.50 | 95                | 16              | 1740(177500)     | 39.0          |
| NF180350     | 350.00      | /               | 52.5                       | /                    | 94.0       | 48.50 | 58.50 | 95                | 16              | 1740(177500)     | 37.8          |
| NF210300     | 300.00      | /               | 59                         | /                    | 101.0      | 51.50 | 61.50 | 110               | 16              | 2150(219500)     | 50.0          |
| NF210350     | 350.00      | /               | 59                         | /                    | 101.0      | 51.50 | 61.50 | 110               | 16              | 2150(219500)     | 48.3          |
| NF250300     | 300.00      | /               | 66                         | /                    | 114.0      | 58.50 | 68.50 | 112               | 19              | 2440(248500)     | 58.8          |
| NF250350     | 350.00      | /               | 66                         | /                    | 114.0      | 58.50 | 68.50 | 112               | 19              | 2440(248500)     | 56.7          |
| NF280300     | 300.00      | /               | 67                         | /                    | 115.0      | 58.50 | 68.50 | 122               | 19              | 2720(277500)     | 66.0          |
| NF280350     | 350.00      | /               | 67                         | /                    | 115.0      | 58.50 | 68.50 | 122               | 19              | 2720(277500)     | 62.3          |

These chains consist of outer link plates, inner block links and pins.

# Engineered Bush Chains

## Engineered Steel Bush Chains

Engineered Steel Bush Chains

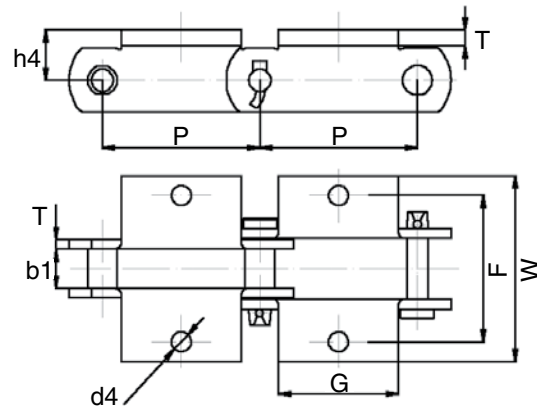
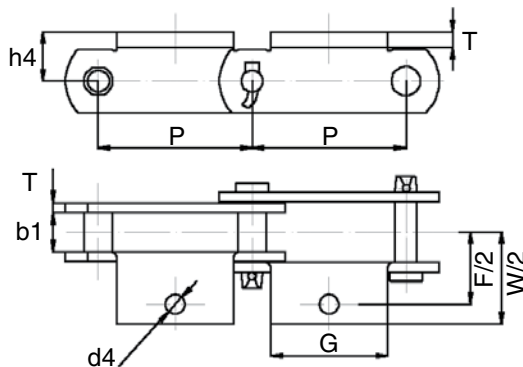


| ANSI chain number | Challenge chain number | Pitch inches | Pitch mm | Bush diameter | Width between inner plates | Pin diameter | Pin length | Side plate height | Plate thickness | Average Tensile strength | Approx weight |
|-------------------|------------------------|--------------|----------|---------------|----------------------------|--------------|------------|-------------------|-----------------|--------------------------|---------------|
|                   |                        | P            | P        | d1 max        | b1 min                     | d2           | L max      | h2                | T               | kN/bf                    | kg/m          |
| S102B             | S102B                  | 4.00         | 101.60   | 25.4          | 54.1                       | 15.88        | 111.3      | 38.10             | 9.70            | 176.00                   | 10.40         |
| S110              | S110                   | 6.00         | 152.40   | 32            | 54.1                       | 15.88        | 111.3      | 38.10             | 9.70            | 176.00                   | 9.80          |
| S111              | S111                   | 4.76         | 120.90   | 36.6          | 66.8                       | 19.05        | 131.2      | 50.80             | 9.70            | 235.40                   | 15.90         |
| S131              | S131                   | 3.08         | 78.11    | 32            | 33.5                       | 15.88        | 90.5       | 38.10             | 9.70            | 176.00                   | 11.60         |
| S150              | S150                   | 6.05         | 153.67   | 44.7          | 84.3                       | 25.4         | 164.6      | 63.50             | 12.70           | 416.00                   | 25.70         |
| S188              | S188                   | 2.61         | 66.27    | 22.4          | 26.9                       | 12.7         | 68.6       | 28.40             | 6.40            | 112.20                   | 5.60          |
| S856              | S856                   | 6.00         | 152.40   | 44.4          | 76.2                       | 25.4         | 154.9      | 63.50             | 12.70           | 401.50                   | 25.00         |
| S857              | S857                   | 6.00         | 152.40   | 44.4          | 76.2                       | 25.4         | 154.9      | 82.60             | 12.70           | 475.20                   | 32.00         |
| S859              | S859                   | 6.00         | 152.40   | 60.4          | 95.3                       | 31.75        | 188.5      | 101.60            | 16.00           | 759.00                   | 55.90         |
| S864              | S864                   | 7.00         | 177.80   | 60.4          | 95.3                       | 31.75        | 188.5      | 101.60            | 16.00           | 759.00                   | 51.80         |

# Engineered Bush Chains

## Engineered Steel Bush Chains Attachments A1 & K1

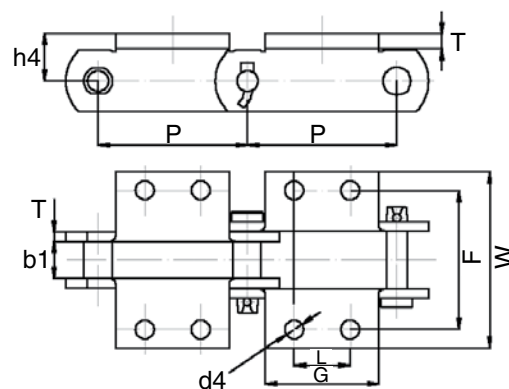
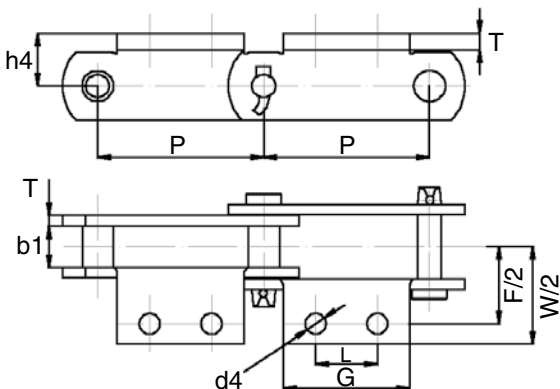
Engineered Steel Bush Chains Attachments A1 &amp; K1



| ANSI chain number | Challenge chain number | Pitch inches | Pitch mm | Attachment diameter |       |       |      |       | Plate thickness |
|-------------------|------------------------|--------------|----------|---------------------|-------|-------|------|-------|-----------------|
|                   |                        | P            | P        | G                   | F     | W     | h4   | d4    | T               |
| *S102B            | *S102B                 | 4.00         | 101.60   | 77.0                | 121.0 | 180.8 | 25.4 | 10.20 | 9.70            |
| S131              | S131                   | 3.08         | 78.11    | 73.9                | 104.6 | 157   | 25.4 | 13.50 | 9.70            |
| S188              | S188                   | 2.61         | 66.27    | 54.6                | 95.2  | 131.6 | 20.6 | 10.20 | 6.40            |

