

Conveyor Chain



RENOLD
Superior Chain Technology

Renold Chain Product Range



Roller Chain

- British, ANSI, API, DIN, ISO and Works Standard Chains
- Adapted Chains
- Extended Pitch Chains
- Hollow Pin Chains
- Made to Order, Special Chains
- Mini Pitch Chains
- Nickel Plated Chains
- Oilfield Chains
- Plastic Bush Chains
- Power and Free Chains
- Polymer Block Chains
- Side Bow Chains
- Stainless Steel Chains

Applications

- Abattoirs • Air Conditioning • Aircraft - Civil & Military • Bakery Machines • Battery Manufacturing
- Brewing • Canning • Carpet Machines • Chart Tables/Marine • Chocolate Manufacturing
- Concrete Moulding Equipment • Copying Machines • Dairy Machinery • Drying Machinery
- Earth Moving Equipment • Extrusion Machines • Filtration Plants • Food & Drink Manufacture
- Glass Manufacture • Health Care Equipment • Hydraulic Components • Ice-Cream Manufacture
- In-flight Refueling • Ingot Casting & Scrap Metal Processing • Latex Machinery • Laundry Machinery
- Lawnmower Manufacture • Mill Machinery • Mining • MOT Brake Testing Machinery • Nuclear Power
- Off Road Vehicles • Oil Industry • Packaging Machines • Paper & Card Making • Paper Shredders
- Plastic Machinery • Potato Grading Machinery • Power Generation • Printing Machines • Quarry Plant
- Road Making & Plant Machinery • Robotic Systems • Roof Tile Manufacture • Ship's Engines
- Silkscreen Machinery • Ski-Lifts • Soot Blowers • Steel Making • Straddle Carriers • Sugar Beet Machines
- Sun-Blinds • Telecommunications • Textile Machinery • Timber and Woodworking Machines
- Tin Printer Ovens • Tobacco/Cigarette Machinery • Tunnelling Machines • T.V. and Audio Equipment
- Tyre Manufacture • Waste Handling • X-Ray Equipment



Conveyor Chain

- British, ISO and Works Standard Chains
- Adapted Chains
- Agricultural Chains
- Bakery Chains
- Deep Link Chains
- Escalator Chains
- Made to Order and Specials
- Stainless Steel Chains
- Sugar Cane Chains
- Zinc Plated Chains

Applications

- Abattoirs • Agricultural Machines • Bakery Machines • Bottle Washing Plants
- Brick & Tile Machinery OEM • Car Plants • Cement Plants • Chemical Plants • Chicken Process Equipment
- Cigarette/Tobacco Machinery • Dust Filters • Egg Sorting Conveyors • Electrical Switchgears • Escalators
- Extrusion Machines • Feed Mill Machines • Feed Silo Equipment • Fibreglass Industry • Filtration Plants
- Fish Conveyor • Food Sterilisation • Food Processing • Freezing Equipment • Freezing Tunnels
- Glass Manufacturing • Grain Conveyor • Harvesting Machines • Ice Cream Machines • Induction Furnaces
- Ingot Casting & Scrap Metal Processing Mfr • Latex Machinery • Leisure Rides • Luggage & Parcel Handling
- Machine Tools • Mail Sorting • Metal Casting • Mushroom Compost Machinery • Nuclear • Ovens/Provers
- Potato Grading Machinery • Potting Machinery • Quarries • Radio Astronomy • Roof Tile Manufacture
- Rope Machinery • Saw Mill Equipment • Sewage Plants • Shaker Conveyors • Ski-Lifts • Sluice Gates
- Steel Making • Sugar Factories • Swarf Conveyors • Textile Machinery • Timber & Woodworking Machines
- Tool Changer • Tunnelling Machines • Tyre Manufacture • Washing & Sterilising Machines
- Water Treatment • Wire Belts



Lifting Chain

- LH(BL), AL, LL and Works Standard Chains

Applications

- Bottle Washing Plants • Cement Plants • Chemical • Counterbalance Sets • Cranes
- Dust/Swarf Conveyors • Elevators • Food Processing • Food Sterilisation • Fork Lift Trucks
- Pipe Line Valves/Taps • Printing Machines • Rock Drilling • Straddle Carriers • Sun-Blinds • Tail Lifts

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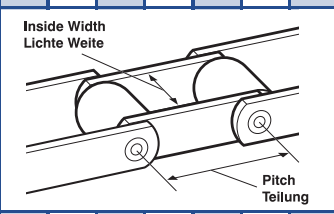
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| | |
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Pitch/Inside width chart

This simple guide is designed to help quickly locate your chain in the catalogue. By measuring the pitch and the inside width of the chain, the page number can be found. This chart covers all the popular sizes, for further info please consult Renold.

| Pitch Inch | Pitch mm | Inside width - dimensions in mm | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|-------------|---------------------------------|-------|---------|-------|---------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|--------|
| | | 11.70 | 12.70 | 15.00 | 15.90 | 19.00 | 19.10 | 19.81 | 20.00 | 22.23 | 24.00 | 25.40 | 28.00 | 28.60 | 32.00 | 37.00 | 38.10 | 43.00 | 48.00 | 56.00 | 63.50 | 66.00 | 76.20 | 78.00 | 94.456 | 94.463 | 95.25 | 101.60 |
| 1.000 | | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.150 | | | | | 44 | | | | | | | | | | | | | | | | | | | | | | | |
| 1.375 | | | | | | | 44 | | | | | | | | | | | | | | | | | | | | | |
| 1.500 | | | 8 | 8,11,36 | | | | | | | 44 | | | | | | | | | | | | | | | | | |
| 1.630 | | | | | | | | | | 44 | 44 | | | | | | | | | | | | | | | | | |
| 1.650 | | | | | | | | | | | | 44 | | | | | | | | | | | | | | | | |
| 2.000 | | | | | | 8,11,36 | | | | | | | | | | | | | | | | | | | | | | |
| 2.297 | | | | | | | | | | | 44 | | | | | | | | | | | | | | | | | |
| | 63 | | | | | | | | | 23,39 | 23,39 | | | | | | | | | | | | | | | | | |
| 2.609 | | | | | | | | | | | | | 44 | | | | | | | | | | | | | | | |
| | 80 | | | | | | | | | | 23 | 23,39 | 23,39 | | | | | | | | | | | | | | | |
| 3.500 | | | | | | | | | | | | 8,11,36 | | | | | | | | | | | | | | | | |
| | 100 | | | | | | | | | | | | | 23 | 23,39 | | | | | | | | | | | | | |
| | 125 | | | | | | | | | | | | | | | | 23,39 | | | | | | | | | | | |
| 5.000 | | | | | | | | | | | | | | | | | 8,36 | | | | | | | | | | | |
| 6.000 | | | | | | | | | | | | | | | | | 8,36 | | | | 35 | 35 | | 35 | 35 | | | |
| | 160 | | | | | | | | | | | | | | | | | 23 | 23,39 | | | | | | | | | |
| 7.000 | | | | | | | | | | | | | | | | | | | | | | | | | | 35 | 35 | 35 |
| | 200 | | | | | | | | | | | | | | | | | | | | 23,39 | | | | | | | |
| | 250 | | | | | | | | | | | | | | | | | | | | | 23,39 | | 23,39 | | | | |



Section 1

Conveyor

Products & Dimensions

Conveyor Chain

Renold Ultimate Performance

Renold Ultimate Performance

- The performance of Renold Conveyor Chain is ensured by a programme of continuous testing and quality control of component dimensions, fits and material properties.
- Specially formulated lubricants reduce initial wear, provide corrosion protection and long storage life.
- Breaking loads exceed the minimum international standards.
- Correct chain selection is essential for optimum performance. Renold's experienced design team are always available to freely advise on particular products and applications.

Renold Ultimate Specification

The Renold specification has taken many years in design and development to achieve the optimum product. In order to ensure this is translated into product performance, we strictly control:

- Materials
- Heat Treatment
- Processes
- Fits
- Attachment Assembly
- Lubrication

Fatigue life is improved by maintaining precise fits and tolerances between the pins, bushes and side plates.



Chain and sprocket life are optimised by the rigid control of pitch accuracy, resulting in excellent gearing, lower friction, reduced wear and a reduction in noise levels during operation.

Exact control of bush projection through the chain side plate maintains precise clearances between the chain's inner and outer links. This feature reduces the risk of wear during operation, allows space for lubricant penetration, and greatly reduces the possibility of chain seizure in dusty/abrasive environments.

Bush and roller life are maximised by controlling the concentricity of these components and careful selection and control of the heat treatment process.

Down time in hostile environments is minimised by strict control of inner and outer plate clearances, ensuring effective lubricant penetration to the bearing surfaces.

Renold Ultimate Reliability

- The key to Renold chain reliability is consistency in design and manufacture.
- Maximum chain strength and resistance to wear are achieved by strict control of the material specification and by using state of the art heat treatment processes.
- The consistent overall tolerances of Renold chain make it ideal for conveying systems requiring precise alignment on multi-strand chain layouts.

Conveyor Chain Details

Conveyor Chain Types

Precision conveyor chain, like transmission chain, consists of a series of journal bearings held in precise relationship to each other by constraining link plates.

Each bearing consists of a bearing pin and bush on which the chain roller revolves. The bearing pin and bush are case-hardened to allow articulation under high pressures, and to contend with the load carrying pressure and gearing action imparted via the chain rollers.

There is, for each strength of conveyor chain, a range of pitches; the minimum pitch being governed by the need for adequate wheel tooth strength; the maximum pitch being normally dictated by plate and general chain rigidity. When required, the normal maximum pitch can be exceeded by the use of strengthening bushes between the link plates, and suitable gaps to clear the bushes must be provided in the wheel teeth.

INTERNATIONAL STANDARDS

Conveyor chain, like transmission chain, can be manufactured to a number of different international standards. The main standards available are:

BRITISH STANDARD - BS

This standard covers chain manufactured to suit the British market and markets where a strong British presence has dominated engineering design and purchasing. The standard is based on the original Renold Conveyor Chain design.

ISO STANDARD

Chain manufactured to ISO Standard is not interchangeable with BS or DIN Standard Chain. This standard has a wide acceptance in the European market, except in Germany. Chain manufactured to this standard is becoming more popular and is used extensively in the Scandinavian region.

HOLLOW BEARING PIN CHAIN

Hollow bearing pin type chain affords ready facility for fixing attachments to outer links by bolting through the hollow bearing pins and is suitable for use in all normal conditions.

The attachments may be bolted up tight or held in the hollow bearing pin in a "free" manner. Bolted attachments should only span the outer link, as a bolted attachment spanning the inner link would impair the free articulation of the chain.

DEEP LINK CHAIN

Deep Link chain has sideplates with a greater depth than the normal chain plates; thus providing a continuous carrying edge above the roller periphery. When lateral flexing of the chain is required to negotiate horizontal bend radii, coned bearing pins are employed.

Available in Hollow or Solid Pin versions.

SOLID BEARING PIN CHAIN

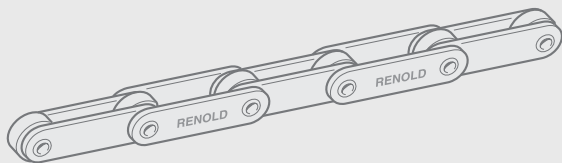
Solid bearing pin chain, while having exactly the same gearing dimensions, i.e. pitch, inside width and roller diameter as the equivalent hollow bearing pin chain, is more robust and is recommended for use where arduous conditions may be encountered.

CHAIN ROLLERS

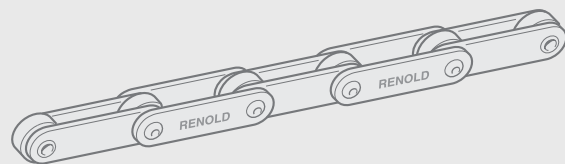
In general, the use of chain incorporating rollers is recommended, but bush chain, i.e. chain without rollers, can be used on certain applications.

Rollers of the plain or flanged type, with a choice of size and material, are listed for most chain series - size and material being dependent upon the type of application.

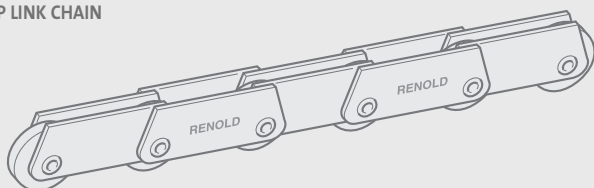
HOLLOW BEARING PIN CHAIN



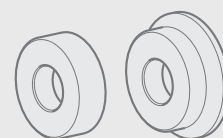
SOLID BEARING PIN CHAIN



DEEP LINK CHAIN



CHAIN ROLLERS



Standard Attachments

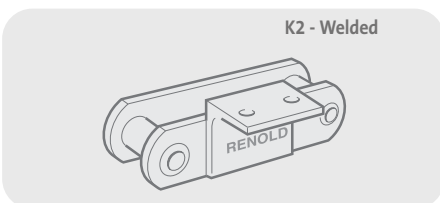
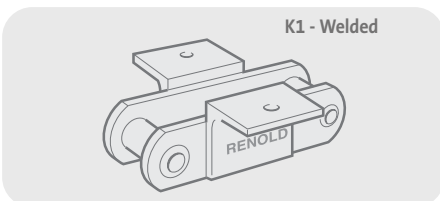
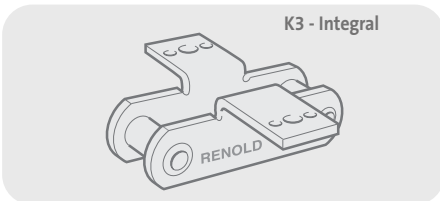
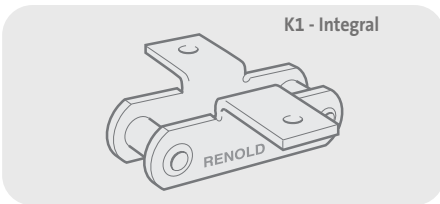
Standard attachments are parts fitted to a base chain to adapt it for a particular purpose as a conveying medium. Attachments may form an integral part of the link plate or may be built into the chain as a replacement of the normal link. Other attachments (according to type) are fixed to the chain plates by projection or fillet welding, to either one or both sides of the chain.

Standard attachments are described below:

- The letter stands for the attachment type.
- The figure stands for the number of holes within each attachment type.

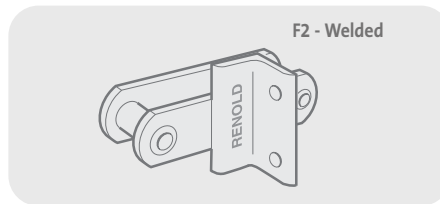
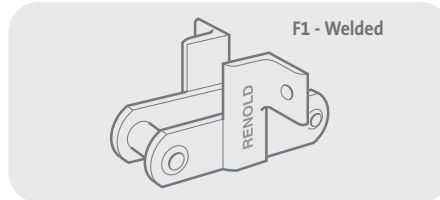
Special attachments can be manufactured, but wherever possible, standard attachments used on our preferred range of chains shown earlier will give price and delivery advantages. Consult Renold Chain for details.

K Attachments Outer or Inner Links



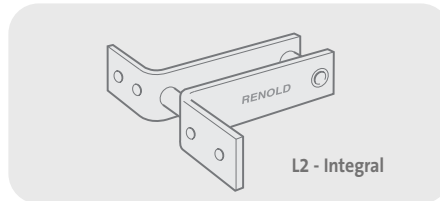
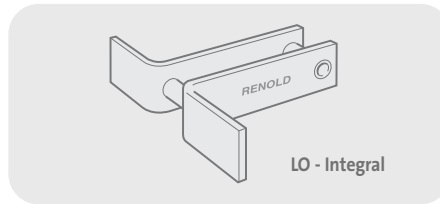
K Attachments provide a platform parallel to the chain line and bearing pin axis. They are used for securing slats, scrapers, buckets etc. to the chain.

F Attachments Outer or Inner Links



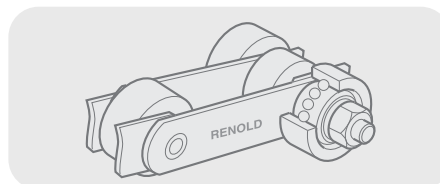
F Attachments provide a flat surface at right angles to the chain plate. They are used for securing pushers, scraper bars, etc.

L Attachments



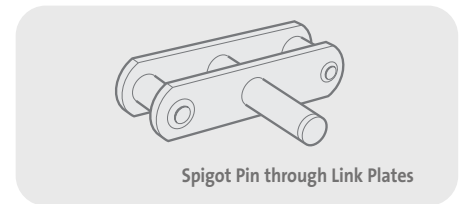
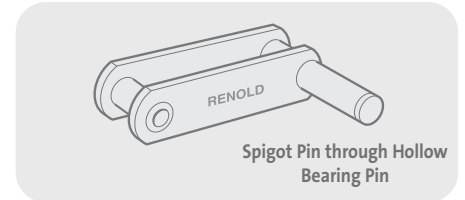
L Attachments are integral with the chain outer plates. Normally they have one or two holes (L2 preferred), but for use on scraper applications they can be supplied without holes and with various box widths (LO Type).

Outboard Rollers For use on Hollow Bearing Pin Chain



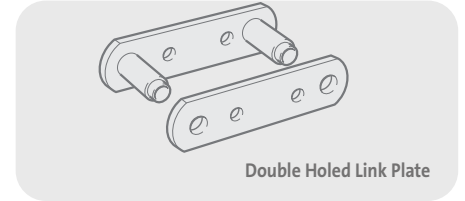
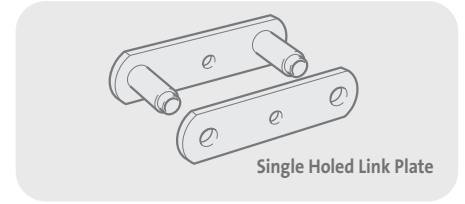
Outboard rollers have two principal advantages; as direct load carriers they enable the chain rollers to be used solely for gearing purposes and in the event of outboard roller wear, they can be replaced easily without recourse to chain replacement. They are particularly useful when attachments prevent the gearing rollers running on support tracks on the return run or where the roller loading is high.

Spigot Pins



Spigot pins may be assembled either through hollow bearing pins or link plates and are secured by a nut and spring washer.

Holed Link Plates



Single holing is primarily for use with spigot pins and is required on both sides of the chain. Double holing is provided for the assembly of special attachments on one or both sides of the chain. The holes in the inner plates are countersunk on the inside face to prevent the bolt heads fouling the sprocket teeth.

Standard Sprockets

A modified rim section is required when G or inverted F2 attachments are fitted to inner links.