## Engineered Steel Bush Chains Attachments A2 & K2

Engineered Steel Bush Chains Attachments A2 &amp; K2



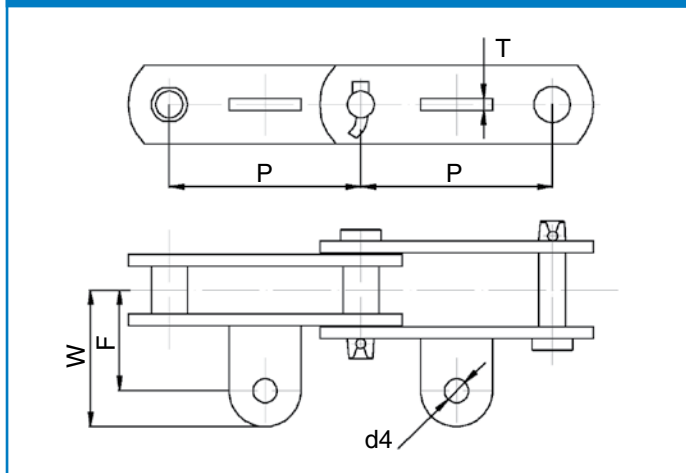
| ANSI chain number | Challenge chain number | Pitch inches | Hole distance | Attachment diameter |       |       |      |        | Plate thickness |
|-------------------|------------------------|--------------|---------------|---------------------|-------|-------|------|--------|-----------------|
|                   |                        | P            | L             | G max               | F     | W max | h4   | d4 min | T               |
| *S102B            | *S102B                 | 101.60       | 44.50         | 69.9                | 134.9 | 180.8 | 25.4 | 10.20  | 9.70            |
| S110              | S110                   | 152.40       | 44.50         | 89.6                | 134.9 | 180.8 | 25.4 | 10.20  | 9.70            |
| S111              | S111                   | 120.90       | 58.70         | 92.7                | 158.8 | 210.8 | 38.1 | 13.50  | 9.70            |
| S131              | S131                   | 78.11        | 38.10         | 73.9                | 104.6 | 157   | 25.4 | 13.50  | 9.70            |
| S150              | S150                   | 153.67       | 69.90         | 108.7               | 190.5 | 249.4 | 47.8 | 13.50  | 12.70           |
| S188              | S188                   | 66.27        | 31.80         | 54.6                | 106.4 | 131.6 | 20.6 | 8.60   | 6.40            |
| S856              | S856                   | 152.40       | 63.50         | 103.1               | 184.2 | 241.3 | 47.8 | 16.80  | 12.70           |

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Engineered Bush Chains

## Engineered Steel Bush Chains Attachments A22

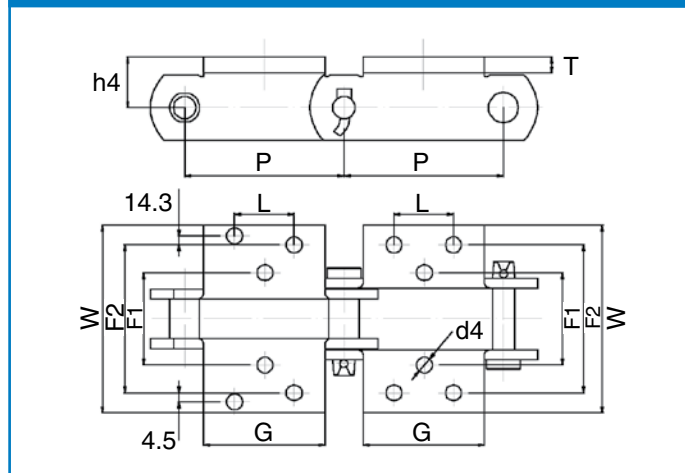
Engineered Steel Bush Chains Attachments A22



| ANSI chain number | Challenge chain number | Pitch inches | Pitch mm | Attachment diameter |      |      | Plate thickness |       |       |
|-------------------|------------------------|--------------|----------|---------------------|------|------|-----------------|-------|-------|
|                   |                        | P            | P        | G                   | F    | W    | h4              | d4    | T     |
| S188              | S188                   | 2.61         | 66.27    | 49.2                | 45.2 | 61.2 | /               | 10.20 | 10.40 |
| /                 | S188A22F1              | 2.61         | 66.27    | 32.0                | 45.2 | 61.2 | /               | 12.00 | 6.40  |

## Engineered Steel Bush Chains Attachments K3

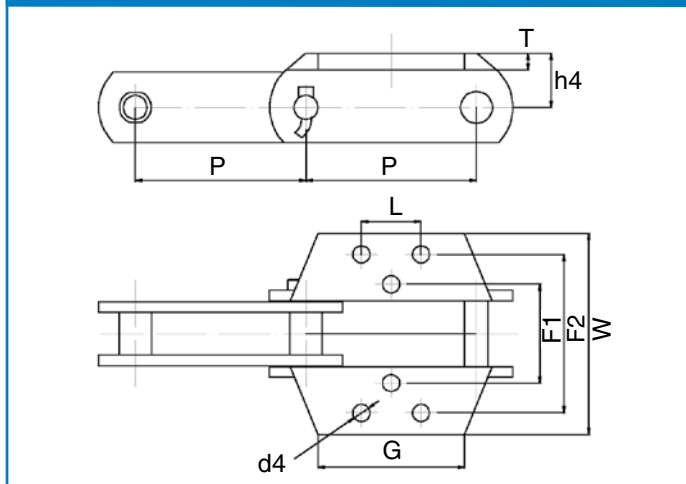
Engineered Steel Bush Chains Attachments K3



| ANSI chain number | Challenge chain number | Pitch inches | Attachment diameter |      |       |       |       |       |       | Plate thickness |
|-------------------|------------------------|--------------|---------------------|------|-------|-------|-------|-------|-------|-----------------|
|                   |                        |              | P                   | G    | L     | F1    | F2    | W     | h4    |                 |
| S150              | S150                   | 153.67       | 109.5               | 69.9 | 190.5 | 292.1 | 347.5 | 47.80 | 13.50 | 13.5            |
| S856              | S856                   | 152.40       | 152.4               | 69.9 | 166.6 | 277.9 | 349.3 | 47.80 | 13.50 | 13.5            |

## Engineered Steel Bush Chains Attachments K35

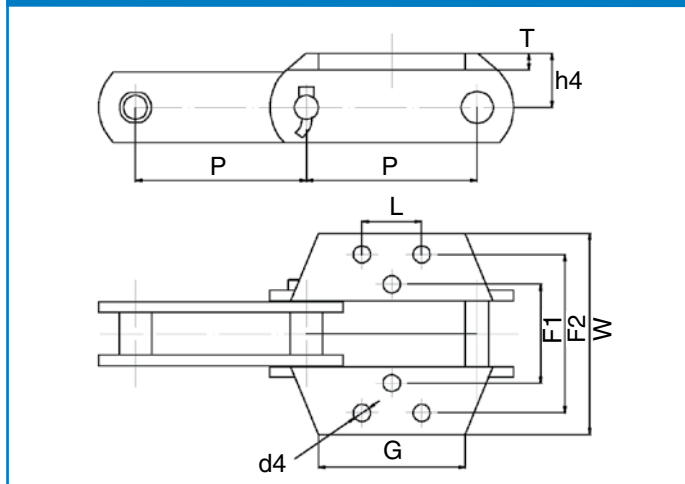
Engineered Steel Bush Chains Attachments K35



| ANSI chain number | Challenge chain number | Pitch inches | Attachment diameter |      |       |       |       |       |       | Plate thickness |
|-------------------|------------------------|--------------|---------------------|------|-------|-------|-------|-------|-------|-----------------|
|                   |                        |              | P                   | G    | L     | F1    | F2    | W     | h4    |                 |
| S856              | S856                   | 152.40       | 146.1               | 63.5 | 184.2 | 298.5 | 349.3 | 47.80 | 16.80 | 13.5            |

## Engineered Steel Bush Chains Attachments K44

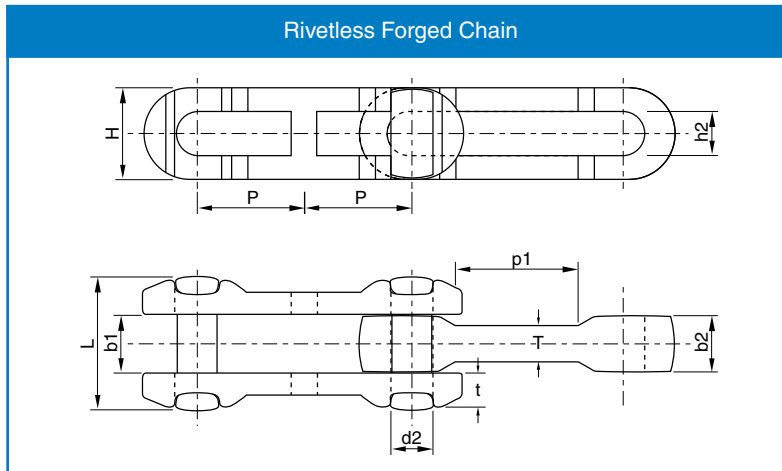
Engineered Steel Bush Chains Attachments K44



| ANSI chain number | Challenge chain number | Pitch inches |       |       |      | Attachment diameter |       |        |       |      | Plate thickness |
|-------------------|------------------------|--------------|-------|-------|------|---------------------|-------|--------|-------|------|-----------------|
|                   |                        | P            | G     | L1    | L2   | F1                  | F2    | W      | h4    | d4   | T               |
| S857              | S857                   | 152.40       | 146.1 | 88.9  | 88.9 | 177.8               | 304.8 | 355.60 | 63.50 | 13.5 | 13.5            |
| S859              | S859                   | 152.40       | 146.1 | 114.3 | 69.9 | 228.6               | 330.2 | 381.00 | 76.20 | 16.8 | 13.5            |
| S864              | S864                   | 177.80       | 146.1 | 139.7 | 95.3 | 228.6               | 330.2 | 381.00 | 76.20 | 16.8 | 13.5            |

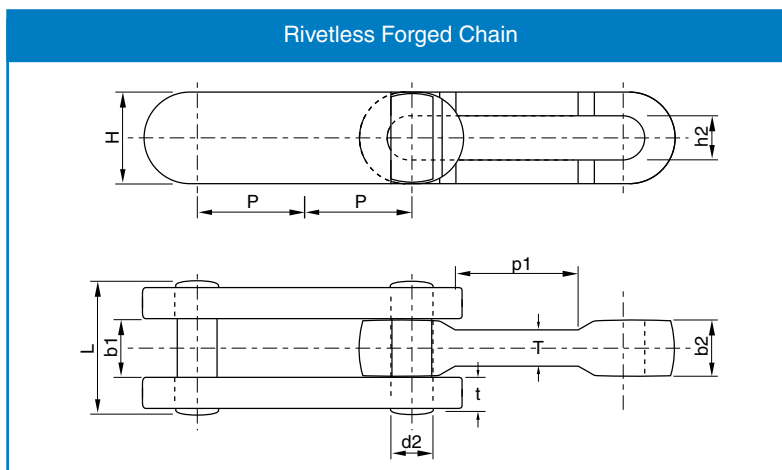
# Drop Forged Chain

## Rivetless Forged Chain



| Chain number | Pitch<br>mm<br>P | Pin<br>diameter<br>d2 | Pin length<br>L | Center link<br>gap<br>h2 min | Chain height<br>H max | Plate thickness |       | Center link<br>width<br>b1 | Ultimate<br>tensile<br>strength / kN<br>Q min | Designation  |
|--------------|------------------|-----------------------|-----------------|------------------------------|-----------------------|-----------------|-------|----------------------------|-----------------------------------------------|--------------|
| X228         | 50.80            | 6.40                  | 27.70           | 7.90                         | 18.00                 | 6.40            | 9.40  | 13.00                      | 26.70                                         | PHC X288...  |
| X348         | 76.20            | 12.40                 | 43.90           | 13.50                        | 27.90                 | 10.20           | 13.00 | 20.10                      | 97.90                                         | PHC X348...  |
| X458         | 101.60           | 16.00                 | 57.20           | 16.80                        | 36.60                 | 12.20           | 16.30 | 27.20                      | 210.00                                        | PHC X458...  |
| X458XP*      | 101.60           | 16.00                 | 57.20           | 16.80                        | 36.60                 | 12.20           | 16.30 | 27.20                      | 255.00                                        | PHC 468...   |
| 468          | 102.40           | 19.05                 | 84.10           | 22.35                        | 47.80                 | 10.40           | 28.70 | 42.93                      | 391.00                                        | PHC 468H...  |
| X678         | 152.40           | 22.10                 | 77.00           | 24.10                        | 51.60                 | 17.80           | 21.10 | 34.30                      | 380.00                                        | PHC X658...  |
| X678XP*      | 152.40           | 22.10                 | 77.00           | 24.10                        | 51.60                 | 17.80           | 21.10 | 34.30                      | 450.00                                        | PHCX678...   |
| 698          | 152.40           | 28.70                 | 95.25           | 31.75                        | 65.00                 | 14.20           | 25.40 | 41.40                      | 650.00                                        | PHC 678...   |
| 698XP*       | 152.40           | 28.70                 | 95.25           | 31.75                        | 65.00                 | 14.20           | 25.40 | 41.40                      | 720.00                                        | PHC 698...   |
| 998          | 229.40           | 28.70                 | 95.30           | 31.75                        | 67.60                 | 14.20           | 25.40 | 42.93                      | 578.00                                        | PHC XT100... |
| 9118         | 229.40           | 35.00                 | 124.00          | 38.10                        | 76.20                 | 19.80           | 33.30 | 51.10                      | 979.00                                        | PHC XT160... |

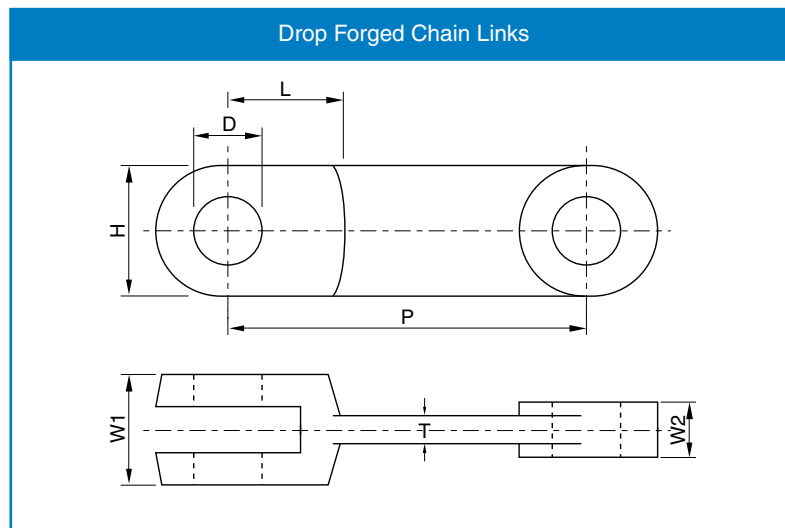
## Rivetless Forged Chain



| Chain number | Pitch<br>mm<br>P | Pin<br>diameter<br>d2 | Pin length<br>L | Center link<br>gap<br>h2 min | Chain height<br>H max | Plate thickness |       | Center link<br>width<br>b1 | Ultimate<br>tensile<br>strength / kN<br>Q min | Designation  |
|--------------|------------------|-----------------------|-----------------|------------------------------|-----------------------|-----------------|-------|----------------------------|-----------------------------------------------|--------------|
| S348         | 76.68            | 12.70                 | 44.45           | 20.57                        | 28.70                 | 12.70           | 14.22 | 8.89                       | 3.58                                          | PHC S348...  |
| S458         | 102.39           | 16.00                 | 52.32           | 26.92                        | 35.05                 | 16.00           | 17.53 | 17.78                      | 5.22                                          | PHC S458...  |
| S468         | 102.39           | 19.05                 | 74.68           | 42.93                        | 50.80                 | 28.70           | 22.35 | 29.78                      | 11.78                                         | PHC S468...  |
| S678         | 153.19           | 22.35                 | 76.20           | 36.58                        | 50.80                 | 20.57           | 25.40 | 34.22                      | 12.83                                         | PHC S678...  |
| S698         | 153.19           | 28.70                 | 82.55           | 41.40                        | 63.50                 | 25.40           | 31.75 | 48.00                      | 17.45                                         | PHC S698...  |
| S998         | 229.39           | 28.70                 | 82.55           | 42.93                        | 63.50                 | 25.40           | 31.75 | 48.00                      | 18.05                                         | PHC S998...  |
| S9118        | 229.39           | 35.05                 | 111.25          | 54.10                        | 76.20                 | 33.27           | 38.10 | 81.33                      | 34.75                                         | PHC S9118... |