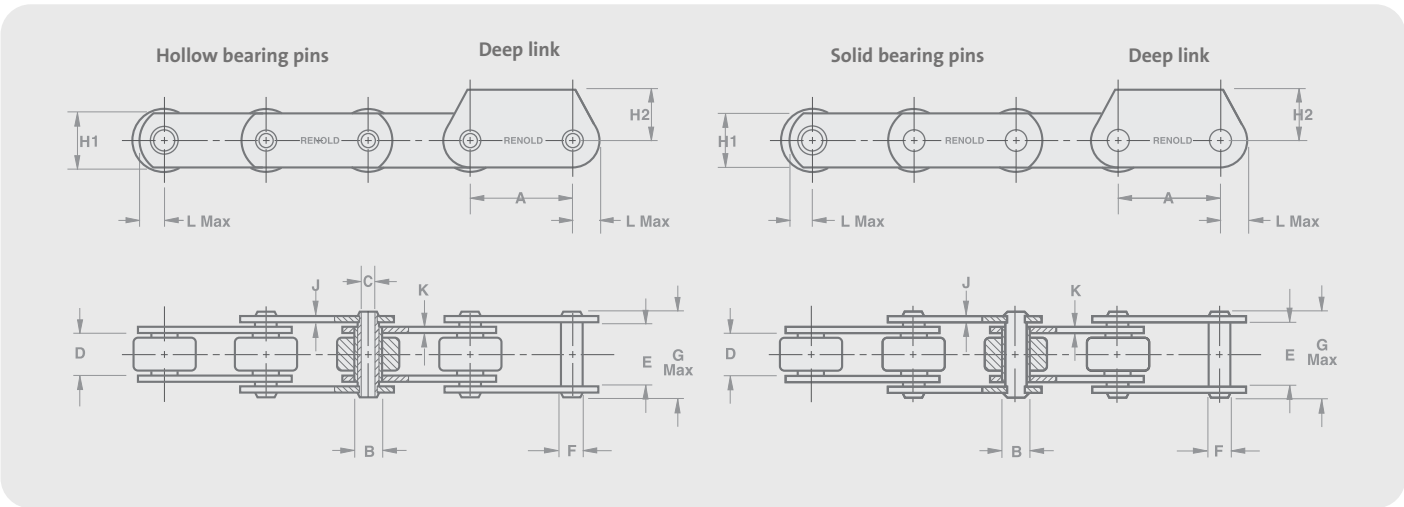
Extended Bearing Pins

Extended bearing pins, one side of the chain, can be supplied hard, soft, solid or drilled and are similar to the spigot pin arrangement.

FOR ATTACHMENT SIZES AND ATTACHMENTS OTHER THAN THOSE SHOWN, CONSULT RENOLD CHAIN.

Standard Conveyor Chain

BS 4116 Part 4



| Chain Ref. | Technical Details (mm) | | | | | | | | | | | | | | | |
|---------------|------------------------|------------|------------|----------|----------|-----------|------------------------------|--------------------|--------------------|----------|------------|--------------|--------|-------------|-------------|------|
| Breaking Load | B.S Series Ref | Pitch Inch | Pitch Inch | Pitch mm | Pitch mm | Bush Diam | Hollow Bearing Pin Bore Diam | Inside Width Inner | Inside Width Outer | Pin Diam | Pin Length | Plate Height | Height | Width Outer | Width Inner | Head |
| lb/f | (Newtons) | MIN | MAX | MIN | MAX | MIN | MIN | MIN | MIN | MAX | MAX | | | | | MAX |

Hollow Bearing Pin

| | | | A | A | A | A | B | C | D | E | F | G | H1 | H2 | J | K | L |
|-------|--------|-------|-----|------|-------|-------|------|------|------|------|------|------|------|------|-----|-----|------|
| 4500 | 20000 | 2H020 | 1.5 | 3.0 | 38.1 | 76.2 | 12.1 | 6.6 | 12.7 | 17.8 | 9.5 | 24.6 | 19.1 | - | 1.8 | 2.3 | 11.4 |
| 6000 | 27000 | 3H027 | 1.5 | 6.0 | 38.1 | 152.4 | 18.0 | 10.1 | 15.0 | 25.4 | 14.0 | 36.5 | 25.4 | 26.0 | 3.8 | 3.8 | 15.0 |
| 12000 | 54000 | 4H054 | 2.0 | 9.0 | 50.8 | 228.6 | 23.6 | 13.2 | 19.0 | 32.5 | 19.0 | 44.0 | 38.1 | 32.0 | 3.8 | 5.1 | 22.1 |
| 24000 | 107000 | 5H107 | 3.5 | 12.0 | 88.9 | 304.8 | 33.2 | 20.1 | 25.4 | 43.0 | 26.9 | 57.0 | 51.0 | 45.0 | 5.1 | 7.1 | 29.7 |
| 36000 | 160000 | 6H160 | 5.0 | 18.0 | 127.0 | 457.2 | 38.1 | 23.1 | 38.1 | 59.0 | 31.8 | 79.5 | 61.0 | - | 7.6 | 8.9 | 34.8 |

Solid Bearing Pin

| | | | A | A | A | A | B | C | D | E | F | G | H1 | H2 | J | K | L |
|-------|--------|-------|-----|------|-------|-------|------|---|------|------|------|------|------|------|------|------|------|
| 3000 | 13000 | 15013 | 1.0 | 4.5 | 25.4 | 114.3 | 8.6 | - | 11.7 | 16.0 | 5.7 | 21.8 | 18.0 | 16.0 | 1.8 | 1.8 | 11.4 |
| 7500 | 33000 | 35033 | 1.5 | 6.0 | 38.1 | 152.4 | 18.0 | - | 15.0 | 25.4 | 14.0 | 38.0 | 25.4 | 26.0 | 3.8 | 3.8 | 15.0 |
| 15000 | 67000 | 45067 | 2.0 | 9.0 | 50.8 | 228.6 | 23.6 | - | 19.0 | 32.5 | 19.0 | 46.0 | 38.1 | 32.0 | 3.8 | 5.1 | 22.1 |
| 30000 | 134000 | 55134 | 3.5 | 12.0 | 88.9 | 304.8 | 33.2 | - | 25.4 | 43.0 | 26.9 | 60.0 | 51.0 | 45.0 | 5.1 | 7.1 | 29.7 |
| 45000 | 200000 | 65200 | 5.0 | 18.0 | 127.0 | 457.2 | 38.1 | - | 38.1 | 59.0 | 31.8 | 82.0 | 61.0 | - | 7.6 | 8.9 | 34.8 |
| 60000 | 267000 | 75267 | 6.0 | 18.0 | 152.4 | 457.2 | 38.1 | - | 38.1 | 59.0 | 23.0 | 80.0 | 61.0 | - | 7.6 | 8.9 | 34.8 |
| 90000 | 400000 | 85400 | 6.0 | 24.0 | 152.4 | 609.6 | 38.1 | - | 38.1 | 66.3 | 29.4 | 94.0 | 63.5 | - | 10.0 | 13.0 | 35.8 |

The dimensions listed will not vary with pitch size for each given breaking load.
 For the details of individual pitch sizes, rollers, and spare links, see pages 9 and 10.
 For attachments see pages 14 - 22.

Standard and Deep Link Chain

BS4116 Part 4

| Pitch Inch | Pitch mm | Roller Chain No Standard | Mass kg/m | Roller Chain No Deep link | Mass kg/m |
|---------------|-------------|--------------------------------|--------------|---------------------------------|--------------|
|---------------|-------------|--------------------------------|--------------|---------------------------------|--------------|

3000 lbf, 13000 Newtons Breaking Load - Solid Pin

| | | | | | |
|-----|-------|-----------|------|-----------|------|
| 1.0 | 25.4 | 140048/12 | 1.33 | 167048/12 | 1.62 |
| 1.5 | 38.1 | 140068/56 | 1.77 | 167068/56 | 2.03 |
| 2.0 | 50.8 | 140088/56 | 1.46 | 167088/56 | 1.70 |
| 2.5 | 63.5 | 140108/56 | 1.28 | 167108/56 | 1.52 |
| 3.0 | 76.2 | 140128/56 | 1.15 | 167128/56 | 1.37 |
| 3.5 | 88.9 | 140148/56 | 1.06 | 167148/56 | 1.28 |
| 4.0 | 101.6 | 140168/56 | 1.00 | 167168/56 | 1.22 |
| 4.5 | 114.3 | 140188/56 | 0.95 | 167188/56 | 1.18 |

4500 lbf, 20000 Newtons Breaking Load - Hollow Pin

| | | | | | |
|-----|------|----------|------|-----------|--|
| 1.5 | 38.1 | 198028** | 2.00 | | |
| 2.0 | 50.8 | 198030** | 1.65 | NOT | |
| 2.5 | 63.5 | 198033** | 1.46 | AVAILABLE | |
| 3.0 | 76.2 | 198039** | 1.34 | | |

6000 lbf, 27000 Newtons Breaking Load - Hollow Pin

| | | | | | |
|-----|-------|-------------|------|-----------|------|
| 1.5 | 38.1 | 105060/03* | 2.94 | 107060/03 | 4.02 |
| 2.0 | 50.8 | 105080/12** | 3.50 | 107080/12 | 4.52 |
| 2.5 | 63.5 | 105100/12 | 3.13 | 107100/12 | 4.10 |
| 3.0 | 76.2 | 105120/12** | 2.88 | 107120/12 | 3.83 |
| 3.5 | 88.9 | 105140/12 | 2.71 | 107140/12 | 3.63 |
| 4.0 | 101.6 | 105160/12** | 2.58 | 107160/12 | 3.49 |
| 4.5 | 114.3 | 105180/12 | 2.47 | 107180/12 | 3.36 |
| 5.0 | 127.0 | 105200/12 | 2.39 | 107200/12 | 3.27 |
| 6.0 | 152.4 | 105240/12** | 2.27 | 107240/12 | 3.14 |

7500 lbf, 33000 Newtons Breaking Load - Solid Pin

| | | | | | |
|-----|-------|-------------|------|-----------|------|
| 1.5 | 38.1 | 145060/03* | 3.54 | 167060/03 | 4.62 |
| 2.0 | 50.8 | 145080/12** | 3.95 | 167080/12 | 4.97 |
| 2.5 | 63.5 | 145100/12 | 3.49 | 167100/12 | 4.46 |
| 3.0 | 76.2 | 145120/12** | 3.19 | 167120/12 | 4.14 |
| 3.5 | 88.9 | 145140/12 | 2.97 | 167140/12 | 3.89 |
| 4.0 | 101.6 | 145160/12** | 2.80 | 167160/12 | 3.71 |
| 4.5 | 114.3 | 145180/12 | 2.67 | 167180/12 | 3.56 |
| 5.0 | 127.0 | 145200/12 | 2.57 | 167200/12 | 3.45 |
| 6.0 | 152.4 | 145240/12* | 2.42 | 167240/12 | 3.29 |

12000 lbf, 54000 Newtons Breaking Load - Hollow Pin

| | | | | | |
|-----|-------|-------------|------|-----------|------|
| 2.0 | 50.8 | 105081/03* | 5.23 | 107081/03 | 6.25 |
| 3.0 | 76.2 | 105121/12** | 6.93 | 107121/12 | 7.90 |
| 3.5 | 88.9 | 105141/12 | 6.35 | 107141/12 | 7.30 |
| 4.0 | 101.6 | 105161/12** | 5.91 | 107161/12 | 6.85 |
| 4.5 | 114.3 | 105181/12 | 5.57 | 107181/12 | 6.50 |
| 5.0 | 127.0 | 105201/12 | 5.30 | 107201/12 | 6.22 |
| 6.0 | 152.4 | 105241/12** | 4.89 | 107241/12 | 5.80 |
| 7.0 | 177.8 | 105281/12 | 4.60 | 107281/12 | 5.50 |
| 8.0 | 203.2 | 105321/12 | 4.39 | 107321/12 | 5.28 |
| 9.0 | 228.6 | 105361/12 | 4.21 | 107361/12 | 5.10 |

15000 lbf, 67000 Newtons Breaking Load - Solid Pin

| | | | | | |
|-----|-------|-------------|------|-----------|------|
| 2.0 | 50.8 | 145081/03* | 6.28 | 167081/03 | 7.31 |
| 3.0 | 76.2 | 145121/12** | 7.62 | 167121/12 | 8.59 |
| 3.5 | 88.9 | 145141/12 | 6.95 | 167141/12 | 7.90 |
| 4.0 | 101.6 | 145161/12** | 6.43 | 167161/12 | 7.37 |
| 4.5 | 114.3 | 145181/12 | 6.03 | 167181/12 | 6.96 |
| 5.0 | 127.0 | 145201/12 | 5.72 | 167201/12 | 6.64 |
| 6.0 | 152.4 | 145241/12** | 5.24 | 167241/12 | 6.15 |
| 7.0 | 177.8 | 145281/12 | 4.90 | 167271/12 | 5.80 |
| 8.0 | 203.2 | 145321/12 | 4.65 | 167321/12 | 5.54 |
| 9.0 | 228.6 | 145361/12 | 4.44 | 167361/12 | 5.33 |

| Pitch Inch | Pitch mm | Roller Chain No Standard | Mass kg/m | Roller Chain No Deep link | Mass kg/m |
|---------------|-------------|--------------------------------|--------------|---------------------------------|--------------|
|---------------|-------------|--------------------------------|--------------|---------------------------------|--------------|

24000 lbf, 107000 Newtons Breaking Load - Hollow Pin

| | | | | | |
|------|-------|-------------|-------|-----------|-------|
| 4.0 | 101.6 | 105162/12** | 12.74 | 107162/12 | 14.86 |
| 5.0 | 127.0 | 105202/12 | 11.21 | 107202/12 | 13.26 |
| 6.0 | 152.4 | 105242/12** | 10.91 | 107242/12 | 12.91 |
| 7.0 | 177.8 | 105282/12 | 9.46 | 107282/12 | 11.42 |
| 8.0 | 203.2 | 105322/12 | 8.92 | 107322/12 | 10.86 |
| 9.0 | 228.6 | 105362/12 | 8.50 | 107362/12 | 10.42 |
| 12.0 | 304.8 | 105482/12 | 7.65 | 107482/12 | 9.52 |

30000 lbf, 134000 Newtons Breaking Load - Solid Pin

| | | | | | |
|------|-------|-------------|-------|-----------|-------|
| 4.0 | 101.6 | 145162/12** | 14.22 | 167162/12 | 16.34 |
| 5.0 | 127.0 | 145202/12 | 12.40 | 167202/12 | 14.45 |
| 6.0 | 152.4 | 145242/12** | 11.18 | 167242/12 | 13.18 |
| 7.0 | 177.8 | 145282/12 | 10.31 | 167282/12 | 12.27 |
| 8.0 | 203.2 | 145322/12 | 9.66 | 167322/12 | 11.60 |
| 9.0 | 228.6 | 145362/12 | 9.16 | 167362/12 | 11.08 |
| 12.0 | 304.8 | 145482/12 | 8.14 | 167482/12 | 10.01 |

36000 lbf, 160000 Newtons Breaking Load - Hollow Pin

| | | | | | |
|------|-------|-----------|-------|-----------|--|
| 5.0 | 127.0 | 105203/12 | 24.97 | | |
| 6.0 | 152.4 | 105243/12 | 22.18 | | |
| 7.0 | 177.8 | 105283/12 | 20.18 | | |
| 7.5 | 190.5 | 105303/12 | 19.40 | AVAILABLE | |
| 8.0 | 203.2 | 105323/12 | 18.68 | ON | |
| 9.0 | 228.6 | 105363/12 | 17.52 | REQUEST | |
| 12.0 | 304.8 | 105483/12 | 15.19 | | |
| 15.0 | 381.0 | 105603/12 | 13.79 | | |
| 18.0 | 457.2 | 105723/12 | 12.86 | | |

45000 lbf, 200000 Newtons Breaking Load - Solid Pin

| | | | | | |
|------|-------|-----------|-------|-----------|--|
| 5.0 | 127.0 | 145203/12 | 27.34 | | |
| 6.0 | 152.4 | 145243/12 | 24.15 | | |
| 7.0 | 177.8 | 145283/12 | 21.87 | | |
| 7.5 | 190.5 | 145303/12 | 20.98 | AVAILABLE | |
| 8.0 | 203.2 | 145323/12 | 20.15 | ON | |
| 9.0 | 228.6 | 145363/12 | 18.83 | REQUEST | |
| 12.0 | 304.8 | 145483/12 | 16.17 | | |
| 15.0 | 381.0 | 145603/12 | 14.58 | | |
| 18.0 | 457.2 | 145723/12 | 13.52 | | |

60000 lbf, 267000 Newtons Breaking Load - Solid Pin

| | | | | | |
|------|-------|-----------|-------|-----------|--|
| 6.0 | 152.4 | 145245/12 | 23.38 | | |
| 7.0 | 177.8 | 145285/12 | 21.64 | | |
| 8.0 | 203.2 | 145325/12 | 19.96 | AVAILABLE | |
| 9.0 | 228.6 | 145365/12 | 18.66 | ON | |
| 12.0 | 304.8 | 145485/12 | 16.04 | REQUEST | |
| 15.0 | 381.0 | 145605/12 | 14.47 | | |
| 18.0 | 457.2 | 145725/12 | 13.43 | | |

90000 lbf, 400000 Newtons Breaking Load - Solid Pin

| | | | | | |
|------|-------|-----------|-------|-----------|--|
| 6.0 | 152.4 | 145247/12 | 29.09 | | |
| 9.0 | 228.6 | 145367/12 | 23.36 | | |
| 12.0 | 304.8 | 145487/12 | 20.50 | AVAILABLE | |
| 15.0 | 381.0 | 145607/12 | 18.78 | ON | |
| 18.0 | 457.2 | 145727/12 | 17.63 | REQUEST | |
| 24.0 | 609.6 | 145967/12 | 16.19 | | |

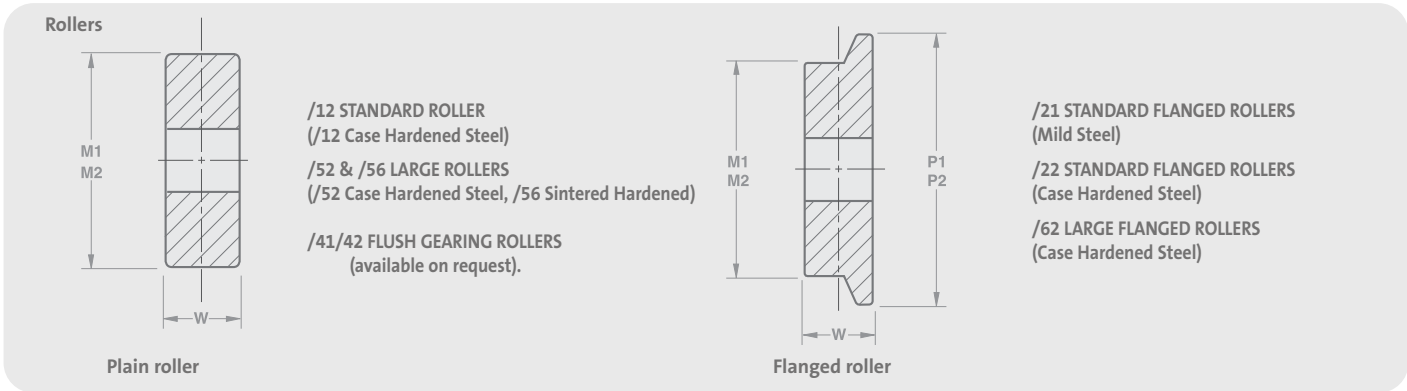
This table indicates standard roller chain configurations. Where alternative rollers are required, amend the roller suffix for identification purposes when ordering - see page 10. For Roller Selection procedure, consult Conveyor Chain Designer Guide

* Bush chain only.

** Preferred sizes of chain with standard sprockets and attachments available.

Conveyor Chain

Rollers and Connecting Links

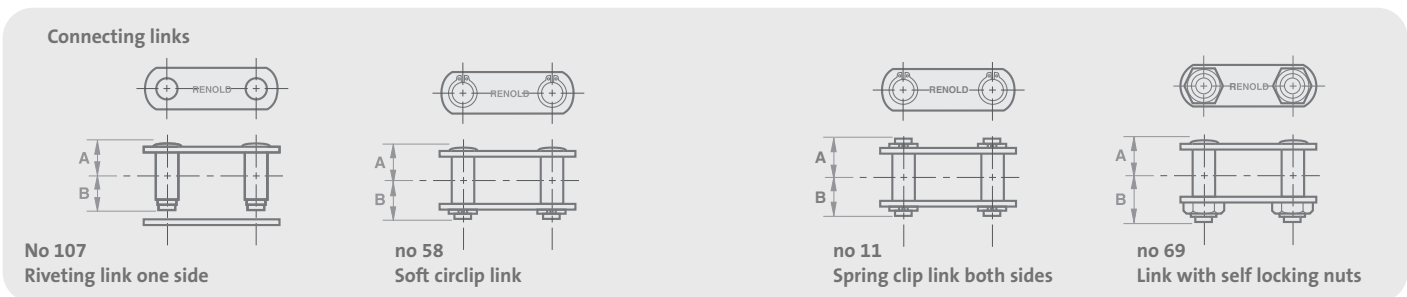


| Rollers | | | | Pitch Inch | Pitch mm | Tread Diam | Roller Width | Rollers Available | Pitch Inch | Pitch mm | Diam | Tread Diam | Flange Width | Roller Available |
|------------|---------|-----------|---------|------------|----------|------------|--------------|-------------------|------------|----------|------|------------|--------------|------------------|
| Hollow Pin | | Solid Pin | | | | | | | | | | | | |
| lbf | Newtons | lbf | Newtons | MIN | MIN | | | | MIN | MIN | | | | |

| Standard roller breaking load | | | | Standard plain | | | | Standard flanged | | | | | | |
|-------------------------------|--------|-------|--------|----------------|-------|------|------|------------------|-----|-------|------|-------|------|---------|
| | | | | | | M1 | W | | | | M1 | P1 | W | |
| - | - | 3000 | 13000 | 1.0 | 25.4 | 12.1 | 11.4 | /12 | - | - | - | - | - | - |
| 6000 | 27000 | 7500 | 33000 | 2.0 | 50.8 | 31.8 | 14.0 | /12 | 2.5 | 63.5 | 31.8 | 41.3 | 14.0 | /21 /22 |
| 12000 | 54000 | 15000 | 67000 | 3.0 | 76.2 | 47.6 | 17.8 | /12 | 3.5 | 88.9 | 47.6 | 60.3 | 17.8 | /21 /22 |
| 24000 | 107000 | 30000 | 134000 | 4.0 | 101.6 | 66.7 | 24.0 | /12 | 4.5 | 114.3 | 66.7 | 85.7 | 24.0 | /21 /22 |
| 36000 | 160000 | 45000 | 200000 | 5.0 | 127.0 | 88.9 | 36.8 | /12 | 6.0 | 152.4 | 88.9 | 114.3 | 36.8 | /22 |
| - | - | 60000 | 267000 | 5.0 | 127.0 | 88.9 | 36.8 | /12 | 6.0 | 152.4 | 88.9 | 114.3 | 36.8 | /22 |
| - | - | 90000 | 400000 | 6.0 | 152.4 | 88.9 | 36.8 | /12 | 6.5 | 165.1 | 88.9 | 114.3 | 36.8 | /22 |

| Large roller | | | | Plain | | | | Flanged | | | | | | |
|--------------|--------|-------|--------|-------|-------|-------|------|---------|-----|-------|-------|-------|------|-----|
| | | | | | | M2 | W | | | | M2 | P2 | W | |
| - | - | 3000 | 13000 | 1.5 | 38.1 | 25.4 | 11.4 | /56 | - | - | - | - | - | - |
| 4500 | 20000 | - | - | 1.5 | 38.1 | 25.4 | 11.4 | - | - | - | - | - | - | - |
| 36000 | 160000 | 45000 | 200000 | 8.0 | 203.2 | 127.0 | 36.8 | /52 | 9.0 | 228.6 | 127.0 | 152.4 | 36.8 | /62 |
| - | - | 60000 | 267000 | 8.0 | 203.2 | 127.0 | 36.8 | /52 | 9.0 | 228.6 | 127.0 | 152.4 | 36.8 | /62 |
| - | - | 90000 | 400000 | 8.0 | 203.2 | 127.0 | 36.8 | /52 | 9.0 | 228.6 | 127.0 | 152.4 | 36.8 | /62 |

Roller selection details - see page 73.



| Breaking Load | | | | No 107 | | No 58 Chain Centre to | | No 11 Chain Centre to | | No 69 Chain Centre to | |
|---------------|---------|-----------|---------|------------|-----------|-----------------------|---------------|-----------------------|---------------|-----------------------|---------------|
| Hollow Pin | | Solid Pin | | Hollow Pin | Solid Pin | Plain Side | Fastener Side | Plain Side | Fastener Side | Plain Side | Fastener Side |
| lbf | Newtons | lbf | Newtons | Both | Both | A | B | A | B | A | B |
| - | - | 3000 | 13000 | - | 11.0 | 11.0 | 13.0 | - | - | 11.0 | 17.0 |
| 4500 | 20000 | - | - | 12.3 | 19.0 | - | - | 13.8 | - | - | - |
| 6000 | 27000 | 7500 | 33000 | 18.3 | 19.0 | 19.0 | 22.0 | - | - | 19.0 | 30.0 |
| 12000 | 54000 | 15000 | 67000 | 22.0 | 23.0 | 23.0 | 25.0 | - | - | 23.0 | 36.0 |
| 24000 | 107000 | 30000 | 134000 | 28.5 | 30.0 | - | - | - | - | 30.0 | 46.0 |
| 36000 | 160000 | 45000 | 200000 | 39.8 | 41.0 | - | - | - | - | 41.0 | 62.0 |
| - | - | 60000 | 267000 | - | 40.0 | - | - | - | - | 40.0 | 56.0 |
| - | - | 90000 | 400000 | - | 47.0 | - | - | - | - | 47.0 | 68.0 |

Dimensions A & B are maximum sizes.

Extra Strength Standard Conveyor Chain

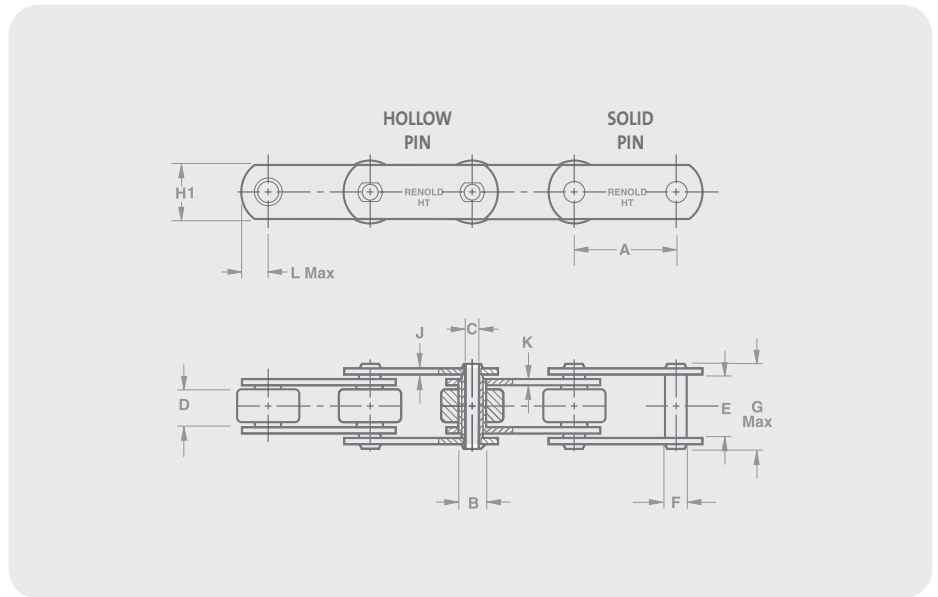
BS 4116 Part 4

Product Description

To complement our standard range of British Standard Conveyor Chain, this extra strength chain is more suitable for conveyor applications selected on ultimate tensile strength (breaking load). Each chain is the same dimensionally as its normal counterpart, for example an extra strength 24000 lbs chain has basically the same dimensions as a normal 12000 lbs series chain.

This chain is used extensively in the conveying of animal feed and bulk food stuffs such as grain, maize, wheat and raw food mixtures. Most of these applications use scraper type conveyor systems that normally have long centre distances between sprockets. Such systems are sometimes slow moving with little or no shock loading.

Contact our technical sales staff for selection and applicational details.



| Chain Ref. | | Technical Details (mm) | | | | | | | | | | | | | |
|---------------|-----------|------------------------|------------|----------|----------|-----------|------------------------------|--------------------|--------------------|----------|------------|--------------|-------------------|-------------------|------------|
| Breaking Load | | Pitch Inch | Pitch Inch | Pitch mm | Pitch mm | Bush Diam | Hollow Bearing Pin Bore Diam | Inside Width Inner | Inside Width Outer | Pin Diam | Pin Length | Plate Height | Width Outer Plate | Width Inner Plate | Head Inner |
| lb/ft | (Newtons) | MIN | MAX | MIN | MAX | MIN | MIN | MIN | MIN | MAX | MAX | MIN | MIN | MIN | MAX |

Hollow Bearing Pin - Extra Strength

| | | A | A | A | A | B | C | D | E | F | G | H1 | J | K | L |
|-------|--------|-----|------|------|-------|------|------|------|------|------|------|------|-----|-----|------|
| 12000 | 54000 | 1.5 | 6.0 | 38.1 | 152.4 | 18.0 | 10.1 | 15.0 | 25.4 | 14.0 | 36.5 | 25.4 | 3.8 | 4.0 | 15.0 |
| 24000 | 107000 | 2.0 | 9.0 | 50.8 | 228.6 | 23.6 | 13.2 | 19.0 | 32.5 | 19.0 | 44.0 | 38.1 | 3.8 | 5.1 | 22.1 |
| 48000 | 213500 | 3.5 | 12.0 | 88.9 | 304.8 | 33.2 | 20.1 | 25.4 | 43.0 | 26.9 | 57.0 | 51.0 | 5.1 | 7.1 | 29.7 |

Solid Bearing Pin - Extra Strength

| | | A | A | A | A | B | C | D | E | F | G | H1 | J | K | L |
|-------|--------|-----|------|------|-------|------|---|------|------|------|------|------|-----|-----|------|
| 15000 | 67000 | 1.5 | 6.0 | 38.1 | 152.4 | 18.0 | - | 15.0 | 25.4 | 14.0 | 38.0 | 25.4 | 3.8 | 4.0 | 15.0 |
| 30000 | 134000 | 2.0 | 9.0 | 50.8 | 228.6 | 23.6 | - | 19.0 | 32.5 | 19.0 | 46.0 | 38.1 | 3.8 | 5.1 | 22.1 |
| 60000 | 267000 | 3.5 | 12.0 | 88.9 | 304.8 | 33.2 | - | 25.4 | 43.0 | 26.9 | 60.0 | 51.0 | 5.1 | 7.1 | 29.7 |

The dimensions listed will not vary with pitch size for each given breaking load. For the details of individual pitch sizes, rollers, and spare links, see pages 12 and 13. Extra strength chains are based on the standard chain shown on page 8. For attachments see pages 14 - 22.

Extra Strength Conveyor Chain

Standard Range - B.S.

Section 1

| Pitch Inch | Pitch mm | Roller Chain No Extra Strength | Mass kg/m |
|---------------|-------------|--------------------------------------|------------------|
|---------------|-------------|--------------------------------------|------------------|

12000 lbf, 54000 Newtons Breaking Load - Hollow Pin
(Extra strength version of 6000 lbf series)

| | | | |
|-----|-------|-------------|------|
| 1.5 | 38.1 | 102060/03* | 2.94 |
| 2.0 | 50.8 | 102080/12** | 3.50 |
| 2.5 | 63.5 | 102100/12 | 3.13 |
| 3.0 | 76.2 | 102120/12** | 2.88 |
| 3.5 | 88.9 | 102140/12 | 2.71 |
| 4.0 | 101.6 | 102160/12** | 2.58 |
| 4.5 | 114.3 | 102180/12 | 2.47 |
| 5.0 | 127.0 | 102200/12 | 2.39 |
| 6.0 | 152.4 | 102240/12** | 2.27 |

15000 lbf, 67000 Newtons Breaking Load - Solid Pin
(Extra strength version of 7500 lbf series)

| | | | |
|-----|-------|-------------|------|
| 1.5 | 38.1 | 162060/03 | 3.54 |
| 2.0 | 50.8 | 162080/12** | 3.95 |
| 2.5 | 63.5 | 162100/12 | 3.49 |
| 3.0 | 76.2 | 162120/12** | 3.19 |
| 3.5 | 88.9 | 162140/12 | 2.97 |
| 4.0 | 101.6 | 162160/12** | 2.80 |
| 4.5 | 114.3 | 162180/12 | 2.67 |
| 5.0 | 127.0 | 162200/12 | 2.57 |
| 6.0 | 152.4 | 162240/12** | 2.42 |

24000 lbf, 107000 Newtons Breaking Load - Hollow Pin
(Extra strength version of 12000 lbf series)

| | | | |
|-----|-------|-------------|------|
| 2.0 | 50.8 | 102081/03 | 5.23 |
| 3.0 | 76.2 | 102121/12** | 6.93 |
| 3.5 | 88.9 | 102141/12 | 6.35 |
| 4.0 | 101.6 | 102161/12** | 5.91 |
| 4.5 | 114.3 | 102181/12 | 5.57 |
| 5.0 | 127.0 | 102201/12 | 5.30 |
| 6.0 | 152.4 | 102241/12** | 4.89 |
| 7.0 | 177.8 | 102281/12 | 4.60 |
| 8.0 | 203.2 | 102321/12 | 4.39 |
| 9.0 | 228.6 | 102361/12 | 4.21 |

30000 lbf, 134000 Newtons Breaking Load - Solid Pin
(Extra strength version of 15000 lbf series)

| | | | |
|-----|-------|-------------|------|
| 2.0 | 50.8 | 162081/03 | 6.28 |
| 3.0 | 76.2 | 162121/12** | 7.62 |
| 3.5 | 88.9 | 162141/12 | 6.95 |
| 4.0 | 101.6 | 162161/12** | 6.43 |
| 4.5 | 114.3 | 162181/12 | 6.03 |
| 5.0 | 127.0 | 162201/12 | 5.72 |
| 6.0 | 152.4 | 162241/12** | 5.24 |
| 7.0 | 177.8 | 162281/12 | 4.90 |
| 8.0 | 203.2 | 162321/12 | 4.65 |
| 9.0 | 228.6 | 162361/12 | 4.44 |

* Bush chain only.

** Preferred sizes of chain, with standard sprockets and attachments available.

| Pitch Inch | Pitch mm | Roller Chain No Extra Strength | Mass kg/m |
|---------------|-------------|--------------------------------------|------------------|
|---------------|-------------|--------------------------------------|------------------|

48000 lbf, 2135000 Newtons Breaking Load - Hollow Pin
(Extra strength version of 24000 lbf series)

| | | | |
|------|-------|-------------|-------|
| 3.5 | 88.9 | 102142/03 | 8.20 |
| 4.0 | 101.6 | 102162/12** | 12.74 |
| 5.0 | 127.0 | 102202/12 | 11.21 |
| 6.0 | 152.4 | 102242/12** | 10.91 |
| 7.0 | 177.8 | 102282/12 | 9.46 |
| 8.0 | 203.2 | 102322/12 | 8.92 |
| 9.0 | 228.6 | 102362/12 | 8.50 |
| 12.0 | 304.8 | 102482/12 | 7.65 |

60000 lbf, 267000 Newtons Breaking Load - Solid Pin
(Extra strength version of 30000 lbf series)

| | | | |
|------|-------|-------------|-------|
| 3.5 | 88.9 | 162142/12 | 9.90 |
| 4.0 | 101.6 | 162162/12** | 14.22 |
| 5.0 | 127.0 | 162202/12 | 12.40 |
| 6.0 | 152.4 | 162242/12** | 11.18 |
| 7.0 | 177.8 | 162282/12 | 10.31 |
| 8.0 | 203.2 | 162322/12 | 9.66 |
| 9.0 | 228.6 | 162362/12 | 9.16 |
| 12.0 | 204.8 | 162482/12 | 8.14 |

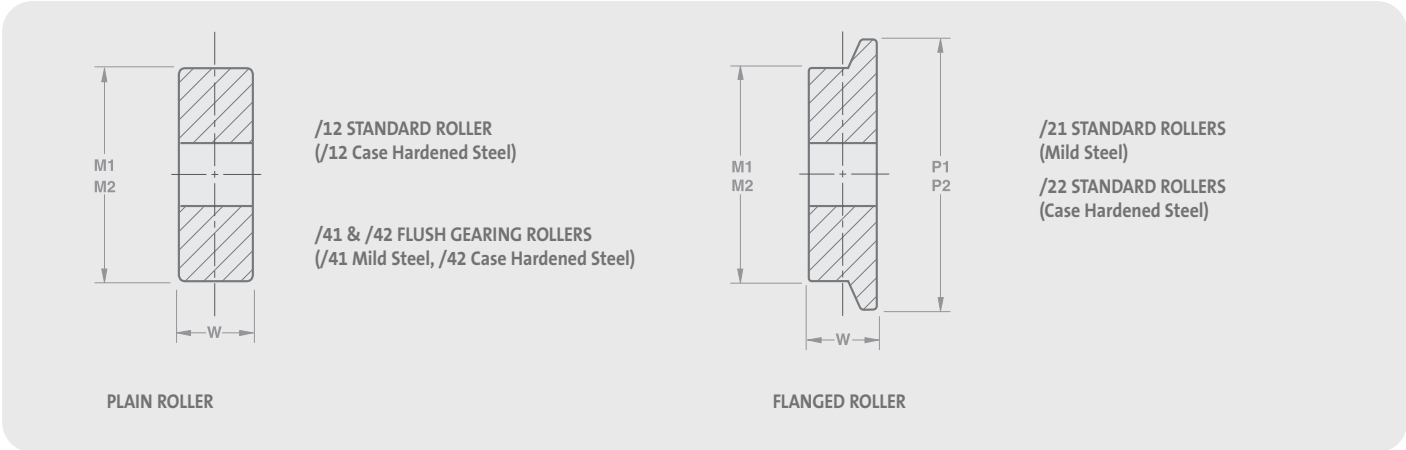
This table indicates standard roller chain configurations.

Where alternative rollers are required, amend the roller suffix for identification purposes when ordering - see page 13.

For Roller Selection procedure, consult Conveyor Chain Designer Guide.