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Drop Forged Chain



| Chain number | Pitch<br>mm<br>P | H  | W1 | W2 | T    | L  | D  | *Weight<br>kg | Min. UTS<br>kN |
|--------------|------------------|----|----|----|------|----|----|---------------|----------------|
| 102          | 102              | 36 | 28 | 12 | 7.6  | 32 | 14 | 0.44          | 150            |
| 142          | 142              | 50 | 42 | 20 | 11   | 46 | 25 | 1.26          | 300            |
| 142H         | 142              | 50 | 62 | 30 | 16.5 | 55 | 25 | 2.1           | 450            |
| 142T         | 142              | 50 | 62 | 30 | 16.5 | 55 | 25 | 2.1           | 600            |
| 200          | 200              | 60 | 62 | 28 | 20   | 58 | 25 | 3.2           | 500            |
| 216          | 216              | 72 | 58 | 25 | 18   | 60 | 35 | 4.6           | 582            |
| 260          | 260              | 75 | 70 | 31 | 20   | 79 | 32 | 5.65          | 700            |

\* Weight including Pin and Circlip.

Nylon and welded steel flights available, eg:

**Square Bar Flight**

**U Flight**

**OO Flight**

**Flat Bar Flight**

**Closed U Flight**

**OO Flight with Filler Plates**

**Paddle Flight**

**Close U Flight with Filler Plates**

**Return Cup Flights**

## Note

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## The Benefits Spin Riveted Palm Oil Chain

**Challenge** Palm Oil conveyor chains are designed to withstand the harsh environments found in today's modern Palm Oil mills. Shock loads, heat and lubricating issues demand a tough, high quality solution.

**Material** – High quality alloy steels used throughout.

**Case Hardened alloy steel precision machined bushes**

– Ensuring minimum distortion and superior concentricity.

**Bushes from seamless tube with location shoulders and interference fit**

– For precise assembly; control on inner width and prevention of pin rotation. Bush shoulder length extended to form clearance between inner and outer plates providing uniform lubrication, increased strength and life and greatly minimises possibility of chain seizure.

**Spin Riveted Induction Hardened Pins in alloy steel** – For optimum life.

**Pins with location shoulders and interference fit** – For precise positioning of outer plate.

**Hardened Rollers with outer diameter finished by grinding**

– Gives excellent wear resistance and good load carrying qualities plus reduced wear on sprockets and a better visual result.

**Link plates cropped from cold drawn steel**

– Ensures internal stresses are minimised resulting in a plate able to withstand fatigue and shock loads.

**Holes precision punched on dedicated progression tooling** – consistently high tolerance pitch control guaranteed.

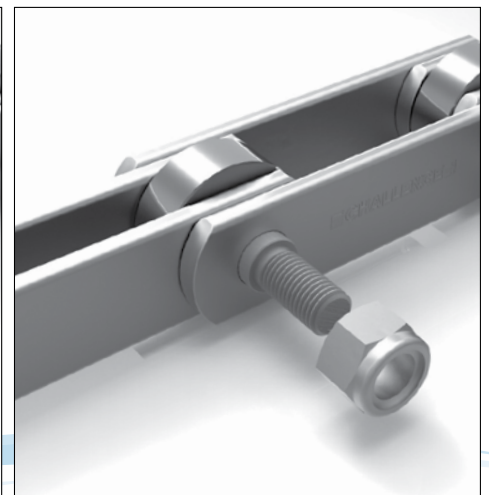
**Links manufactured from high carbon steel** – Giving increased breaking load.

**Shot peened** – Produces strong surface and reduced fatigue.

**Attachments and options**

– Zinc and Nickel plated parts, molykoted pins, bushes and rollers. Flanged rollers, hardened plates, Stainless parts, liner bushes etc.