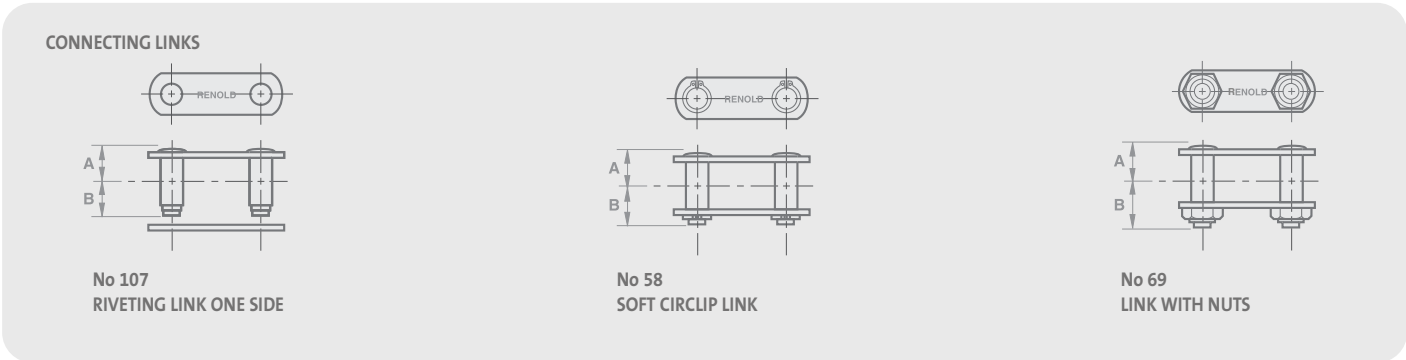
Extra Strength Conveyor Chain

Rollers and Connecting Links



| Rollers | | | | Pitch Inch | Pitch mm | Tread Diam | Roller Width | Rollers Available | Pitch Inch | Pitch mm | Diam | Tread Diam | Flange Width | Roller Available | |
|--------------------------------------|---------|-----------|---------|-----------------------|----------|------------|--------------|-------------------------|------------|----------|------|------------|--------------|------------------|--|
| Hollow Pin | | Solid Pin | | | | | | | | | | | | | |
| lbf | Newtons | lbf | Newtons | MIN | MIN | | | | MIN | MIN | | | | | |
| Standard roller breaking load | | | | Standard plain | | | | Standard flanged | | | | | | | |
| | | | | | | M1 | W | | | | M1 | P1 | W | | |
| 12000 | 54000 | 15000 | 67000 | 2.0 | 50.8 | 31.8 | 14.0 | /12 | 2.5 | 63.5 | 31.8 | 41.3 | 14.0 | /21 /22 | |
| 24000 | 107000 | 30000 | 84000 | 3.0 | 76.2 | 47.6 | 17.8 | /12 | 3.5 | 88.9 | 47.6 | 60.3 | 17.8 | /21 /22 | |
| 48000 | 213500 | 60000 | 200000 | 4.0 | 101.6 | 66.7 | 24.0 | /12 | 4.5 | 114.3 | 66.7 | 85.7 | 24.0 | /21 /22 | |

For Roller Selection procedure, consult Conveyor Chain Designer Guide.



Chain

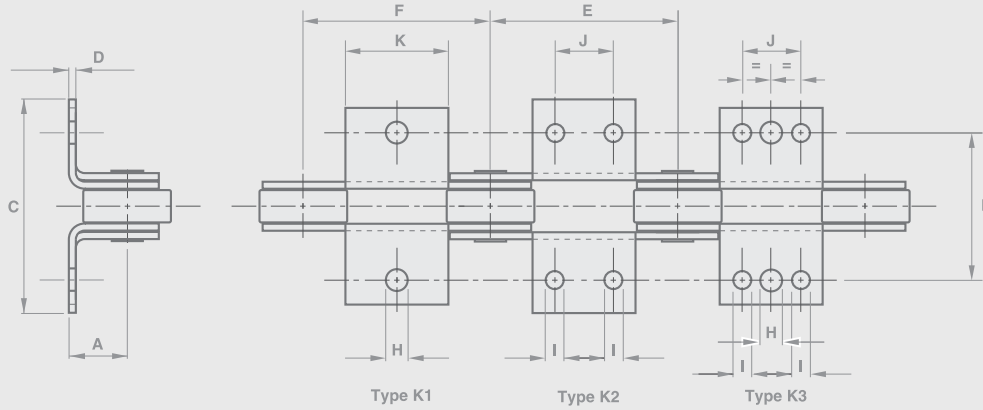
| Breaking Load | | | | No 107 | | No 58 Chain Centre to | | No 11 Chain Centre to | | No 69 Chain Centre to | |
|---------------|---------|-----------|---------|-----------------|----------------|-----------------------|---------------|-----------------------|---------------|-----------------------|---------------|
| Hollow Pin | | Solid Pin | | Hollow Pin Both | Solid Pin Both | Plain Side | Fastener Side | Plain Side | Fastener Side | Plain Side | Fastener Side |
| lbf | Newtons | lbf | Newtons | | | | | | | | |
| | | | | A&B | A&B | A | B | A | B | A | B |
| 12000* | 54000 | 15000* | 67000 | 18.3 | 19.0 | 19.0 | 22.0 | - | - | 19.0 | 30.0 |
| 24000* | 107000 | 30000* | 134000 | 22.0 | 23.0 | 23.0 | 25.0 | - | - | 23.0 | 36.0 |
| 45000* | 213500 | 60000* | 267000 | 28.5 | 30.0 | - | - | - | - | 30.0 | 46.0 |

Dimensions A & B are maximum sizes.
 For standard versions of these chains see page 8.
 Small rollers - available on request.

Conveyor Chain

BS K Attachments (Integral)

Section 1



Technical Details (mm)

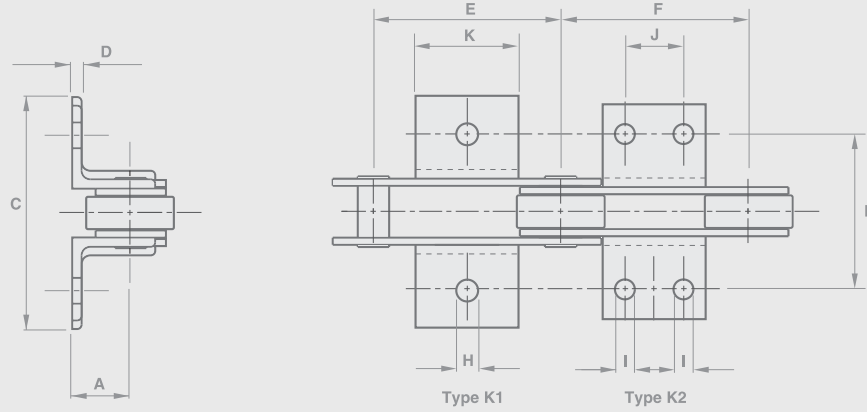
| Breaking Load lbf | Platform Height | Transverse Pitch | Width Over Attachment Inner/Outer | Attachment Thickness | Attachment Type | Attachment Minimum Outer Pitch | Attachment Minimum Inner Pitch | Centre Hole Dia | Outer Holes Dia | Attachment Hole Pitch | Platform Length | Mass (kg/Att) |
|----------------------|-----------------|------------------|--------------------------------------|----------------------|-----------------|-----------------------------------|-----------------------------------|-----------------|-----------------|-----------------------|-----------------|------------------|
|----------------------|-----------------|------------------|--------------------------------------|----------------------|-----------------|-----------------------------------|-----------------------------------|-----------------|-----------------|-----------------------|-----------------|------------------|

Conveyor chain - BS K attachments (integral)

| | A | B | C | D | | E | F | H | I | J | K | |
|-------------|------|-------|-----------|-----------|----|-------|-------|------|------|------|-------|-------|
| 3000 | 16.5 | 44.5 | 66 / 70 | 1.8 / 1.8 | K1 | 38.1 | 38.1 | 9.2 | - | - | 19.0 | 0.009 |
| | | | | | K3 | 50.8 | 50.8 | 9.2 | 7.4 | 25.4 | 44.5 | 0.018 |
| | | | | | K3 | 76.2 | 76.2 | 9.2 | 7.4 | 25.4 | 44.5 | 0.018 |
| | | | | | K3 | 101.6 | 101.6 | 9.2 | 7.4 | 25.4 | 70.0 | 0.027 |
| 6000/7500 | 19.0 | 76.2 | 106 / 115 | 3.8 / 3.8 | K3 | 76.2 | 76.2 | 10.5 | 9.2 | 22.2 | 43.0 | 0.045 |
| | | | | | K3 | 101.6 | 101.6 | 10.5 | 9.2 | 31.8 | 63.5 | 0.077 |
| | | | | | K3 | 127.0 | 127.0 | 10.5 | 9.2 | 57.2 | 89.0 | 0.109 |
| | | | | | K3 | 152.4 | 152.4 | 10.5 | 9.2 | 57.2 | 114.5 | 0.141 |
| 12000/15000 | 31.8 | 89.0 | 130 / 136 | 5.1 / 3.8 | K3 | 76.2 | 76.2 | 13.7 | 10.5 | 31.8 | 63.5 | 0.127 |
| | | | | | K3 | 101.6 | 101.6 | 13.7 | 10.5 | 31.8 | 63.5 | 0.127 |
| | | | | | K3 | 152.4 | 152.4 | 13.7 | 10.5 | 57.2 | 114.5 | 0.240 |
| 24000/30000 | 38.0 | 108.0 | 146 / 157 | 7.1 / 5.1 | K1 | 101.6 | 101.6 | 15.3 | - | - | 56.0 | 0.172 |
| | | | | | K2 | 101.6 | 101.6 | - | 12.2 | 31.8 | 56.0 | 0.172 |
| | | | | | K3 | 152.4 | 152.4 | 15.3 | 12.2 | 57.2 | 107.0 | 0.318 |
| 36000/45000 | 50.8 | 146.0 | 198 / 198 | 8.9 / 7.6 | K2 | 152.4 | 152.4 | - | 13.7 | 31.8 | 74.0 | 0.310 |
| | | | | | K2 | 203.2 | 203.2 | - | 13.7 | 88.9 | 125.0 | 0.420 |

Conveyor Chain

BS K Attachments (Welded)



Technical Details (mm)

| Breaking Load lbf | Platform Height | Transverse Pitch | Width Over Attachment Inner/Outer MAX | Attachment Thickness | Attachment Type | Attachment Minimum Outer Pitch | Attachment Minimum Inner Pitch | Centre Hole Dia | Outer Holes Dia | Attachment Hole Pitch | Platform Length | Mass (kg/Att) |
|----------------------|-----------------|------------------|--|----------------------|-----------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------------|-----------------|------------------|
|----------------------|-----------------|------------------|--|----------------------|-----------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------------|-----------------|------------------|

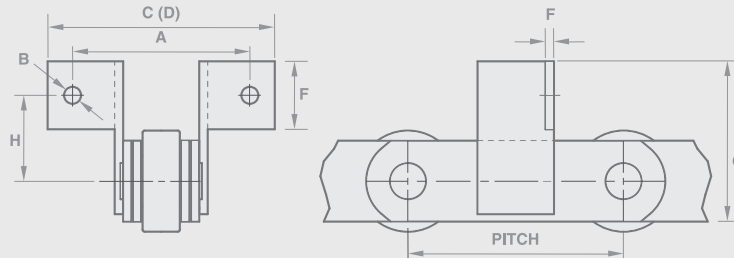
Conveyor chain - BS K attachments (welded)

| | A | B | C | D | | E | F | H | I | J | K | |
|--------------------------|------|-------|-----------|------|----|-------|-------|------|------|-------|-------|-------|
| 3000 | 16.5 | 44.5 | 68 / 72 | 3.0 | K1 | 38.1 | 50.8 | 8.2 | - | - | 19.0 | 0.027 |
| | | | | | K1 | 50.8 | 63.5 | 8.2 | - | - | 38.0 | 0.059 |
| | | | | | K2 | 50.8 | 63.5 | - | 7.4 | 22.2 | 38.0 | 0.059 |
| | | | | | K2 | 76.2 | 76.2 | - | 7.4 | 25.4 | 44.5 | 0.068 |
| 6000 / 7500 | 19.0 | 76.2 | 106 / 116 | 4.0 | K1 | 50.8 | 63.5 | 10.6 | - | - | 19.0 | 0.028 |
| | | | | | K1 | 63.5 | 76.2 | 10.6 | - | - | 28.0 | 0.054 |
| | | | | | K1 | 88.9 | 101.6 | 10.6 | - | - | 56.0 | 0.104 |
| | | | | | K2 | 88.9 | 101.6 | - | 9.2 | 31.8 | 56.0 | 0.104 |
| | | | | | K2 | 114.3 | 127.0 | - | 9.2 | 57.2 | 84.0 | 0.163 |
| | | | | | K2 | 114.3 | 127.0 | - | 9.2 | 57.2 | 84.0 | 0.163 |
| 12000 / 15000 | 31.8 | 88.9 | 122 / 133 | 5.0 | K1 | 76.2 | 88.9 | 13.7 | - | - | 35.0 | 0.119 |
| | | | | | K1 | 88.9 | 101.6 | 13.7 | - | - | 56.0 | 0.193 |
| | | | | | K2 | 88.9 | 101.6 | - | 10.5 | 31.8 | 56.0 | 0.193 |
| | | | | | K2 | 114.3 | 152.4 | - | 10.5 | 57.2 | 84.0 | 0.289 |
| | | | | | K2 | 152.4 | 177.8 | - | 10.5 | 88.9 | 127.0 | 0.443 |
| | | | | | K2 | 152.4 | 177.8 | - | 10.5 | 88.9 | 127.0 | 0.443 |
| 24000 / 30000 | 38.0 | 108.0 | 146 / 159 | 6.0 | K1 | 127.0 | 127.0 | 15.3 | - | - | 56.0 | 0.299 |
| | | | | | K2 | 127.0 | 127.0 | - | 12.2 | 31.8 | 56.0 | 0.299 |
| | | | | | K2 | 152.4 | 152.4 | - | 12.2 | 57.2 | 84.0 | 0.449 |
| | | | | | K2 | 177.8 | 177.8 | - | 12.2 | 69.9 | 108.0 | 0.581 |
| | | | | | K2 | 203.2 | 203.2 | - | 12.2 | 88.9 | 127.0 | 0.685 |
| | | | | | K2 | 228.6 | 228.6 | - | 12.2 | 133.4 | 168.0 | 0.907 |
| 36000 / 45000 / 60000 | 50.8 | 146.0 | 202 / 200 | 8.0 | K1 | 152.4 | 152.4 | 16.9 | - | - | 70.0 | 0.581 |
| | | | | | K2 | 152.4 | 152.4 | - | 13.7 | 38.1 | 70.0 | 0.581 |
| | | | | | K2 | 203.2 | 203.2 | - | 13.7 | 76.2 | 112.0 | 0.930 |
| | | | | | K2 | 228.6 | 228.6 | - | 13.7 | 88.9 | 152.0 | 1.270 |
| | | | | | K2 | 304.8 | 304.8 | - | 13.7 | 165.1 | 229.0 | 1.905 |
| | | | | | K2 | 304.8 | 304.8 | - | 13.7 | 165.1 | 229.0 | 1.905 |
| 90000 | 57.0 | 171.5 | 229 / 252 | 10.0 | K1 | 228.6 | 228.6 | 19.7 | - | - | 89.0 | 1.050 |
| | | | | | K2 | 228.6 | 228.6 | - | 19.7 | 44.5 | 89.0 | 1.050 |
| | | | | | K2 | 228.6 | 228.6 | - | 19.7 | 88.9 | 152.0 | 1.810 |
| | | | | | K2 | 304.8 | 304.8 | - | 19.7 | 165.1 | 229.0 | 2.710 |

Conveyor Chain

BS F1 Attachments (Welded)

Section 1



Technical Details (mm)

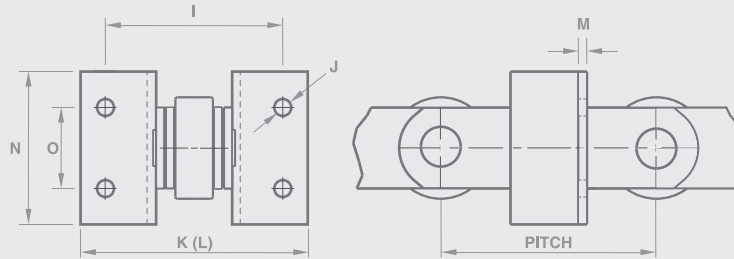
| Breaking Load lbf | Pitch Inner Plate MIN | Pitch Outer Plate MIN | Transverse Pitch | Attachment Hole Size | Width Over Attachment Outer Plate | Width Over Attachment Inner Plate | Attachment Thickness | Attachment Face Height | Total Height of Attachment | Attachment Hole Distance From Chain Centreline | Mass (kg) |
|----------------------|--------------------------|--------------------------|------------------|----------------------|-----------------------------------|-----------------------------------|----------------------|------------------------|----------------------------|--|-----------|
|----------------------|--------------------------|--------------------------|------------------|----------------------|-----------------------------------|-----------------------------------|----------------------|------------------------|----------------------------|--|-----------|

Conveyor chain - BS F1 attachments (welded)

| | | | A | B | C (Max) | D (Max) | E | F | G | H | |
|---------------|-------|-------|-------|------|---------|---------|------|------|-------|------|-------|
| 3000 | 50.8 | 38.1 | 44.5 | 7.4 | 72.0 | 68.0 | 3.0 | 19.0 | 44.5 | 26.0 | 0.054 |
| 6000 / 7500 | 69.9 | 57.2 | 76.2 | 9.2 | 116.0 | 106.0 | 4.0 | 25.4 | 56.0 | 32.4 | 0.082 |
| 12000 / 15000 | 101.6 | 82.6 | 88.9 | 10.5 | 133.0 | 122.0 | 5.0 | 31.8 | 84.0 | 51.4 | 0.163 |
| 24000 / 30000 | 139.7 | 114.3 | 108.0 | 12.2 | 159.0 | 146.0 | 6.0 | 44.5 | 108.0 | 63.5 | 0.435 |
| 36000 / 45000 | 165.1 | 133.4 | 146.0 | 13.7 | 200.0 | 202.0 | 8.0 | 63.5 | 152.0 | 90.0 | 0.954 |
| 60000 | 165.1 | 133.4 | 146.0 | 13.7 | 200.0 | 202.0 | 8.0 | 63.5 | 152.0 | 90.0 | 0.950 |
| 90000 | 190.5 | 152.4 | 171.5 | 19.7 | 252.0 | 229.0 | 10.0 | 63.5 | 152.0 | 88.9 | 1.530 |

Conveyor Chain

BS F2 Attachments (Welded)



Technical Details (mm)

| Breaking Load lbf | Pitch Inner Plate MIN | Pitch Outer Plate MIN | Transverse Pitch | Attachment Hole Size | Width Over Attachment Outer Plate | Width Over Attachment Inner Plate | Attachment Thickness | Attachment Face Height | Pitch of Attachment Holes | Mass (kg) |
|----------------------|--------------------------|--------------------------|------------------|----------------------|-----------------------------------|-----------------------------------|----------------------|------------------------|---------------------------|-----------|
|----------------------|--------------------------|--------------------------|------------------|----------------------|-----------------------------------|-----------------------------------|----------------------|------------------------|---------------------------|-----------|

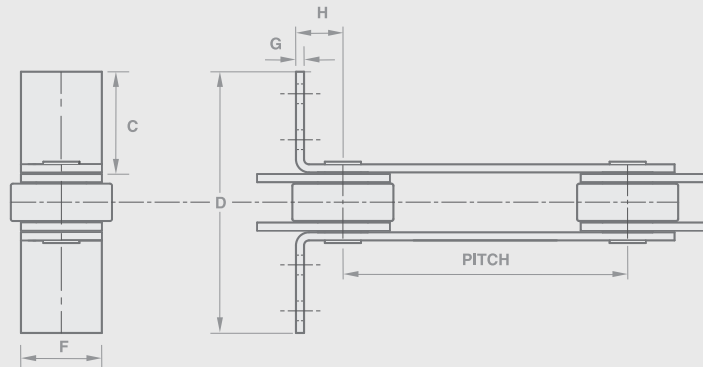
Conveyor chain - BS F2 attachments (welded)

| | | | I | J | K (Max) | L (Max) | M | N | O | |
|---------------|-------|-------|-------|------|---------|---------|------|-------|------|-------|
| 3000 | 50.8 | 38.1 | 44.5 | 7.4 | 72.0 | 68.0 | 3.0 | 44.5 | 25.4 | 0.068 |
| 6000 / 7500 | 69.9 | 57.2 | 76.2 | 9.2 | 116.0 | 106.0 | 4.0 | 56.0 | 31.8 | 0.104 |
| 12000 / 15000 | 101.6 | 82.6 | 88.9 | 10.5 | 133.0 | 122.0 | 5.0 | 84.0 | 57.2 | 0.231 |
| 24000 / 30000 | 139.7 | 114.3 | 108.0 | 12.2 | 159.0 | 146.0 | 6.0 | 108.0 | 69.9 | 0.580 |
| 36000 / 45000 | 165.1 | 133.4 | 146.0 | 13.7 | 200.0 | 202.0 | 8.0 | 152.0 | 88.9 | 1.270 |
| 60000 | 165.1 | 133.4 | 146.0 | 13.7 | 200.0 | 202.0 | 8.0 | 152.0 | 88.9 | 1.270 |
| 90000 | 190.5 | 152.4 | 171.5 | 19.7 | 252.0 | 229.0 | 10.0 | 152.0 | 88.9 | 1.810 |

Conveyor Chain

BS L Attachments (Integral)

Section 1



Technical Details (mm)

| Breaking Load lbf | Type | Transverse Pitch | Pitch of Attachment Holes | Attachment Face Length | Width Over Attachment Outer | Attachment Hole Diameter | Total Height of Attachment | Attachment Thickness | Distance of Pitch point to Attachment Face | Box Width* | Mass (kg) |
|----------------------|------|------------------|---------------------------|------------------------|-----------------------------|--------------------------|----------------------------|----------------------|--|------------|-----------|
|----------------------|------|------------------|---------------------------|------------------------|-----------------------------|--------------------------|----------------------------|----------------------|--|------------|-----------|

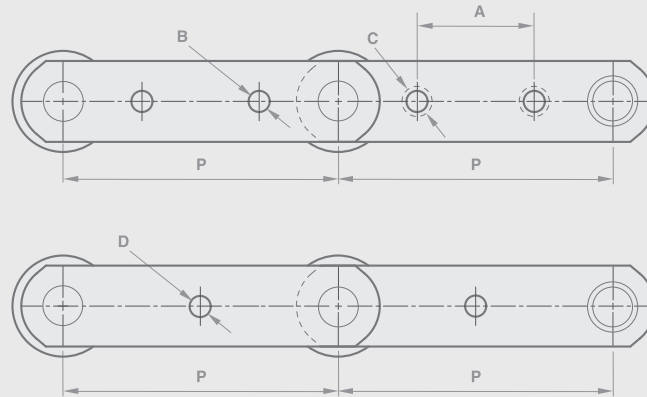
Conveyor chain - BS L attachments (integral)

| | | A | B | C | D | E | F | G | H | | |
|---------------|----|------|------|-------|-------|------|------|-----|------|-------|-------|
| 3000 | L0 | - | - | 28.7 | 74.2 | - | 18.0 | 1.8 | 16.0 | 76.2 | 0.007 |
| | L0 | - | - | 41.4 | 99.6 | - | 18.0 | 1.8 | 16.0 | 101.6 | 0.010 |
| | L0 | - | - | 54.1 | 125.0 | - | 18.0 | 1.8 | 16.0 | 127.0 | 0.013 |
| | L0 | - | - | 66.8 | 150.4 | - | 18.0 | 1.8 | 16.0 | 152.4 | 0.016 |
| | L1 | 41.4 | - | 25.4 | 67.6 | 7.4 | 18.0 | 1.8 | 16.0 | - | 0.007 |
| | L2 | 41.4 | 19.0 | 41.4 | 100.0 | 7.4 | 18.0 | 1.8 | 16.0 | - | 0.009 |
| 6000 / 7500 | L0 | - | - | 48.3 | 123.5 | - | 25.4 | 3.8 | 19.0 | 127.0 | 0.041 |
| | L0 | - | - | 61.0 | 148.9 | - | 25.4 | 3.8 | 19.0 | 152.4 | 0.051 |
| | L0 | - | - | 86.4 | 199.7 | - | 25.4 | 3.8 | 19.0 | 203.2 | 0.071 |
| | L0 | - | - | 111.8 | 250.5 | - | 25.4 | 3.8 | 19.0 | 254.0 | 0.091 |
| | L0 | - | - | 137.2 | 301.3 | - | 25.4 | 3.8 | 19.0 | 304.8 | 0.111 |
| | L1 | 58.9 | - | 31.8 | 107.0 | 9.2 | 25.4 | 3.8 | 19.0 | - | 0.025 |
| 12000 / 15000 | L0 | - | - | 44.5 | 122.0 | - | 38.1 | 3.8 | 25.4 | 127.0 | 0.058 |
| | L0 | - | - | 57.2 | 147.4 | - | 38.1 | 3.8 | 25.4 | 152.4 | 0.072 |
| | L0 | - | - | 82.6 | 198.2 | - | 38.1 | 3.8 | 25.4 | 203.2 | 0.101 |
| | L0 | - | - | 108.0 | 249.0 | - | 38.1 | 3.8 | 25.4 | 254.0 | 0.130 |
| | L0 | - | - | 133.4 | 299.8 | - | 38.1 | 3.8 | 25.4 | 304.8 | 0.160 |
| | L1 | 73.4 | - | 36.8 | 106.8 | 10.5 | 38.1 | 3.8 | 25.4 | - | 0.045 |
| 24000 / 30000 | L0 | - | - | 128.5 | 300.0 | - | 51.0 | 5.1 | 35.0 | 320.0 | 0.267 |
| | L2 | 73.4 | 24.0 | 57.2 | 148.6 | 10.5 | 38.1 | 3.8 | 25.4 | - | 0.073 |
| 36000 / 45000 | L0 | - | - | 135.2 | 330.0 | - | 61.0 | 7.6 | 42.0 | 350.0 | 0.479 |
| 60000 | L0 | - | - | 135.2 | 330.0 | - | 61.0 | 7.6 | 42.0 | 350.0 | 0.479 |

* Alternative width available. Please enquire.

Conveyor Chain

BS Attachments Holes in Link Plates



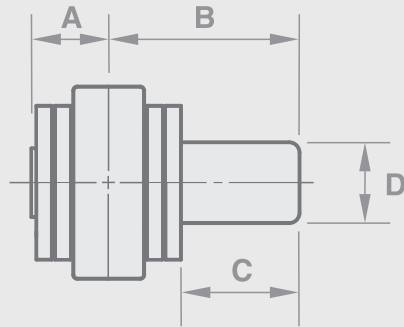
Technical Details (mm)

| Breaking Load lbf lbf | Pitch Bush Chain | Pitch Small Roller | Pitch Large Roller | Hole Diameter | Pitch* | Attachment Hole Pitch | Hole Diameter | Cone Diameter |
|-----------------------------|---------------------|-----------------------|-----------------------|------------------|------------------|--------------------------|------------------|------------------|
| | MIN | MIN | MIN | | MIN | | | |
| One hole | | | | | Two holes | | | |
| | P | P | P | D | P | A | B | C |
| 3000 | 50.8 | 50.8 | 76.20 | 6.65 | - | - | - | - |
| 6000 | - | 95.3 | - | 9.9 | 95.3 | 38.1 | 8.3 | 14.7 |
| 7500 | - | 95.3 | - | 9.9 | 127.0 | 63.5 | 8.3 | 14.7 |
| 12000/15000 | - | - | 133.35 | 13.1 | 101.6 | 25.4 | 9.9 | 17.8 |
| | | | | | 108.0 | 34.9 | 9.9 | 17.8 |
| | | | | | 139.7 | 60.3 | 9.9 | 17.8 |
| | | | | | 177.8 | 101.6 | 9.9 | 17.8 |
| 24000/30000 | - | - | 190.50 | 19.4 | 127.0 | 34.9 | 9.9 | 17.8 |
| | | | | | 152.4 | 60.3 | 9.9 | 17.8 |
| | | | | | 171.5 | 82.6 | 9.9 | 17.8 |
| | | | | | 190.5 | 101.6 | 9.9 | 17.8 |
| | | | | | 228.6 | 139.7 | 9.9 | 17.8 |
| 36000/45000 | 241.3 | 241.3 | 317.50 | 22.6 | 152.4 | 44.5 | 11.5 | 20.8 |
| | | | | | 190.5 | 82.6 | 11.5 | 20.8 |
| | | | | | 228.6 | 114.3 | 11.5 | 20.8 |
| | | | | | 304.8 | 190.5 | 11.5 | 20.8 |
| 60000 | 241.3 | 241.3 | 317.50 | 22.6 | 152.4 | 44.5 | 11.5 | 20.8 |
| | | | | | 190.5 | 82.6 | 11.5 | 20.8 |
| | | | | | 222.3 | 114.3 | 11.5 | 20.8 |
| | | | | | 298.5 | 190.5 | 11.5 | 20.8 |
| 90000 | 279.4 | 279.4 | 330.20 | 29.0 | 177.8 | 50.8 | 16.7 | 30.5 |
| | | | | | 228.6 | 108.0 | 16.7 | 30.5 |
| | | | | | 304.8 | 184.2 | 16.7 | 30.5 |

* Based on small plain roller - will be increased pro rata for other types.

Conveyor Chain

BS Extended Bearing Pins



Technical Details (mm)

| Breaking Load lbf | Centre Distance To rivet End | Centre Distance To pin End | Extension Length | Extension Diameter | Mass |
|----------------------|---------------------------------|-------------------------------|---------------------|-----------------------|------|
|----------------------|---------------------------------|-------------------------------|---------------------|-----------------------|------|

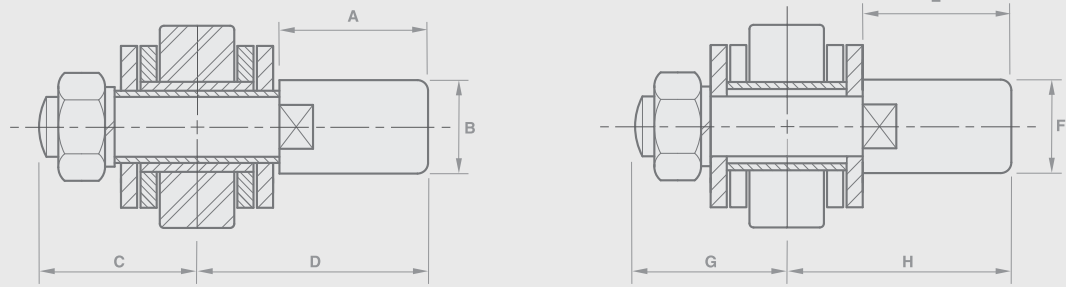
BS Extended bearing pins

| A | B | C | D | | |
|-------|------|-------|------|------|-------|
| 3000 | 11.0 | 35.0 | 25.4 | 11.0 | 0.020 |
| 7500 | 19.0 | 55.0 | 38.0 | 16.0 | 0.059 |
| 15000 | 23.0 | 65.0 | 44.5 | 22.2 | 0.132 |
| 30000 | 30.0 | 84.0 | 57.2 | 28.6 | 0.286 |
| 45000 | 41.2 | 107.2 | 70.0 | 35.0 | 0.522 |
| 60000 | 40.0 | 107.2 | 70.0 | 35.0 | 0.522 |
| 90000 | 47.0 | 113.3 | 70.0 | 38.0 | 0.620 |

N.B Extended bearing pins are an integral part of the chain assembly and cannot be removed without dismantling the chain .
 Extended bearing pins can be specified at any pitch point of the chain.
 Extensions are case - hardened or can remain soft to suit customers requirements.

Conveyor Chain

BS Spigot Pins

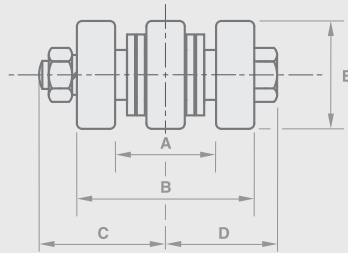


Technical Details (mm)

| Breaking Load lbf | Extended Length | Extension Diameter | Centre Distance To nut End | Centre Distance To Pin End | Extended Length | Extension Diameter | Centre Distance To nut End | Centre Distance To pin End | Mass (kg) |
|--|-----------------|--------------------|----------------------------|----------------------------|---|--------------------|----------------------------|----------------------------|-----------|
| Spigot pins-Through hollow pin type 1 | | | | | Spigot pins-Mid pitch on outer link type 2 | | | | |
| | A | B | C | D | E | F | G | H | |
| 3000 | - | - | - | - | 25.4 | 11.0 | 17.0 | 35.0 | 0.036 |
| 6000 | 38.1 | 16.0 | 31.0 | 57.0 | 38.1 | 16.0 | 29.2 | 56.0 | 0.112 |
| 7500 | - | - | - | - | 38.1 | 16.0 | 29.2 | 56.0 | 0.112 |
| 12000 | 44.5 | 19.0 | 36.30 | 66.3 | 44.5 | 19.0 | 34.3 | 64.8 | 0.200 |
| 15000 | - | - | - | - | 44.5 | 19.0 | 34.3 | 64.8 | 0.200 |
| 24000 | 57.2 | 28.6 | 48.0 | 85.3 | 57.2 | 28.6 | 45.7 | 83.8 | 0.560 |
| 30000 | - | - | - | - | 57.2 | 28.6 | 45.7 | 83.8 | 0.560 |
| 36000 | 70.0 | 31.8 | 61.0 | 109.0 | 70.0 | 31.8 | 58.5 | 107.0 | 0.900 |
| 45000 | - | - | - | - | 70.0 | 31.8 | 58.5 | 107.0 | 0.900 |
| 60000 | - | - | - | - | 70.0 | 31.8 | 58.5 | 107.0 | 0.900 |
| 90000 | - | - | - | - | 70.0 | 38.0 | 71.0 | 113.0 | 1.490 |

Conveyor Chain

BS Outboard Rollers



Technical Details (mm)

| Breaking Load lbf | Distance Between Outboard Rollers | Distance Over Outboard Rollers | Centre Distance To nut End | Centre Distance To bolt End | Roller Diameter | Mass (kg) | Roller Load Per Pitch Point (kg) |
|----------------------|--------------------------------------|-----------------------------------|-------------------------------|--------------------------------|--------------------|--------------|--|
|----------------------|--------------------------------------|-----------------------------------|-------------------------------|--------------------------------|--------------------|--------------|--|

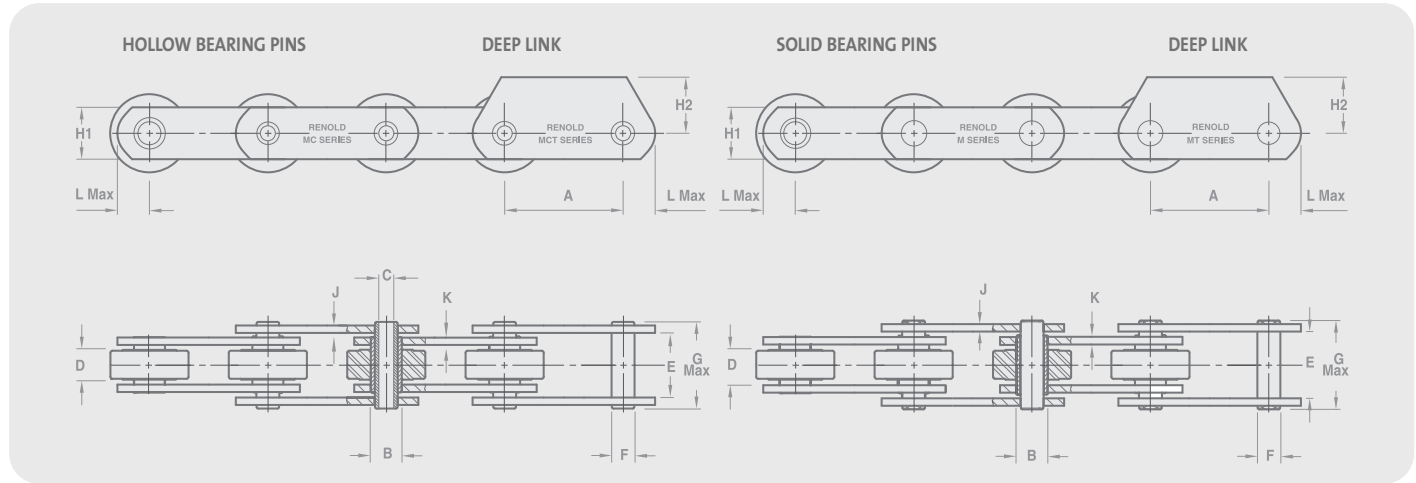
BS Outboard rollers

| | A | B | C | D | E | | |
|-------|-------|-------|-------|-------|------|------|-----|
| 6000 | 44.45 | 75.0 | 55.6 | 46.5 | 33.3 | 0.26 | 165 |
| 12000 | 50.80 | 88.9 | 68.5 | 57.0 | 50.8 | 0.73 | 290 |
| 24000 | 66.00 | 118.0 | 86.6 | 75.7 | 69.9 | 1.94 | 545 |
| 36000 | 94.00 | 171.5 | 113.5 | 106.0 | 92.1 | 4.74 | 725 |

Ball bearing outboard rollers
Bolted through hollow bearing pins

Conveyor Chain

ISO 1977 Specification



| Chain | Technical Details (mm) | | | | | | | | | | | | | |
|----------|-----------------------------|-----------|-----------|----------------|-----------------------------------|------------------------|------------------------|---------------|----------------|--------------|--------------|-------------------|-------------------|----------|
| Chain No | Breaking Load (Newtons) MIN | Pitch MIN | Pitch MAX | Bush Diam. MAX | Hollow Bearing Pin Bore Diam. MIN | Inside Width Inner MIN | Inside Width Outer MIN | Pin Diam. MAX | Pin Length MAX | Plate Height | Plate Height | Plate Width Outer | Plate Width Inner | Head MAX |