**Connecting links** – Use zinc plated steel locking nuts (Nylok).

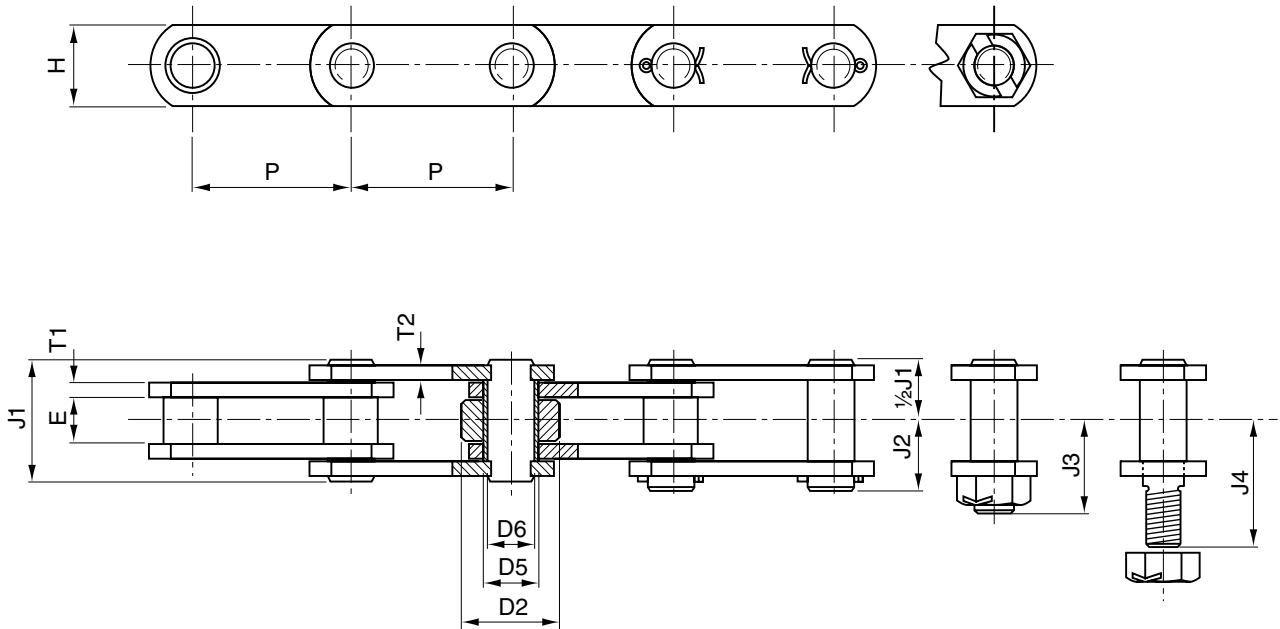




# Palm Oil Chain

## BS Conveyor Chain (BS 4116 Part 4)

Solid Pin



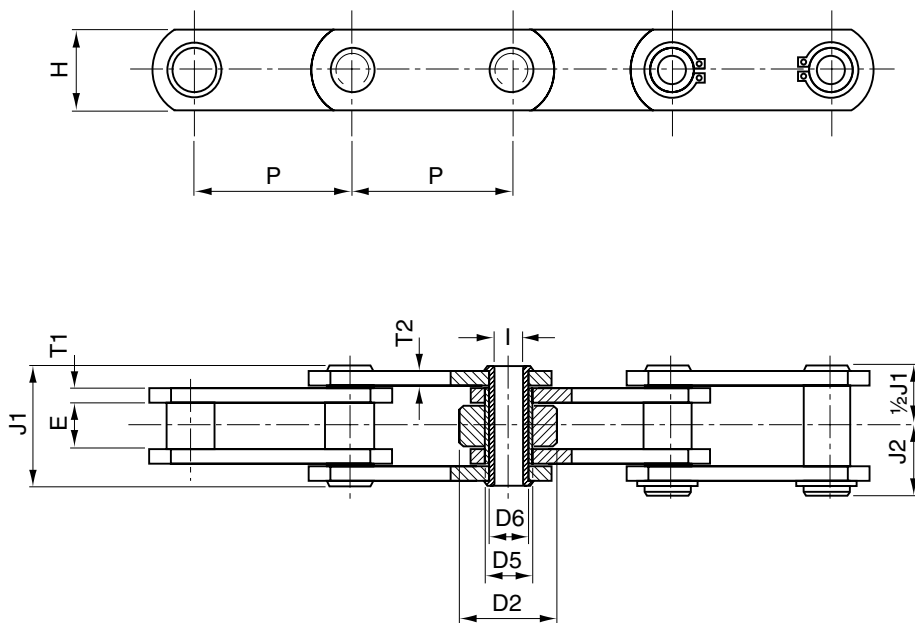
### Solid Pin

| Chain number | Minimum Breaking Load, lbf | Pitch Inches P | Pitch mm P | E    | H    | T1  | T2  | J1    | J2   | J3 | J4 | D2 | D4    | D5   | D6    | G   | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|----------------------------|----------------|------------|------|------|-----|-----|-------|------|----|----|----|-------|------|-------|-----|------------------|----------------------|----------------------|
| PCC-15-101.6 | 15000                      | 4.0            | 101.6      | 19.6 | 38.2 | 5.1 | 4   | 46.1  | 28   | 37 | 57 | 57 | 47.63 | 25.4 | 19    | 3.5 | 100              | 6.5                  | 4                    |
| PCC-15-152.4 | 15000                      | 6.0            | 152.4      | 19.6 | 38.2 | 5.1 | 4   | 46.1  | 28   | 37 | 57 | 57 | 47.63 | 25.4 | 19    | 3.5 | 100              | 5.3                  | 3.5                  |
| PCC-30-101.6 | 30000                      | 4.0            | 101.6      | 25.5 | 50.8 | 7.1 | 5.1 | 59.13 | 34.5 | 51 | 76 | 76 | 66.7  | 34.9 | 26.9  | 3.5 | 156              | 14.3                 | 3.2                  |
| PCC-30-152.4 | 30000                      | 6.0            | 152.4      | 25.5 | 50.8 | 7.1 | 5.1 | 59.13 | 34.5 | 51 | 76 | 76 | 66.7  | 34.9 | 26.9  | 3.5 | 156              | 11.3                 | 3                    |
| PCC-45-152.4 | 45000                      | 6.0            | 152.4      | 38   | 65   | 10  | 8   | 82.5  | 47   | 70 | 93 | 93 | 88.9  | 41.3 | 31.75 | 8.5 | 300              | 24.3                 | 2.8                  |
| PCC-55-152.4 | 55000                      | 6.0            | 152.4      | 25.5 | 50.8 | 7.1 | 5.1 | 59.13 | 34.5 | 51 | 76 | 76 | 66.7  | 34.9 | 26.9  | 3.5 | 245              | 11.3                 | 2.6                  |

# Palm Oil Chain

## BS Conveyor Chain (BS 4116 Part 4)

Hollow Pin



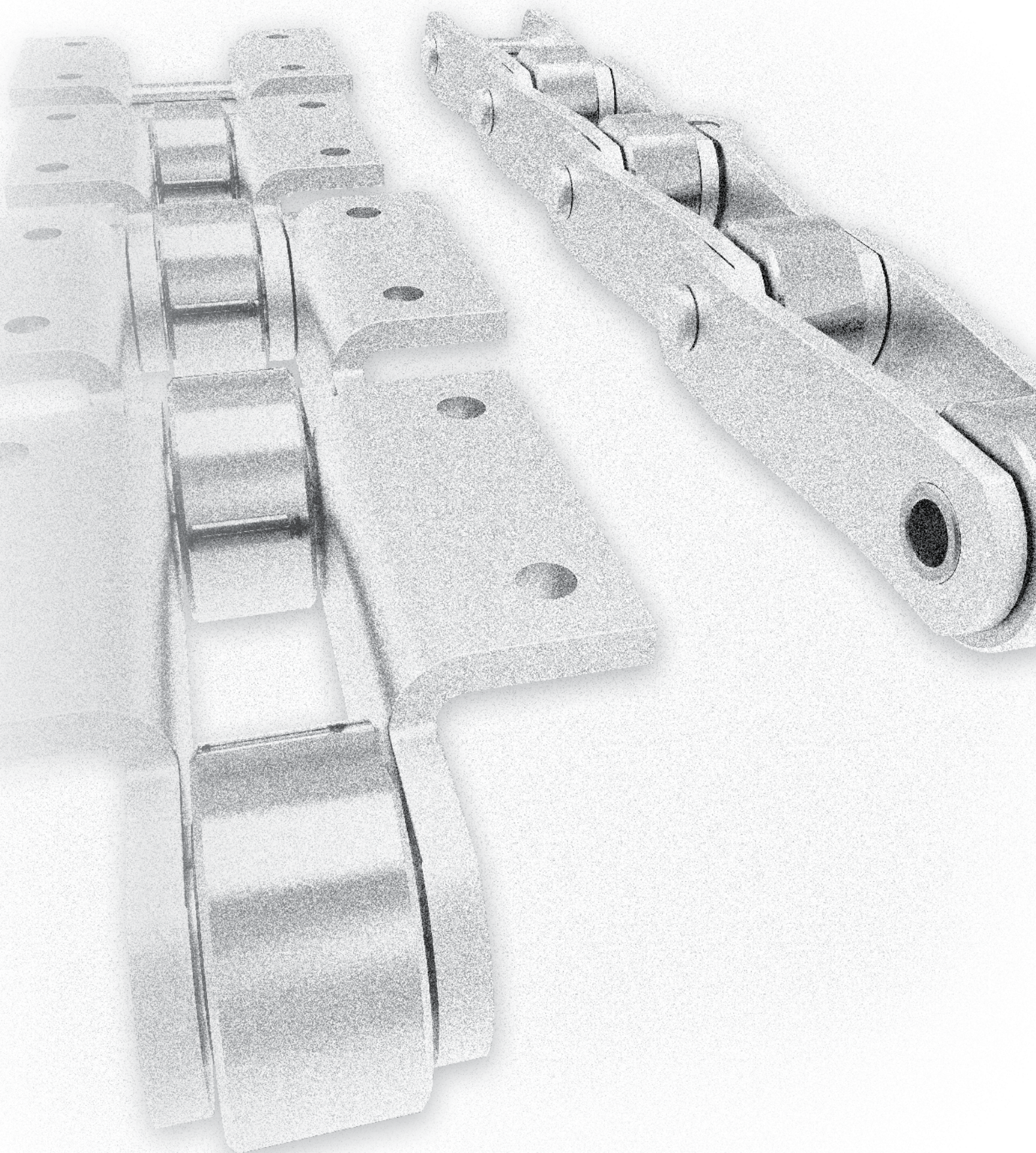
### Hollow Pin

| Chain number | Minimum Breaking Load, lbf | Pitch Inches P | Pitch mm P | E     | H    | T1  | T2  | J1   | J2   | J3    | D2   | D4    | D5  | D6  | G    | Breaking Load kN | HT Breaking Load, kN | Weight (Type C) kg/m |
|--------------|----------------------------|----------------|------------|-------|------|-----|-----|------|------|-------|------|-------|-----|-----|------|------------------|----------------------|----------------------|
| PCC-12-101.6 | 12000                      | 4.0            | 101.6      | 19.16 | 38.2 | 5.1 | 4   | 44   | 23.5 | 47.63 | 25.4 | 19    | 3.5 | 60  | 6.0  | 100              | 6.5                  | 4                    |
| PCC-12-152.4 | 12000                      | 6.0            | 152.4      | 19.16 | 38.2 | 5.1 | 4   | 44   | 23.5 | 47.63 | 25.4 | 19    | 3.5 | 60  | 4.9  | 100              | 5.3                  | 3.5                  |
| PCC-24-101.6 | 24000                      | 4.0            | 101.6      | 25.5  | 50.8 | 7.1 | 5.1 | 57   | 31.5 | 66.7  | 34.9 | 26.9  | 4   | 150 | 12.8 | 156              | 14.3                 | 3.2                  |
| PCC-24-152.4 | 24000                      | 6.0            | 152.4      | 25.5  | 50.8 | 7.1 | 5.1 | 57   | 31.5 | 66.7  | 34.9 | 26.9  | 4   | 150 | 11.0 | 156              | 11.3                 | 3                    |
| PCC-36-152.4 | 36000                      | 6.0            | 152.4      | 38    | 65   | 10  | 8   | 82.5 | 47   | 88.9  | 41.3 | 31.75 | 8.5 | 300 | 22.3 | 300              | 24.3                 | 2.8                  |
| PCC-50-152.4 | 50000                      | 6.0            | 152.4      | 25.5  | 50.8 | 7.1 | 5.1 | 57   | 31.5 | 66.7  | 34.9 | 26.9  | 4   | 225 | 11.0 | 245              | 11.3                 | 2.6                  |



# Sugar Chain

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Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.