Hollow Bearing Pin

| | | A | A | B | C | D | E | F | G | H1 | H2 | J | K | L |
|-------|--------|-----|-----|------|------|------|------|------|------|------|------|-----|-----|------|
| MC56 | 56000 | 80 | 250 | 21.0 | 10.2 | 24.0 | 33.7 | 15.5 | 46.5 | 35.0 | 32.5 | 4.0 | 4.0 | 19.4 |
| MC112 | 112000 | 100 | 315 | 29.0 | 14.3 | 32.0 | 45.7 | 22.0 | 63.0 | 50.0 | 45.0 | 6.0 | 6.0 | 27.3 |
| MC224 | 224000 | 160 | 500 | 41.0 | 20.3 | 43.0 | 60.8 | 31.0 | 83.0 | 70.0 | 65.0 | 8.0 | 8.0 | 37.8 |

Solid Bearing Pin

| | | A | A | B | C | D | E | F | G | H1 | H2 | J | K | L |
|------|--------|-----|------|------|---|------|-------|------|-------|-------|-------|------|------|------|
| M40 | 40000 | 63 | 250 | 12.5 | - | 20.0 | 28.3 | 8.5 | 41.0 | 25.0 | 22.5 | 3.5 | 3.5 | 15.0 |
| M56 | 56000 | 63 | 250 | 15.0 | - | 24.0 | 33.3 | 10.0 | 47.0 | 30.0 | 30.0 | 4.0 | 4.0 | 17.5 |
| M80 | 80000 | 80 | 315 | 18.0 | - | 28.0 | 39.4 | 12.0 | 54.6 | 35.0 | 32.5 | 5.0 | 5.0 | 20.2 |
| M112 | 112000 | 80 | 400 | 21.0 | - | 32.0 | 45.5 | 15.0 | 60.6 | 40.0 | 40.0 | 5.0 | 6.0 | 23.0 |
| M160 | 160000 | 100 | 500 | 25.0 | - | 37.0 | 52.5 | 18.0 | 72.6 | 50.0 | 45.0 | 6.0 | 7.0 | 29.0 |
| M224 | 224000 | 125 | 630 | 30.0 | - | 43.0 | 60.6 | 21.0 | 84.0 | 60.0 | 60.0 | 6.0 | 8.0 | 35.0 |
| M315 | 315000 | 160 | 630 | 36.0 | - | 48.0 | 70.7 | 25.0 | 97.0 | 70.0 | 65.0 | 8.0 | 10.0 | 38.1 |
| M450 | 450000 | 200 | 800 | 42.0 | - | 56.0 | 82.8 | 30.0 | 114.0 | 80.0 | 80.0 | 10.0 | 12.0 | 43.4 |
| M630 | 630000 | 250 | 1000 | 50.0 | - | 66.0 | 97.0 | 36.0 | 133.0 | 100.0 | 90.0 | 14.0 | 14.0 | 54.1 |
| M900 | 900000 | 250 | 1000 | 60.0 | - | 78.0 | 113.0 | 44.0 | 153.0 | 120.0 | 120.0 | 16.0 | 16.0 | 64.7 |

Dimensions listed above will not vary with pitch size in each given breaking load. Stainless and zinc plated chains are available to order. For the details of individual pitch sizes, rollers, and spare links, see pages 24 - 29. For attachments see pages 30 - 34.

Conveyor Chain

ISO Standard – Bush

| Pitch mm | Chain No. (Bush) | kg/m |
|-------------|------------------|------|
|-------------|------------------|------|

M40 Solid Pin

| | | |
|-----|---------|------|
| 63 | M40B63 | 2.29 |
| 80 | M40B80 | 2.11 |
| 100 | M40B100 | 1.97 |
| 125 | M40B125 | 1.86 |
| 160 | M40B160 | 1.76 |
| 200 | M40B200 | 1.70 |
| 250 | M40B250 | 1.63 |

M56 Solid Pin

| | | |
|-----|---------|------|
| 63 | M56B63 | 3.50 |
| 80 | M56B80 | 3.20 |
| 100 | M56B100 | 2.90 |
| 125 | M56B125 | 2.70 |
| 160 | M56B160 | 2.50 |
| 200 | M56B200 | 2.40 |
| 250 | M56B250 | 2.30 |

MC56 Hollow Pin

| | | |
|-----|----------|------|
| 80 | MC56B80 | 3.67 |
| 100 | MC56B100 | 3.38 |
| 125 | MC56B125 | 3.15 |
| 160 | MC56B160 | 2.95 |
| 200 | MC56B200 | 2.81 |
| 250 | MC56B250 | 2.69 |

M80 Solid Pin

| | | |
|-----|---------|------|
| 80 | M80B80 | 4.51 |
| 100 | M80B100 | 4.13 |
| 125 | M80B125 | 3.83 |
| 160 | M80B160 | 3.57 |
| 200 | M80B200 | 3.38 |
| 250 | M80B250 | 3.32 |
| 315 | M80B315 | 3.20 |

M112 Solid Pin

| | | |
|-----|----------|------|
| 80 | M112B80 | 6.30 |
| 100 | M112B100 | 5.60 |
| 125 | M112B125 | 5.80 |
| 160 | M112B160 | 5.37 |
| 200 | M112B200 | 4.63 |
| 250 | M112B250 | 4.43 |
| 315 | M112B315 | 4.10 |
| 400 | M112B400 | 3.90 |

| Pitch mm | Chain No. (Bush) | kg/m |
|-------------|------------------|------|
|-------------|------------------|------|

MC112 Hollow Pin

| | | |
|-----|-----------|------|
| 100 | MC112B100 | 7.60 |
| 125 | MC112B125 | 6.96 |
| 160 | MC112B160 | 6.40 |
| 200 | MC112B200 | 6.00 |
| 250 | MC112B250 | 5.68 |
| 315 | MC112B315 | 5.42 |

M160 Solid Pin

| | | |
|-----|----------|------|
| 100 | M160B100 | 9.80 |
| 125 | M160B125 | 8.50 |
| 160 | M160B160 | 7.80 |
| 200 | M160B200 | 7.30 |
| 250 | M160B250 | 6.90 |
| 315 | M160B315 | 6.57 |
| 400 | M160B400 | 6.30 |
| 500 | M160B500 | 6.08 |

M224 Solid Pin

| | | |
|-----|----------|-------|
| 125 | M224B125 | 12.30 |
| 160 | M224B160 | 11.10 |
| 200 | M224B200 | 10.20 |
| 250 | M224B250 | 9.60 |
| 315 | M224B315 | 8.98 |
| 400 | M224B400 | 8.50 |
| 500 | M224B500 | 8.10 |
| 630 | M224B630 | 7.80 |

MC224 Hollow Pin

| | | |
|-----|-----------|-------|
| 160 | MC224B160 | 12.45 |
| 200 | MC224B200 | 10.77 |
| 250 | MC224B250 | 9.94 |
| 315 | MC224B315 | 9.30 |
| 400 | MC224B400 | 8.62 |
| 500 | MC224B500 | 8.15 |

M315 Solid Pin

| | | |
|-----|----------|-------|
| 160 | M315B160 | 19.20 |
| 200 | M315B200 | 16.70 |
| 250 | M315B250 | 15.60 |
| 315 | M315B315 | 14.70 |
| 400 | M315B400 | 13.80 |
| 500 | M315B500 | 13.20 |
| 630 | M315B630 | 12.80 |

M450 Solid Pin

| | | |
|-----|----------|-------|
| 200 | M450B200 | 23.90 |
| 250 | M450B250 | 22.12 |
| 315 | M450B315 | 20.65 |
| 400 | M450B400 | 19.45 |
| 500 | M450B500 | 18.56 |
| 630 | M450B630 | 17.83 |
| 800 | M450B800 | 17.22 |

M630 Solid Pin

| | | |
|------|-----------|-------|
| 250 | M630B250 | 35.28 |
| 315 | M630B315 | 32.53 |
| 400 | M630B400 | 30.30 |
| 500 | M630B500 | 28.64 |
| 630 | M630B630 | 27.27 |
| 800 | M630B800 | 26.15 |
| 1000 | M630B1000 | 25.32 |

M900 Solid Pin

| | | |
|------|-----------|-------|
| 250 | M900B250 | 53.20 |
| 315 | M900B315 | 48.20 |
| 400 | M900B400 | 44.50 |
| 500 | M900B500 | 41.60 |
| 630 | M900B630 | 39.20 |
| 800 | M900B800 | 37.25 |
| 1000 | M900B1000 | 35.80 |

* Add an F to the end of the part number if a product with flattened round parts (Pin and Bush) is required.

Conveyor Chain

ISO Standard – Small Roller

| Pitch mm | Chain No. (Small) | kg/m |
|-------------|-------------------|------|
|-------------|-------------------|------|

M40 Solid Pin

| | | |
|-----|---------|------|
| 63 | M40S63 | 2.59 |
| 80 | M40S80 | 2.34 |
| 100 | M40S100 | 2.15 |
| 125 | M40S125 | 2.00 |
| 160 | M40S160 | 1.87 |
| 200 | M40S200 | 1.78 |
| 250 | M40S250 | 1.70 |

M56 Solid Pin

| | | |
|-----|---------|------|
| 63 | M56S63 | 3.98 |
| 80 | M56S80 | 3.50 |
| 100 | M56S100 | 3.20 |
| 125 | M56S125 | 2.90 |
| 160 | M56S160 | 2.70 |
| 200 | M56S200 | 2.50 |
| 250 | M56S250 | 2.40 |

MC56 Hollow Pin

| | | |
|-----|----------|------|
| 80 | MC56S80 | 4.65 |
| 100 | MC56S100 | 4.16 |
| 125 | MC56S125 | 3.77 |
| 160 | MC56S160 | 3.44 |
| 200 | MC56S200 | 3.20 |
| 250 | MC56S250 | 3.00 |

M80 Solid Pin

| | | |
|-----|---------|------|
| 80 | M80S80 | 5.45 |
| 100 | M80S100 | 4.90 |
| 125 | M80S125 | 4.46 |
| 160 | M80S160 | 4.07 |
| 200 | M80S200 | 3.80 |
| 250 | M80S250 | 3.58 |
| 315 | M80S315 | 3.40 |

M112 Solid Pin

| | | |
|-----|----------|------|
| 80 | M112S80 | 7.20 |
| 100 | M112S100 | 6.00 |
| 125 | M112S125 | 5.80 |
| 160 | M112S160 | 5.37 |
| 200 | M112S200 | 5.00 |
| 250 | M112S250 | 4.75 |
| 315 | M112S315 | 4.60 |
| 400 | M112S400 | 4.45 |

* Add an F to the end of the part number if a product with flattened round parts (Pin and Bush) is required.

| Pitch mm | Chain No. (Small) | kg/m |
|-------------|-------------------|------|
|-------------|-------------------|------|

MC112 Hollow Pin

| | | |
|-----|-----------|------|
| 100 | MC112S100 | 9.34 |
| 125 | MC112S125 | 8.35 |
| 160 | MC112S160 | 7.45 |
| 200 | MC112S200 | 6.87 |
| 250 | MC112S250 | 6.38 |
| 315 | MC112S315 | 5.97 |

M160 Solid Pin

| | | |
|-----|----------|-------|
| 100 | M160S100 | 11.20 |
| 125 | M160S125 | 10.00 |
| 160 | M160S160 | 9.00 |
| 200 | M160S200 | 8.35 |
| 250 | M160S250 | 7.78 |
| 315 | M160S315 | 7.31 |
| 400 | M160S400 | 6.92 |
| 500 | M160S500 | 6.64 |

M224 Solid Pin

| | | |
|-----|----------|-------|
| 125 | M224S125 | 14.05 |
| 160 | M224S160 | 12.40 |
| 200 | M224S200 | 11.28 |
| 250 | M224S250 | 10.40 |
| 315 | M224S315 | 9.60 |
| 400 | M224S400 | 8.90 |
| 500 | M224S500 | 8.50 |
| 630 | M224S630 | 8.00 |

MC224 Hollow Pin

| | | |
|-----|-----------|-------|
| 160 | MC224S160 | 15.51 |
| 200 | MC224S200 | 13.22 |
| 250 | MC224S250 | 11.90 |
| 315 | MC224S315 | 10.86 |
| 400 | MC224S400 | 9.65 |
| 500 | MC224S500 | 9.13 |

M315 Solid Pin

| | | |
|-----|----------|-------|
| 160 | M315S160 | 21.16 |
| 200 | M315S200 | 18.40 |
| 250 | M315S250 | 16.90 |
| 315 | M315S315 | 15.70 |
| 400 | M315S400 | 14.70 |
| 500 | M315S500 | 13.90 |
| 630 | M315S630 | 13.30 |

M450 Solid Pin

| | | |
|-----|----------|-------|
| 200 | M450S200 | 26.90 |
| 250 | M450S250 | 24.52 |
| 315 | M450S315 | 22.55 |
| 400 | M450S400 | 20.95 |
| 500 | M450S500 | 19.76 |
| 630 | M450S630 | 18.78 |
| 800 | M450S800 | 17.97 |

M630 Solid Pin

| | | |
|------|-----------|-------|
| 250 | M630S250 | 38.80 |
| 315 | M630S315 | 25.32 |
| 400 | M630S400 | 32.50 |
| 500 | M630S500 | 30.40 |
| 630 | M630S630 | 28.66 |
| 800 | M630S800 | 27.25 |
| 1000 | M630S1000 | 26.20 |

M900 Solid Pin

| | | |
|------|-----------|-------|
| 250 | M900S250 | 55.80 |
| 315 | M900S315 | 50.48 |
| 400 | M900S400 | 46.12 |
| 500 | M900S500 | 42.90 |
| 630 | M900S630 | 40.24 |
| 800 | M900S800 | 38.00 |
| 1000 | M900S1000 | 36.45 |

Conveyor Chain

ISO Standard – Flanged Roller

| Pitch mm | Chain No. (Flanged) | kg/m |
|-------------|---------------------|------|
|-------------|---------------------|------|

M40 Solid Pin

| | | |
|-----|---------|------|
| 63 | M40F63 | 4.57 |
| 80 | M40F80 | 3.90 |
| 100 | M40F100 | 3.40 |
| 125 | M40F125 | 3.00 |
| 160 | M40F160 | 2.65 |
| 200 | M40F200 | 2.40 |
| 250 | M40F250 | 2.20 |

M56 Solid Pin

| | | |
|-----|---------|------|
| 63 | - | - |
| 80 | M56F80 | 6.20 |
| 100 | M56F100 | 4.80 |
| 125 | M56F125 | 4.22 |
| 160 | M56F160 | 3.95 |
| 200 | M56F200 | 3.60 |
| 250 | M56F250 | 3.22 |

MC56 Hollow Pin

| | | |
|-----|----------|------|
| 80 | MC56F80 | 7.54 |
| 100 | MC56F100 | 6.48 |
| 125 | MC56F125 | 5.63 |
| 160 | MC56F160 | 4.89 |
| 200 | MC56F200 | 4.36 |
| 250 | MC56F250 | 3.93 |

M80 Solid Pin

| | | |
|-----|---------|------|
| 80 | M80F80 | 9.88 |
| 100 | M80F100 | 8.45 |
| 125 | M80F125 | 7.30 |
| 160 | M80F160 | 6.30 |
| 200 | M80F200 | 5.57 |
| 250 | M80F250 | 5.00 |
| 315 | M80F315 | 4.52 |

M112 Solid Pin

| | | |
|-----|----------|-------|
| 80 | - | - |
| 100 | M112F100 | 12.25 |
| 125 | M112F125 | 10.58 |
| 160 | M112F160 | 9.05 |
| 200 | M112F200 | 7.95 |
| 250 | M112F250 | 7.10 |
| 315 | M112F315 | 6.40 |
| 400 | M112F400 | 5.85 |

| Pitch mm | Chain No. (Flanged) | kg/m |
|-------------|---------------------|------|
|-------------|---------------------|------|

MC112 Hollow Pin

| | | |
|-----|-----------|-------|
| 100 | MC112F100 | 16.20 |
| 125 | MC112F125 | 13.84 |
| 160 | MC112F160 | 11.78 |
| 200 | MC112F200 | 10.30 |
| 250 | MC112F250 | 9.12 |
| 315 | MC112F315 | 8.15 |

M160 Solid Pin

| | | |
|-----|----------|-------|
| 100 | - | - |
| 125 | M160F125 | 16.50 |
| 160 | M160F160 | 14.08 |
| 200 | M160F200 | 12.30 |
| 250 | M160F250 | 10.90 |
| 315 | M160F315 | 9.74 |
| 400 | M160F400 | 8.80 |
| 500 | M160F500 | 8.10 |

M224 Solid Pin

| | | |
|-----|----------|-------|
| 125 | - | - |
| 160 | M224F160 | 22.30 |
| 200 | M224F200 | 19.10 |
| 250 | M224F250 | 16.65 |
| 315 | M224F315 | 14.70 |
| 400 | M224F400 | 13.00 |
| 500 | M224F500 | 11.70 |
| 630 | M224F630 | 11.10 |

MC224 Hollow Pin

| | | |
|-----|-----------|-------|
| 160 | MC224F160 | 22.87 |
| 200 | MC224F200 | 19.84 |
| 250 | MC224F250 | 17.18 |
| 315 | MC224F315 | 14.85 |
| 400 | MC224F400 | 13.10 |
| 500 | MC224F500 | 11.70 |

M315 Solid Pin

| | | |
|-----|----------|-------|
| 160 | - | - |
| 200 | M315F200 | 31.00 |
| 250 | M315F250 | 27.00 |
| 315 | M315F315 | 23.60 |
| 400 | M315F400 | 21.00 |
| 500 | M315F500 | 19.00 |
| 630 | M315F630 | 17.20 |

M450 Solid Pin

| | | |
|-----|----------|-------|
| 200 | M450F200 | 47.56 |
| 250 | M450F250 | 41.05 |
| 315 | M450F315 | 35.67 |
| 400 | M450F400 | 31.28 |
| 500 | M450F500 | 28.02 |
| 630 | M450F630 | 25.34 |
| 800 | M450F800 | 25.13 |

M630 Solid Pin

| | | |
|------|-----------|-------|
| 250 | M630F250 | 71.28 |
| 315 | M630F315 | 61.10 |
| 400 | M630F400 | 52.75 |
| 500 | M630F500 | 46.64 |
| 630 | M630F630 | 41.55 |
| 800 | M630F800 | 37.40 |
| 1000 | M630F1000 | 34.32 |

M900 Solid Pin

| | | |
|------|-----------|-------|
| 250 | - | - |
| 315 | M900F315 | 88.41 |
| 400 | M900F400 | 76.00 |
| 500 | M900F500 | 66.80 |
| 630 | M900F630 | 59.20 |
| 800 | M900F800 | 53.00 |
| 1000 | M900F1000 | 48.40 |

* Add an F to the end of the part number if a product with flattened round parts (Pin and Bush) is required.