# Sugar Chain

## The Benefits of Challenge Sugar Chain

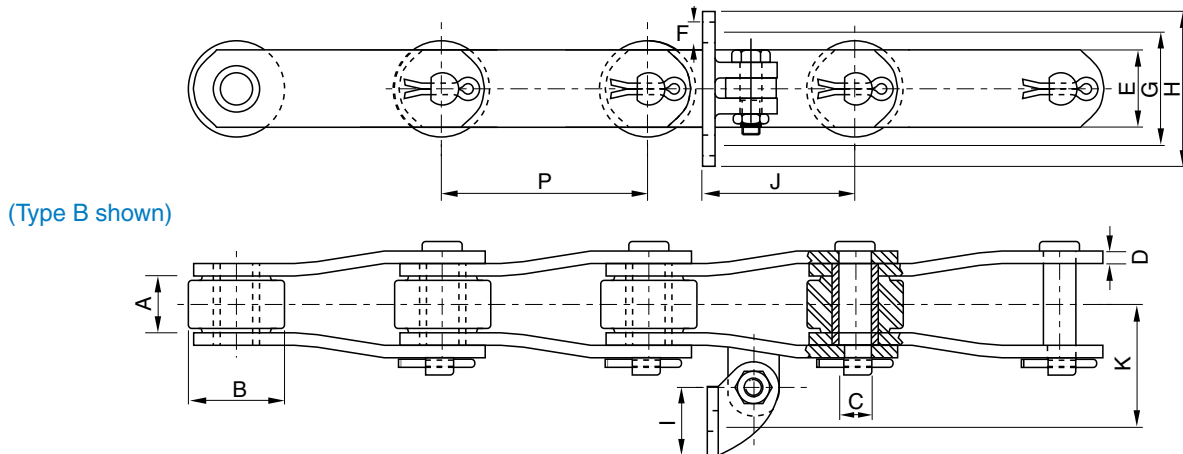
- Material** – High quality steels used throughout
- Link plates cropped from high carbon cold drawn steel**  
 To avoid internal stresses associated with guillotined steel, Challenge produces all plates from high tolerance, on size, cold drawn steel bars resulting in a plate better able to withstand fatigue and shock loads.
- Case Hardened Alloy steel bushes precision machined from seamless tube**  
 Ensuring minimum distortion and superior concentricity. Interference fit extends wear life by preventing bush rotation. Surface grinding minimises wear between bush and roller
- Induction Hardened Pins in High Chrome Alloy Steel**  
 Pins headed and flattened to ensure location and prevent rotation. Challenge EasyFit® pins designed with long lead in to aid on-site maintenance and assembly.
- Hardened Rollers with grinding**  
 Grinding the outer diameter gives excellent wear resistance and good load carrying qualities plus reduced wear on sprockets and better visual result. Stepped down to help prevent seizure.
- Flatted pin on 2184 Hyper Chain** for increased breaking load.
- Shot peened to produce a strong surface and reduce fatigue**
- Challenge has invested heavily in CNC controlled machinery for optimum batch component conformity.**
- Attachment plates jig assembled maintains position and squareness.**
- Holes precision punched on dedicated progression tooling**  
 Guarantees consistently high tolerance pitch control and strong, fatigue resistant chain.
- Robotic welding of attachment**  
 All industry standard attachments available.

In-house design team for all special requirements.

# Sugar Chain

## Bagasse Chain

Bagasse Chain



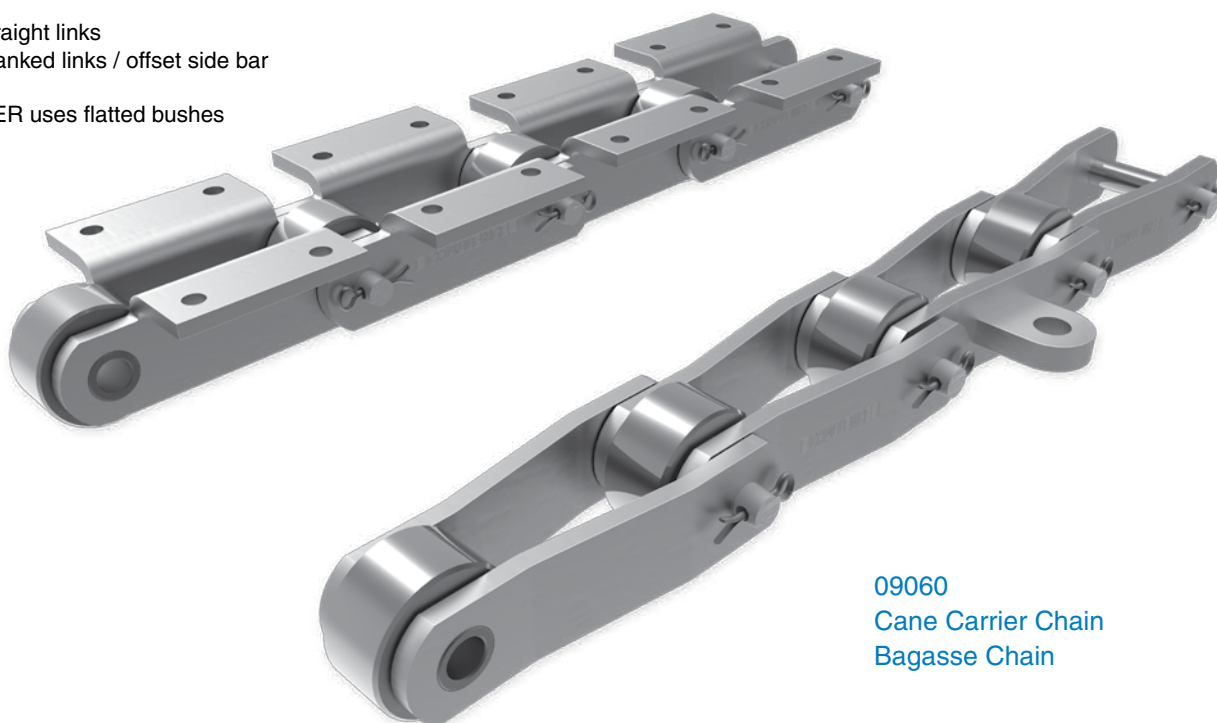
| Chain number  | Type | Pitch<br>P | Inside width<br>A | Roller diameter<br>B | Pin diameter<br>C | Plate thickness<br>D | Plate height<br>E | Attachment hole diameter<br>F | Attachment hole centres<br>G | Attachment length<br>H | Attachment width<br>I | Attachment face<br>J | Transverse pitch<br>K | Breaking load(kN) | Weight (kg/m) |
|---------------|------|------------|-------------------|----------------------|-------------------|----------------------|-------------------|-------------------------------|------------------------------|------------------------|-----------------------|----------------------|-----------------------|-------------------|---------------|
| CH1796        | A    | 152.4      | 38.1              | 69.85                | 22.2              | 9.52                 | 57.15             | 12.7                          | 82.5                         | 114.3                  | 50.8                  | 115.8                | 88.9                  | 445               | 22            |
| CH1796        | B    | 152.4      | 38.1              | 69.85                | 22.2              | 9.52                 | 57.15             | 12.7                          | 82.5                         | 114.3                  | 50.8                  | 115.8                | 88.9                  | 445               | 22.9          |
| CH2184        | B    | 152.4      | 34.93             | 76.2                 | 22.2              | 9.52                 | 50.8              | 14.3                          | 88.9                         | 127                    | 50.8                  | 143                  | 90.4                  | 356               | 21            |
| *CH2184 HYPER | B    | 152.4      | 34.93             | 76.2                 | 22.2              | 9.52                 | 50.8              | 12.7                          | 88.9                         | 127                    | 50.8                  | 143                  | 90.4                  | 380               | 21            |
| CH9060        | A    | 152.4      | 38.1              | 69.85                | 18.9              | 9.52                 | 50.8              | 12.7                          | 82.5                         | 114.3                  | 50.8                  | 115.8                | 88.9                  | 272               | 18.5          |
| CH9060        | B    | 152.4      | 38.1              | 69.85                | 18.9              | 9.52                 | 50.8              | 12.7                          | 82.5                         | 114.3                  | 50.8                  | 115.8                | 88.9                  | 272               | 18.5          |
| CH9061        | A    | 152.4      | 38.1              | 76.2                 | 18.9              | 9.52                 | 57.15             | 12.7                          | 82.5                         | 114.3                  | 50.8                  | 115.8                | 88.9                  | 386               | 19.85         |
| CH9061        | B    | 152.4      | 38.1              | 76.2                 | 18.9              | 9.52                 | 57.15             | 12.7                          | 82.5                         | 114.3                  | 50.8                  | 115.8                | 88.9                  | 386               | 20.3          |
| CH9063        | A    | 152.4      | 38.1              | 76.2                 | 23.82             | 10.28                | 63.5              | 14.3                          | 88.9                         | 127.9                  | 50.8                  | 142.9                | 100                   | 620               | 25.1          |

Heat treated stainless steel versions available on request.

**TYPE A** with straight links

**TYPE B** with cranked links / offset side bar

\* CH2184 HYPER uses flatted bushes

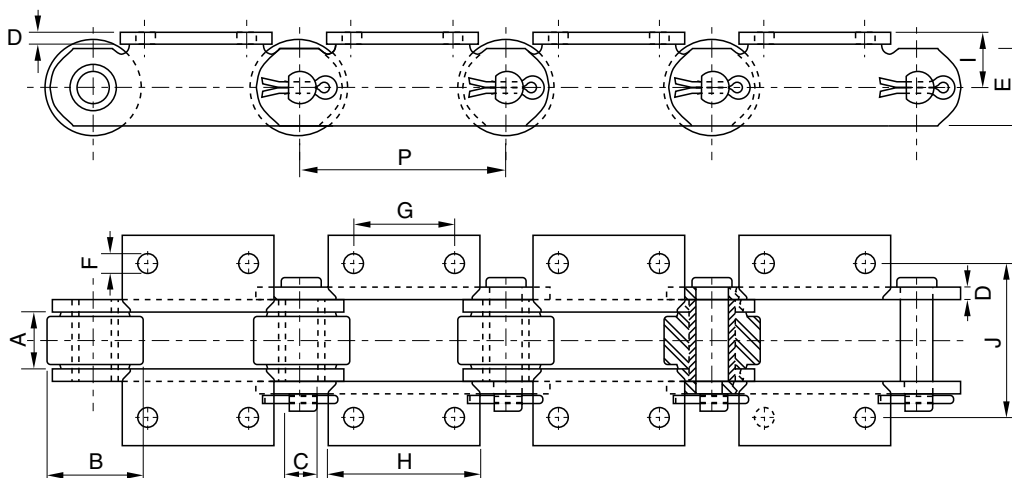


09060  
Cane Carrier Chain  
Bagasse Chain

# Sugar Chain

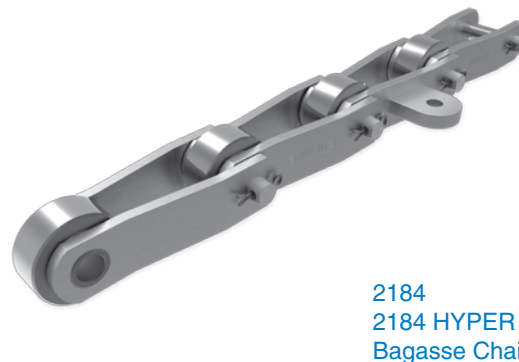
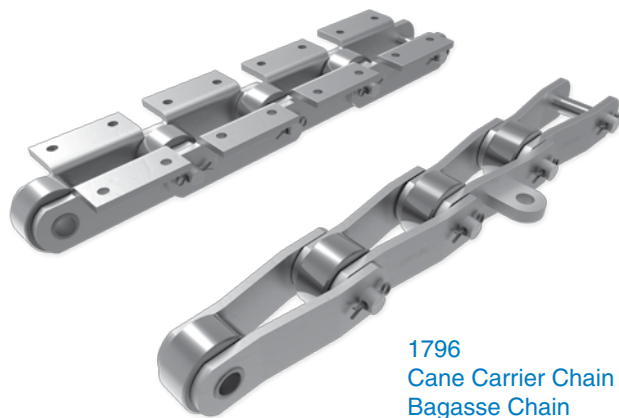
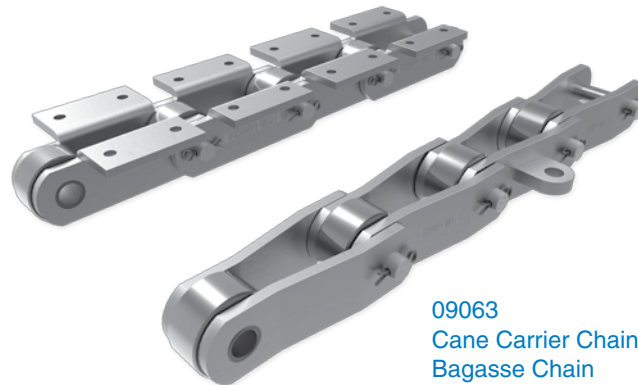
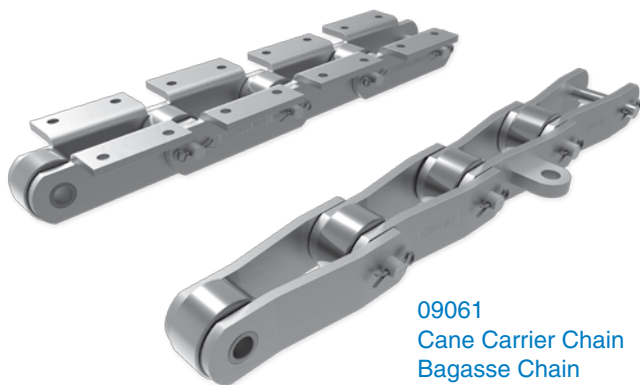
## Cane Carrier Chain

Cane Carrier Chain



| Chain number | Pitch  | Inside width | Roller diameter | Pin diameter | Plate thick | Plate height | Attachment hole diameter | Attachment hole centres | Attachment length | Platform height | Transverse pitch | Breaking Load (kN) | Weight (kg/m) |
|--------------|--------|--------------|-----------------|--------------|-------------|--------------|--------------------------|-------------------------|-------------------|-----------------|------------------|--------------------|---------------|
|              | P      | A            | B               | C            | D           | E            | F                        | G                       | H                 | I               | J                |                    |               |
| CH9060       | 152.40 | 36.50        | 69.85           | 19.05        | 9.52        | 50.80        | 12.70                    | 76.20                   | 114.30            | 41.30           | 111.20           | 272                | 24.70         |
| CH9061       | 152.40 | 36.50        | 69.85           | 19.05        | 9.52        | 57.15        | 12.70                    | 76.20                   | 114.30            | 41.30           | 111.20           | 386                | 25.30         |
| CH9063       | 152.40 | 36.50        | 76.20           | 23.80        | 10.30       | 61.90        | 12.70                    | 76.20                   | 114.30            | 44.45           | 111.20           | 620                | 27.50         |
| CH1796       | 152.40 | 36.50        | 69.85           | 22.23        | 9.52        | 57.15        | 12.70                    | 76.20                   | 114.30            | 41.30           | 111.20           | 445                | 26.20         |

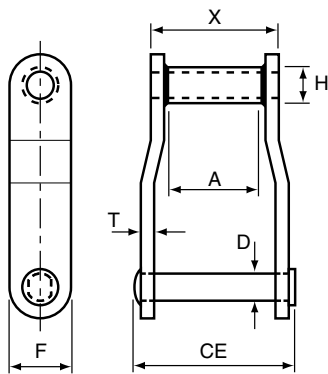
Heat treated stainless steel versions available on request.