Conveyor Chain

ISO Standard – Plain Roller

| Pitch mm | Chain No. (Plain) | kg/m |
|-------------|-------------------|------|
|-------------|-------------------|------|

M40 Solid Pin

| | | |
|-----|---------|------|
| 63 | M40P63 | 4.33 |
| 80 | M40P80 | 3.70 |
| 100 | M40P100 | 3.25 |
| 125 | M40P125 | 2.88 |
| 160 | M40P160 | 2.56 |
| 200 | M40P200 | 2.32 |
| 250 | M40P250 | 2.14 |

M56 Solid Pin

| | | |
|-----|---------|------|
| 80 | M56P80 | 5.53 |
| 100 | M56P100 | 4.80 |
| 125 | M56P125 | 4.22 |
| 160 | M56P160 | 3.70 |
| 200 | M56P200 | 3.35 |
| 250 | M56P250 | 3.06 |

MC56 Hollow Pin

| | | |
|-----|----------|------|
| 80 | MC56P80 | 6.68 |
| 100 | MC56P100 | 5.78 |
| 125 | MC56P125 | - |
| 160 | MC56P160 | 4.43 |
| 200 | MC56P200 | 3.98 |
| 250 | MC56P250 | 3.62 |

M80 Solid Pin

| | | |
|-----|---------|------|
| 80 | M80P80 | 9.26 |
| 100 | M80P100 | 7.95 |
| 125 | M80P125 | 6.90 |
| 160 | M80P160 | 5.98 |
| 200 | M80P200 | 5.32 |
| 250 | M80P250 | 4.80 |
| 315 | M80P315 | 4.36 |

M112 Solid Pin

| | | |
|-----|----------|-------|
| 100 | M112P100 | 11.30 |
| 125 | M112P125 | 9.80 |
| 160 | M112P160 | 8.48 |
| 200 | M112P200 | 7.55 |
| 250 | M112P250 | 6.80 |
| 315 | M112P315 | 6.18 |
| 400 | M112P400 | 5.67 |

* Add an F to the end of the part number if a product with flattened round parts (Pin and Bush) is required.

| Pitch mm | Chain No. (Plain) | kg/m |
|-------------|-------------------|------|
|-------------|-------------------|------|

MC112 Hollow Pin

| | | |
|-----|-----------|-------|
| 100 | MC112P100 | 14.90 |
| 125 | MC112P125 | 12.80 |
| 160 | MC112P160 | 10.96 |
| 200 | MC112P200 | 9.65 |
| 250 | MC112P250 | 8.60 |
| 315 | MC112P315 | 7.73 |

M160 Solid Pin

| | | |
|-----|----------|-------|
| 125 | M160P125 | 15.46 |
| 160 | M160P160 | 13.24 |
| 200 | M160P200 | 11.65 |
| 250 | M160P250 | 10.38 |
| 315 | M160P315 | 9.33 |
| 400 | M160P400 | 8.48 |
| 500 | M160P500 | 7.83 |

M224 Solid Pin

| | | |
|-----|----------|-------|
| 160 | M224P160 | 20.00 |
| 200 | M224P200 | 17.50 |
| 250 | M224P250 | 15.50 |
| 315 | M224P315 | 13.84 |
| 400 | M224P400 | 12.50 |
| 500 | M224P500 | 11.50 |
| 630 | M224P630 | 10.67 |

MC224 Hollow Pin

| | | |
|-----|-----------|-------|
| 160 | MC224P160 | 21.75 |
| 200 | MC224P200 | 18.65 |
| 250 | MC224P250 | 16.17 |
| 315 | MC224P315 | 14.12 |
| 400 | MC224P400 | 12.45 |
| 500 | MC224P500 | 11.21 |

M315 Solid Pin

| | | |
|-----|----------|-------|
| 200 | M315P200 | 29.00 |
| 250 | M315P250 | 25.40 |
| 315 | M315P315 | 22.43 |
| 400 | M315P400 | 20.00 |
| 500 | M315P500 | 18.20 |
| 630 | M315P630 | 16.70 |

M450 Solid Pin

| | | |
|-----|----------|-------|
| 200 | M450P200 | 44.50 |
| 250 | M450P250 | 38.60 |
| 315 | M450P315 | 33.73 |
| 400 | M450P400 | 29.75 |
| 500 | M450P500 | 26.80 |
| 630 | M450P630 | 24.37 |
| 800 | M450P800 | 22.37 |

M630 Solid Pin

| | | |
|------|-----------|-------|
| 250 | M630P250 | 60.40 |
| 315 | M630P315 | 52.47 |
| 400 | M630P400 | 46.00 |
| 500 | M630P500 | 41.20 |
| 630 | M630P630 | 37.24 |
| 800 | M630P800 | 34.00 |
| 1000 | M630P1000 | 31.60 |

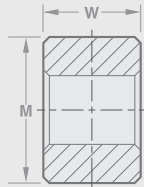
M900 Solid Pin

| | | |
|------|-----------|-------|
| 315 | M900P315 | 83.33 |
| 400 | M900P400 | 72.00 |
| 500 | M900P500 | 63.60 |
| 630 | M900P630 | 56.67 |
| 800 | M900P800 | 51.00 |
| 1000 | M900P1000 | 46.80 |

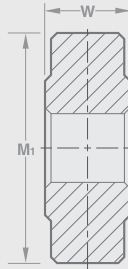
Conveyor Chain

ISO Rollers

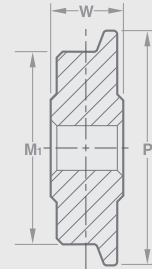
Section 1



SMALL ROLLER



PLAIN ROLLER



FLANGED ROLLER

| Chain Ref | Technical Details (mm) | | | | | | | |
|-----------|-------------------------|-------------------|--------------|-------------------|--------------|---------------------|--------------|--------------|
| Chain No | Breaking Load (Newtons) | Small Tread Diam. | Roller Width | Plain Tread Diam. | Roller Width | Flanged Tread Diam. | Flange Diam. | Roller Width |

Hollow Bearing Pin Rollers

| | | M | W | M1 | W | M1 | P | W |
|-------|--------|------|------|-------|------|-------|-------|------|
| MC56 | 56000 | 30.0 | 23.0 | 50.0 | 23.0 | 50.0 | 60.0 | 23.0 |
| MC112 | 112000 | 42.0 | 31.0 | 70.0 | 31.0 | 70.0 | 85.0 | 31.0 |
| MC224 | 224000 | 60.0 | 42.0 | 100.0 | 42.0 | 100.0 | 120.0 | 42.0 |

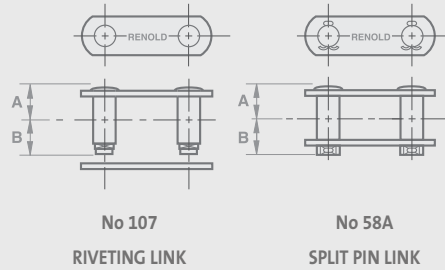
Solid Bearing Pin Rollers

| | | M | W | M1 | W | M1 | P | W |
|------|--------|------|------|-------|------|-------|-------|------|
| M40 | 40000 | 18.0 | 19.0 | 36.0 | 19.0 | 36.0 | 42.0 | 19.0 |
| M56 | 56000 | 21.0 | 23.0 | 42.0 | 23.0 | 42.0 | 50.0 | 23.0 |
| M80 | 80000 | 25.0 | 27.0 | 50.0 | 27.0 | 50.0 | 60.0 | 27.0 |
| M112 | 112000 | 30.0 | 31.0 | 60.0 | 31.0 | 60.0 | 70.0 | 31.0 |
| M160 | 160000 | 36.0 | 36.0 | 70.0 | 36.0 | 70.0 | 85.0 | 36.0 |
| M224 | 224000 | 42.0 | 42.0 | 85.0 | 42.0 | 85.0 | 100.0 | 42.0 |
| M315 | 315000 | 50.0 | 47.0 | 100.0 | 47.0 | 100.0 | 120.0 | 47.0 |
| M450 | 450000 | 60.0 | 55.0 | 120.0 | 55.0 | 120.0 | 140.0 | 55.0 |
| M630 | 630000 | 70.0 | 65.0 | 140.0 | 65.0 | 140.0 | 170.0 | 65.0 |
| M900 | 900000 | 85.0 | 76.0 | 170.0 | 76.0 | 170.0 | 210.0 | 76.0 |

For Roller Selection procedure, consult Conveyor Chain Designer Guide.

Conveyor Chain

ISO Connecting Links

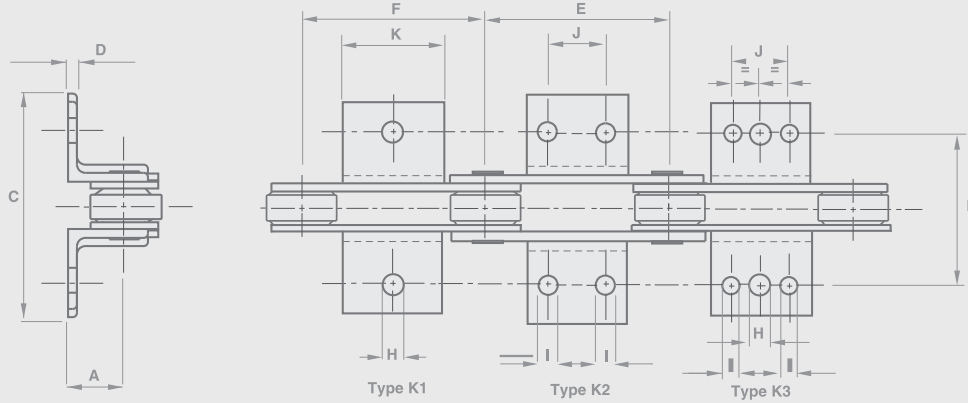


| Chain Ref | Technical Details (mm) | | | | |
|--|------------------------|-------------------------|-------------------------|--------------------------|-------------------------|
| Chain No | Breaking Load Newtons | No 107 Chain Plain Side | Centre to Fastener Side | No 58A# Chain Chain Side | Centre to Fastener Side |
| Hollow Bearing Pin Rollers - connecting links | | | | | |
| | | A | B | A | B |
| MC56 | 56000 | 22.9 | 22.9 | 22.9 | 29.1 |
| MC112 | 112000 | 31.2 | 31.2 | 31.2 | 38.7 |
| MC224 | 224000 | 41.2 | 41.2 | 41.2 | 50.9 |
| Solid Bearing Pin Rollers - connecting links | | | | | |
| | | A | B | A | B |
| M40 | 40000 | 20.2 | 20.2 | 20.2 | 24.2 |
| M56 | 56000 | 23.1 | 23.1 | 23.1 | 29.2 |
| M80 | 80000 | 27.3 | 27.3 | 27.3 | 33.4 |
| M112 | 112000 | 31.4 | 31.4 | 31.4 | 38.9 |
| M160 | 160000 | 36.6 | 36.6 | 36.6 | 44.6 |
| M224 | 224000 | 41.7 | 41.7 | 41.7 | 51.4 |
| M315 | 315000 | 48.4 | 48.4 | 48.4 | 58.6 |
| M450 | 450000 | 56.6 | 56.6 | 56.6 | 70.0 |
| M630 | 630000 | 65.9 | 65.9 | 65.9 | 79.1 |
| M900 | 900000 | 76.1 | 76.1 | 76.1 | 93.5 |

Conveyor Chain - Solid Pin Type

ISO K Attachments

Section 1



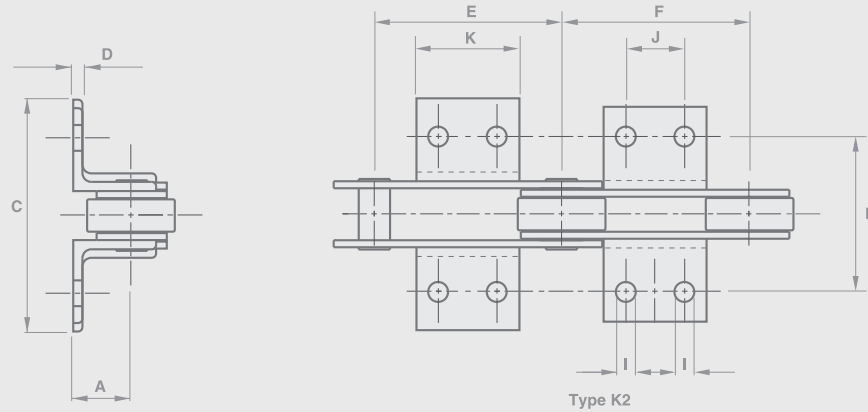
| Chain Ref | Technical Details (mm) | | | | | | | | | | | | |
|-----------|-------------------------|-----------------|------------------|--|----------------------------------|-----------------|--------------------------------|--------------------------------|-------------------|-------------------|------------|-----------------|---------------|
| Chain No | Breaking Load (Newtons) | Platform Height | Transverse Pitch | Width Over Attachment Inner/Outer MAX | Attachment Thickness Inner/Outer | Attachment Type | Attachment Minimum Outer Pitch | Attachment Minimum Inner Pitch | Centre Hole Diam. | Outer Holes Diam. | Hole Pitch | Platform Length | Mass (kg/Att) |

Solid Bearing Pin

| | | A | B | C | D | | E | F | H | I | J | K | |
|------|--------|-----|-----|-----------|------|----|-----|-----|------|------|-----|-----|------|
| M40 | 40000 | 25 | 70 | 101 / 110 | 3.5 | K1 | 63 | 63 | 9.0 | - | - | 20 | 0.04 |
| | | | | | | K2 | 80 | 80 | - | 9.0 | 20 | 40 | 0.07 |
| | | | | | | K3 | 100 | 100 | 9.0 | 9.0 | 40 | 60 | 0.11 |
| | | | | | | K3 | 125 | 125 | 9.0 | 9.0 | 65 | 85 | 0.15 |
| M56 | 56000 | 30 | 88 | 116 / 126 | 5.0 | K1 | 63 | 63 | 11.0 | - | - | 25 | 0.04 |
| | | | | | | K2 | 100 | 100 | - | 11.0 | 25 | 50 | 0.07 |
| | | | | | | K3 | 125 | 125 | 11.0 | 11.0 | 50 | 75 | 0.11 |
| | | | | | | K3 | 160 | 160 | 11.0 | 11.0 | 85 | 110 | 0.15 |
| M80 | 80000 | 35 | 96 | 132 / 135 | 5.0 | K1 | 80 | 80 | 11.0 | - | - | 25 | 0.10 |
| | | | | | | K3 | 125 | 125 | 11.0 | 11.0 | 50 | 75 | 0.25 |
| | | | | | | K3 | 160 | 160 | 11.0 | 11.0 | 85 | 110 | 0.37 |
| | | | | | | K3 | 200 | 200 | 11.0 | 11.0 | 125 | 150 | 0.50 |
| M112 | 112000 | 40 | 110 | 150 / 164 | 6.0 | K1 | 80 | 80 | 14.0 | - | - | 30 | 0.20 |
| | | | | | | K2 | 125 | 125 | - | 14.0 | 35 | 65 | 0.35 |
| | | | | | | K3 | 160 | 160 | 14.0 | 14.0 | 65 | 95 | 0.50 |
| | | | | | | K3 | 200 | 200 | 14.0 | 14.0 | 100 | 130 | 0.75 |
| M160 | 160000 | 45 | 124 | 178 / 193 | 6.0 | K1 | 100 | 100 | 14.0 | - | - | 30 | 0.20 |
| | | | | | | K2 | 160 | 160 | - | 14.0 | 50 | 80 | 0.45 |
| | | | | | | K3 | 200 | 200 | 14.0 | 14.0 | 85 | 115 | 0.65 |
| | | | | | | K3 | 250 | 250 | 14.0 | 14.0 | 145 | 175 | 0.95 |
| M224 | 224000 | 55 | 140 | 206 / 224 | 8.0 | K1 | 125 | 125 | 18.0 | - | - | 40 | 0.30 |
| | | | | | | K2 | 200 | 200 | - | 18.0 | 65 | 105 | 0.80 |
| | | | | | | K3 | 250 | 250 | 18.0 | 18.0 | 125 | 165 | 1.20 |
| | | | | | | K3 | 315 | 315 | 18.0 | 18.0 | 190 | 230 | 1.65 |
| M315 | 315000 | 65 | 160 | 216 / 240 | 10.0 | K1 | 160 | 160 | 18.0 | - | - | 35 | 0.50 |
| | | | | | | K2 | 200 | 200 | - | 18.0 | 50 | 85 | 0.85 |
| | | | | | | K2 | 250 | 250 | - | 18.0 | 100 | 135 | 1.40 |
| | | | | | | K2 | 315 | 315 | - | 18.0 | 155 | 190 | 1.85 |
| M450 | 450000 | 75 | 180 | 228 / 255 | 10.0 | K1 | 200 | 200 | 18.0 | - | - | 40 | 0.60 |
| | | | | | | K2 | 250 | 250 | - | 18.0 | 85 | 125 | 1.40 |
| | | | | | | K2 | 315 | 315 | - | 18.0 | 155 | 195 | 2.40 |
| | | | | | | K2 | 400 | 400 | - | 18.0 | 240 | 280 | 3.50 |
| M630 | 630000 | 90 | 230 | 302 / 333 | 12.0 | K1 | 250 | 250 | 24.0 | - | - | 50 | 1.30 |
| | | | | | | K2 | 315 | 315 | - | 24.0 | 100 | 150 | 3.70 |
| | | | | | | K2 | 400 | 400 | - | 24.0 | 190 | 240 | 5.60 |
| | | | | | | K2 | 500 | 500 | - | 24.0 | 300 | 350 | 7.50 |
| M900 | 900000 | 110 | 280 | 358 / 393 | 15.0 | K1 | 250 | 250 | 30.0 | - | - | 60 | 1.70 |
| | | | | | | K2 | 315 | 315 | - | 30.0 | 65 | 125 | 4.80 |
| | | | | | | K2 | 400 | 400 | - | 30.0 | 155 | 215 | 7.50 |
| | | | | | | K2 | 500 | 500 | - | 30.0 | 240 | 300 | 9.80 |

Conveyor Chain - Hollow Pin Type

ISO K Attachments (Welded)



| Chain Ref | Technical Details (mm) | | | | | | | | | | | |
|-----------|----------------------------|-----------------|------------------|---|-------------------------------------|-----------------|-----------------------------------|-----------------------------------|----------------------|------------|-----------------|------------------|
| Chain No | Breaking Load (Newtons) | Platform Height | Transverse Pitch | Width Over Attachment Inner/Outer MAX | Attachment Thickness Inner/Outer | Attachment Type | Attachment Minimum Outer Pitch | Attachment Minimum Inner Pitch | Outer Holes Diam. | Hole Pitch | Platform Length | Mass (kg/Att) |