# Sugar Chain

## Welded Steel Chain

Welded Steel Chain



## Welded Steel Chain (Offset Side Bar)

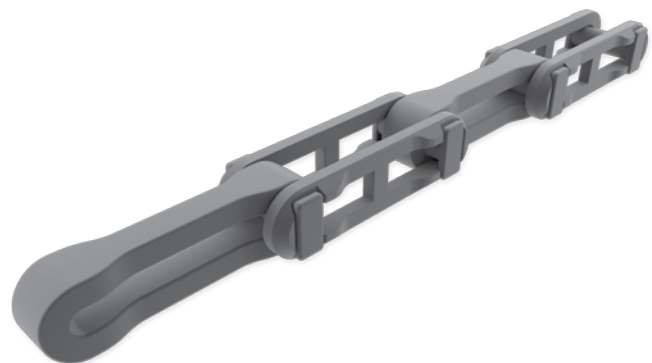
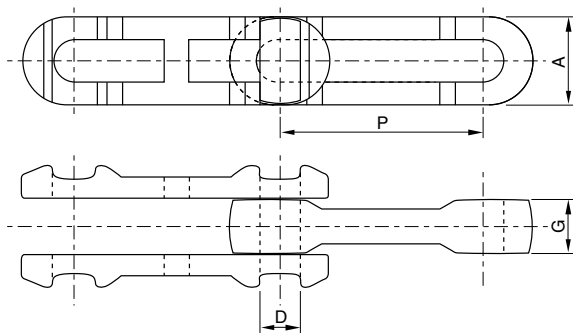
| Chain Number | Pitch  |        | Average Ultimate Strength lbf | Max. Working Load lbf | Approx. Links Per Foot | Average Weight lbf/ft | Dimensions |        |       |       |       |       |       |
|--------------|--------|--------|-------------------------------|-----------------------|------------------------|-----------------------|------------|--------|-------|-------|-------|-------|-------|
|              | mm     | Inches |                               |                       |                        |                       | CE         | X      | D     | T     | F     | H     | A     |
| WR78         | 66.26  | 2.609  | 24000                         | 3000                  | 4.6                    | 4.0                   | 76.20      | 50.80  | 12.70 | 6.35  | 28.58 | 22.23 | 28.58 |
| WH78         | 66.26  | 2.609  | 36000                         | 3500                  | 4.6                    | 4.0                   | 76.20      | 50.80  | 12.70 | 6.35  | 28.58 | 22.23 | 28.58 |
| WR82         | 78.10  | 3.074  | 30000                         | 5000                  | 3.9                    | 5.0                   | 79.50      | 57.00  | 14.29 | 6.40  | 31.80 | 25.40 | 32.00 |
| WH82         | 78.10  | 3.074  | 40000                         | 6650                  | 3.9                    | 5.2                   | 79.50      | 57.00  | 14.29 | 6.40  | 31.80 | 27.00 | 32.00 |
| WR124        | 101.60 | 4.000  | 46000                         | 6300                  | 3.0                    | 8.3                   | 107.95     | 69.85  | 19.05 | 9.53  | 38.10 | 31.75 | 38.10 |
| WH124        | 101.60 | 4.000  | 60000                         | 7350                  | 3.0                    | 8.3                   | 107.95     | 69.85  | 19.05 | 9.53  | 38.10 | 31.75 | 38.10 |
| WR132        | 153.67 | 6.050  | 84000                         | 13100                 | 2.0                    | 14.2                  | 158.75     | 111.00 | 25.40 | 12.70 | 50.80 | 41.28 | 73.03 |
| WH132        | 153.67 | 6.050  | 110000                        | 15000                 | 2.0                    | 14.2                  | 158.75     | 111.00 | 25.40 | 12.70 | 50.80 | 41.28 | 73.03 |

WR - Welded steel chain - through hardened pins and case hardened bushes.

WH - Welded steel chain - all components fully heat treated

## Rivetless Forged Chain

Rivetless Forged Chain



| Chain number | Average Pitch | Pins  | Overall width |       | Chain Height | Link Thickness |       | Rated Working Load | Average Weight | Chain Part                      | Brinell Hardness              | Average Ultimate Strength | Sprocket Unit No. |
|--------------|---------------|-------|---------------|-------|--------------|----------------|-------|--------------------|----------------|---------------------------------|-------------------------------|---------------------------|-------------------|
|              | P             | A     | B             | C     | D            | E              | F     |                    |                |                                 |                               |                           |                   |
| X458         | 102.39        | 16.00 | 55.63         | 26.92 | 35.05        | 16.00          | 17.53 | 4,000              | 3.1            | Side Link<br>Center Link<br>Pin | 311/388<br>331/388<br>363/415 | 57,000                    | 458               |
| X678         | 153.19        | 22.35 | 76.96         | 35.05 | 50.80        | 20.57          | 25.40 | 7,100              | 6.5            | Side Link<br>Center Link<br>Pin | 311/388<br>331/388<br>340/415 | 125,000                   | 678               |
| 698          | 153.19        | 28.70 | 95.25         | 41.40 | 65.79        | 25.40          | 31.75 | 10,800             | 12.5           | Side Link<br>Center Link<br>Pin | 311/388<br>331/388<br>340/415 | 175,000                   | 698               |

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.



## Challenge Group Companies



### AUSTRALIA

Challenge Power Transmission (Aust) Pty Ltd  
Tel: (03) 9763 6701 Fax: (03) 9764 0890  
Email: aussales@challengept.com



### CZECH REPUBLIC

Challenge PT (Czech) s.r.o  
Tel: +420 573 334 106 Fax: +420 573 330 556  
Email: czsales@challengept.com



### GERMANY

Challenge Power Transmission GmbH  
Tel: +49 2772 575860 Fax: +49 2772 5758620  
Email: desales@challengept.com



### IRELAND

Challenge Power Transmission (Ireland) Ltd  
Tel: +353 1 4566311 Fax: +353 1 4566312  
Email: ireland@challengept.com



### AMERICAS

Challenge Power Transmission  
Tel: +1 305 592 9196 Fax: +1 305 592 0208  
Email: usa@challengeptsales.com



### CHINA

Challenge Power Transmission (SHZ) Plc  
Tel: +86 311-85385510 Fax: +86 311 8538 5590  
Email: cnsales@challengept.com



### SOUTH AFRICA

Challenge Power Transmission Africa (Pty) Ltd  
Tel: +27 11 3976115 Fax: + 27 11 3978494  
Email: sasales@challengept.com



### UNITED KINGDOM

Challenge Power Transmission Ltd  
Tel: +44 1902 866116 Fax: +44 1902 866117  
Email: uk@challengept.com



### CHINA

Challenge Power Transmission (Ningbo) Ltd  
Tel: +86 574 8833 4378 Fax: +86 574 8833 4379  
Email: ningbo.sales@challengeproduction.com

Full contact details can be found before contents and also on page 432.

Never a problem always a ...

 **CHALLENGE** 