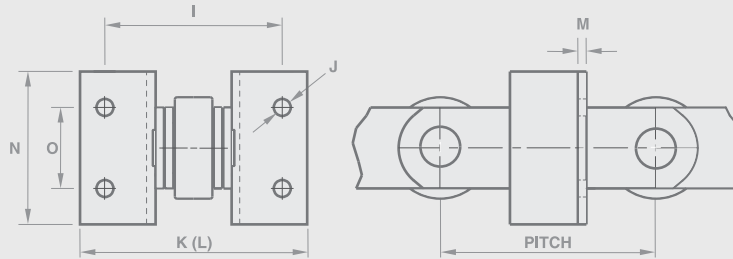
Hollow Bearing Pin

| | | A | B | C (max) | D | | E | F | I | J | K | |
|-------|--------|----|-----|-----------|-----|----|-----|-----|----|-----|-----|------|
| MC56 | 56000 | 35 | 88 | 126 / 137 | 5.0 | K2 | 125 | 125 | 11 | 50 | 75 | 0.25 |
| | | | | | | K2 | 160 | 160 | 11 | 85 | 110 | 0.36 |
| | | | | | | K2 | 200 | 200 | 11 | 125 | 150 | 0.50 |
| MC112 | 112000 | 45 | 110 | 171 / 186 | 6.0 | K2 | 160 | 160 | 14 | 50 | 80 | 0.45 |
| | | | | | | K2 | 200 | 200 | 14 | 85 | 115 | 0.60 |
| | | | | | | K2 | 250 | 250 | 14 | 145 | 175 | 0.90 |
| MC224 | 224000 | 65 | 140 | 206 / 220 | 8.0 | K2 | 200 | 200 | 18 | 50 | 85 | 0.85 |
| | | | | | | K2 | 250 | 250 | 18 | 100 | 135 | 1.35 |
| | | | | | | K2 | 315 | 315 | 18 | 155 | 190 | 1.90 |

Conveyor Chain

ISO F Attachments (Welded)

Section 1



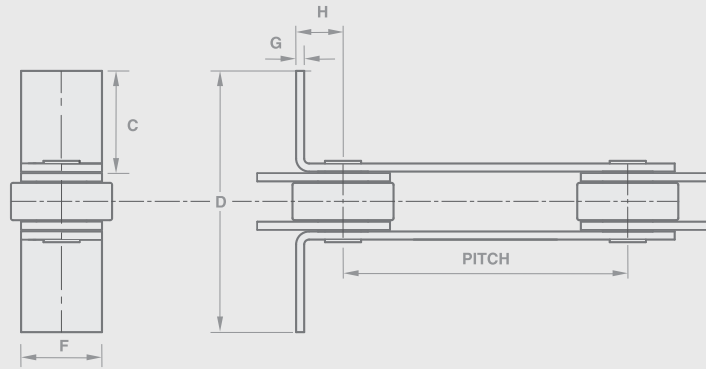
| Chain Ref | Technical Details (mm) | | | | | | | | | | |
|-----------|----------------------------|---------------------------|---------------------------|------------------|----------------------|----------------------------|----------------------------|----------------------|------------------------|---------------------|------------------|
| Chain No | Breaking Load (Newtons) | Minimum Pitch Inner Plate | Minimum Pitch Outer Plate | Transverse Pitch | Attachment Hole Size | Width Over Att Outer Plate | Width Over Att Inner Plate | Attachment Thickness | Attachment Face Height | Pitch of Attachment | Mass Holes Kg |

ISO F Attachments (Welded)

| | | | | I | J | K | L | M | N | O | |
|-------|--------|-------|-------|-------|------|-------|-------|------|-------|-------|-------|
| M40 | 40000 | 80.0 | 80.0 | 70.0 | 9.0 | 110.0 | 101.0 | 3.5 | 40.0 | 20.0 | 0.085 |
| M56 | 56000 | 100.0 | 100.0 | 88.0 | 11.0 | 126.0 | 116.0 | 5.0 | 50.0 | 25.0 | 0.204 |
| MC56 | 56000 | 100.0 | 100.0 | 88.0 | 11.0 | 137.0 | 126.0 | 5.0 | 75.0 | 50.0 | 0.283 |
| M80 | 80000 | 100.0 | 100.0 | 96.0 | 11.0 | 135.0 | 132.0 | 5.0 | 75.0 | 50.0 | 0.283 |
| M112 | 112000 | 125.0 | 125.0 | 110.0 | 14.0 | 164.0 | 150.0 | 6.0 | 65.0 | 35.0 | 0.324 |
| MC112 | 112000 | 125.0 | 125.0 | 110.0 | 14.0 | 186.0 | 171.0 | 6.0 | 80.0 | 50.0 | 0.629 |
| M160 | 160000 | 125.0 | 125.0 | 124.0 | 14.0 | 193.0 | 178.0 | 6.0 | 80.0 | 50.0 | 8.629 |
| M224 | 224000 | 160.0 | 160.0 | 140.0 | 18.0 | 224.0 | 206.0 | 8.0 | 105.0 | 65.0 | 1.078 |
| MC224 | 244000 | 200.0 | 200.0 | 140.0 | 18.0 | 220.0 | 206.0 | 8.0 | 85.0 | 50.0 | 0.873 |
| M315 | 315000 | 200.0 | 200.0 | 160.0 | 18.0 | 240.0 | 216.0 | 10.0 | 85.0 | 50.0 | 0.873 |
| M450 | 450000 | 200.0 | 200.0 | 180.0 | 18.0 | 255.0 | 228.0 | 10.0 | 125.0 | 85.0 | 1.283 |
| M630 | 630000 | 250.0 | 250.0 | 230.0 | 24.0 | 333.0 | 302.0 | 12.0 | 150.0 | 100.0 | 2.906 |
| M900 | 900000 | 315.0 | 315.0 | 280.0 | 30.0 | 393.0 | 358.0 | 15.0 | 125.0 | 65.0 | 3.617 |

Conveyor Chain

ISO L Attachments (Integral)



| Chain Ref | Technical Details (mm) | | | | | | | | |
|-----------|-----------------------------------|------|------------------------|-----------------------------|----------------------------|----------------------|--|------------|-----------|
| Chain No | Breaking Load (Newtons) lbf | Type | Attachment Face Length | Width Over Attachment Outer | Total Height of Attachment | Attachment Thickness | Distance of Pitch point to Attachment Face | Box Width* | Mass (kg) |

ISO L Attachments (Integral)

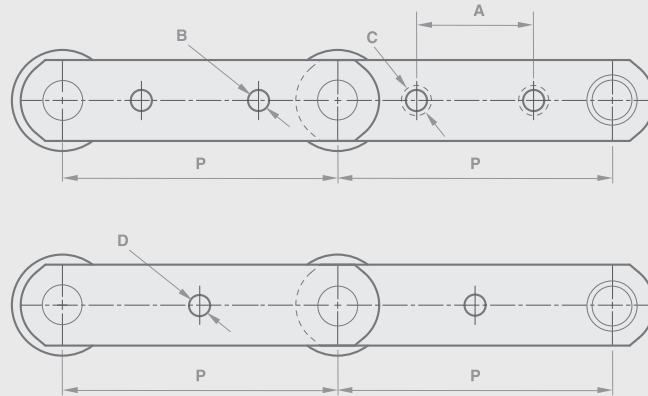
| | | | C | D | F | G | H | | |
|------|--------|----|--------|-------|-------|------|------|-------|-------|
| M40 | 40000 | LO | 75.85 | 180.0 | 25.0 | 3.5 | 30.0 | 200.0 | 0.054 |
| M56 | 56000 | LO | 98.35 | 230.0 | 30.0 | 4.0 | 30.0 | 250.0 | 0.089 |
| M80 | 80000 | LO | 95.30 | 230.0 | 35.0 | 5.0 | 30.0 | 250.0 | 0.124 |
| M112 | 112000 | LO | 104.75 | 255.0 | 40.0 | 6.0 | 30.0 | 275.0 | 0.157 |
| M160 | 160000 | LO | 113.75 | 280.0 | 50.0 | 7.0 | 35.0 | 300.0 | 0.254 |
| M224 | 224000 | LO | 134.70 | 330.0 | 60.0 | 8.0 | 40.0 | 350.0 | 0.364 |
| M315 | 315000 | LO | 154.65 | 380.0 | 70.0 | 10.0 | 50.0 | 400.0 | 0.645 |
| M450 | 450000 | LO | 173.60 | 430.0 | 80.0 | 12.0 | 60.0 | 450.0 | 1.027 |
| M630 | 630000 | LO | 166.50 | 430.0 | 100.0 | 14.0 | 70.0 | 450.0 | 1.676 |

* Alternative width available. Please enquire.

Conveyor Chain - Holes in Link Plates

ISO Attachments

Section 1



Technical Details Two Holes

| Chain Ref | Technical Details (mm) | | |
|-----------|-------------------------|------------------|---------------------|
| Chain No. | Breaking Load (Newtons) | Pitch Bush Chain | Pitch Hole Diameter |
| | | MIN | |

| Technical Details (mm) | | |
|------------------------|-----------------|---------------|
| Pitch* | Attachment Hole | Hole Diameter |
| MIN | | |

One hole

| | | P | D |
|-------|--------|-------|------|
| M40 | 40000 | 100.0 | 11.0 |
| M56 | 56000 | 100.0 | 11.0 |
| MC56 | 56000 | 100.0 | 11.0 |
| M80 | 80000 | 100.0 | 15.0 |
| M112 | 112000 | 125.0 | 15.0 |
| MC112 | 112000 | 125.0 | 15.0 |
| M160 | 160000 | 160.0 | 21.0 |
| M224 | 224000 | 160.0 | 21.0 |
| MC224 | 224000 | 160.0 | 21.0 |
| M315 | 315000 | 200.0 | 25.0 |
| M450 | 450000 | 200.0 | 30.0 |
| M630 | 630000 | 250.0 | 36.0 |
| M900 | 900000 | 315.0 | 45.0 |

Two holes

| P | A | B |
|-------|-------|------|
| 160.0 | 63.0 | 9.0 |
| 160.0 | 63.0 | 11.0 |
| 160.0 | 80.0 | 11.0 |
| 200.0 | 80.0 | 11.0 |
| 200.0 | 80.0 | 14.0 |
| 200.0 | 100.0 | 14.0 |
| 250.0 | 100.0 | 14.0 |
| 250.0 | 100.0 | 18.0 |
| 315.0 | 125.0 | 18.0 |
| 315.0 | 125.0 | 18.0 |
| 315.0 | 125.0 | 18.0 |
| 400.0 | 160.0 | 24.0 |
| 500.0 | 200.0 | 30.0 |

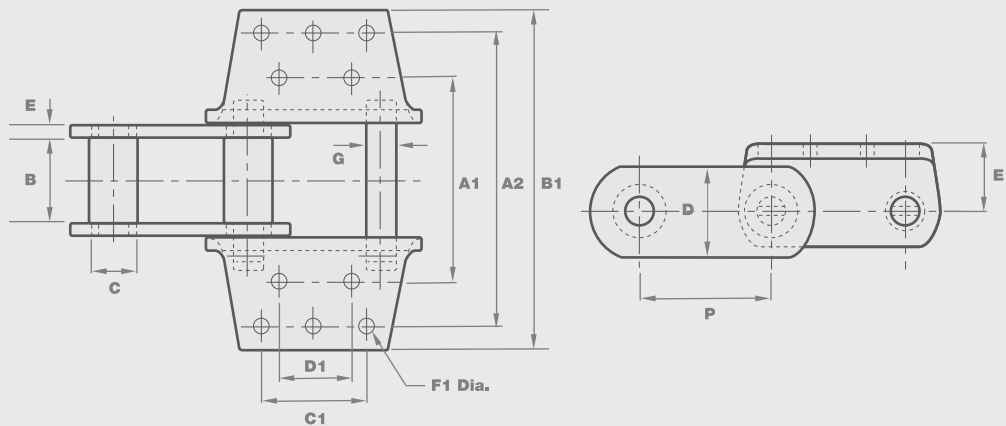
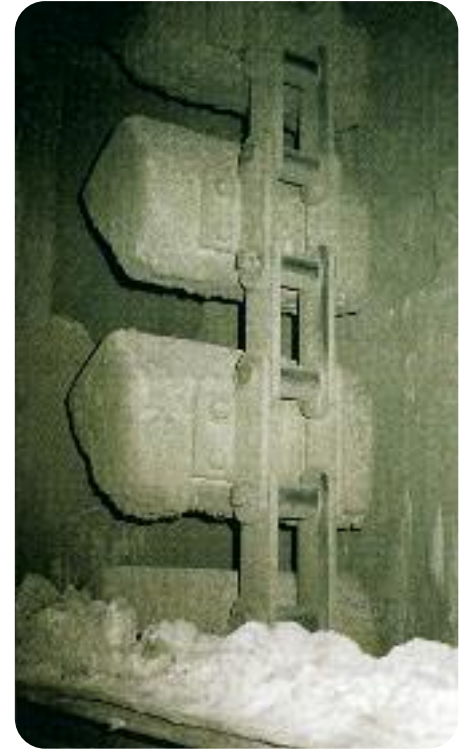
* Based on small plain roller - will be increased pro rata for other types.

Elevator Chain

Renold has been used successfully in elevator applications for many years and it has been found by experience that for most applications, chains that have been derived from the standard range of products are more than adequate. The inclusion of fillet welded K attachments to provide extra attachment strength and smaller than standard gearing rollers to reduce weight, are all that is required to produce a hard wearing and long lasting chain.

Where chains are to be used in abrasive and/or corrosive conditions then special heavy duty chains can be produced, a few examples of which are shown on the following pages.

Chain is fitted with fillet welded K attachments for the dynamic discharge (centrifugal) elevator and G attachments for positive discharge elevator. The details of the design of each of these types of elevator can be found in the Designer Guide section. It is sometimes necessary to modify the design, materials, or heat treatment of chain when certain aggressive materials are handled, and in these cases we suggest Renold Applications Engineers are consulted before a chain is specified.



| Chain | Technical Details (mm) | | | | | | | | | | | | | Type of Attachment | Ultimate Strength (Newtons) |
|----------|------------------------|--------------|-----------------|--------------|-------------|----------|--|--|--|--|--|--|--|--------------------|-----------------------------|
| Chain No | Pitch | Inside Width | Plate Thickness | Plate Height | Roller Diam | Pin Diam | | | | | | | | No. of holes | |

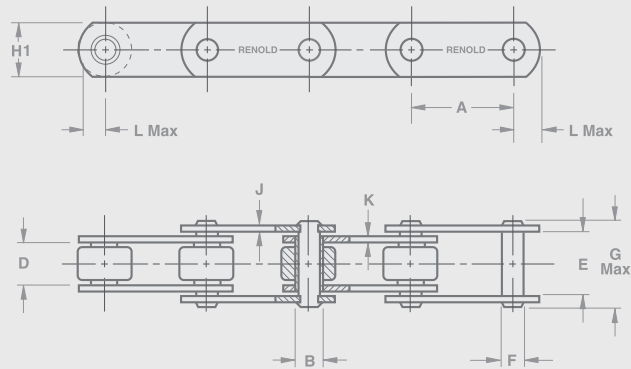
Bucket Elevator Chain

| | P | B | E | D | C | G | A1 | A2 | B1 | C1 | D1 | E1 | F1 | | |
|---------|-----|---------|--------|---------|--------|--------|---------|---------|---------|---------|--------|--------|--------|---------------------|--------|
| 6956-PB | 6.0 | 76.200 | 12.700 | 76.200 | 44.450 | 25.400 | - | 184.150 | 242.888 | - | - | 47.625 | 17.463 | K-24-4 holes | 71174 |
| 6867-R | 6.0 | 76.200 | 12.700 | 82.550 | 44.450 | 25.400 | 177.800 | 304.801 | 355.601 | 88.900 | 88.900 | 63.500 | 14.288 | K-44-8 holes | 62278 |
| 6866-R | 6.0 | 63.500 | 12.700 | 76.200 | 60.325 | 31.750 | - | 160.338 | 249.238 | - | - | 60.325 | 17.475 | K-2-4 holes | 77402 |
| 6869-R | 6.0 | 94.456 | 15.875 | 101.600 | 60.325 | 31.750 | 228.600 | 330.201 | 381.001 | 114.300 | 69.850 | 76.200 | 17.475 | K-44-8 holes | 97865 |
| 6969-R | 6.0 | 94.463 | 15.875 | 101.600 | 63.500 | 38.100 | 228.600 | 330.201 | 381.001 | 114.300 | 69.850 | 76.200 | 17.475 | K-44-8 holes | 133452 |
| 6864-R | 7.0 | 94.463 | 15.875 | 101.600 | 60.325 | 31.750 | 228.600 | 330.201 | 381.001 | 139.700 | 95.250 | 76.200 | 17.475 | K-443-10 holes | 97865 |
| 6874 | 7.0 | 101.600 | 15.875 | 114.300 | 69.850 | 44.450 | 241.300 | 342.901 | 393.701 | 139.700 | 95.250 | 79.375 | 17.475 | K-443/K-44-10 holes | 169039 |
| 6875-R | 7.0 | 95.250 | 15.875 | 101.600 | 63.500 | 38.100 | 228.600 | 330.201 | 381.001 | 139.700 | 95.250 | 76.200 | 17.475 | K-443/K-44-10 holes | 133452 |

Elevator Chain

BS 4116 Part 4

Section 1



| Chain | Technical Details (mm) | | | | | | | | | | | | | | |
|-----------------|------------------------|-------------------------|----------------|----------------|--------------|--------------|--------------|------------------------|------------------------|--------------|----------------|--------------|-------------|-------------|----------|
| B.S. Series Ref | Breaking Load lbf | Breaking Load (Newtons) | Pitch Inch MIN | Pitch Inch MAX | Pitch mm MIN | Pitch mm MAX | Bush Dia MAX | Inside Width Inner MIN | Inside Width Outer MIN | Pin Diam MAX | Pin Length MAX | Plate Height | Width Outer | Width Inner | Head MAX |

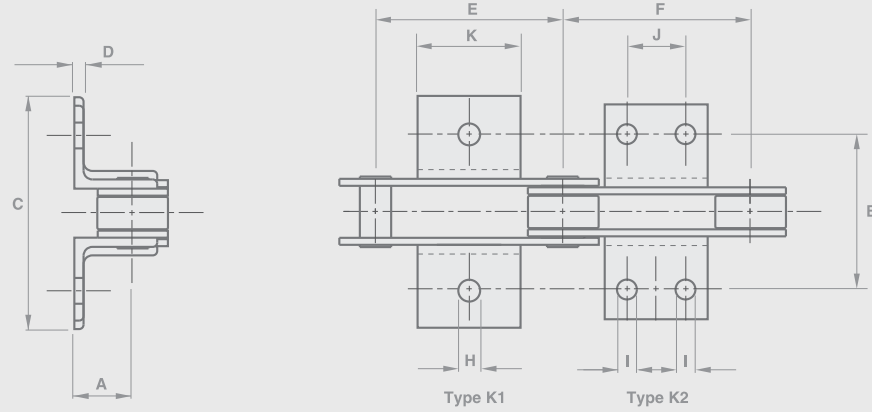
BS Elevator Chain- Solid Bearing Pin

| | | | A | A | A | A | B | D | E | F | G | H1 | J | K | L |
|-------|-------|--------|-----|------|-------|-------|------|------|------|------|------|------|------|------|------|
| 35033 | 7500 | 33000 | 1.5 | 6.0 | 38.1 | 152.4 | 18.0 | 15.0 | 25.4 | 14.0 | 38.0 | 25.4 | 3.8 | 3.8 | 15.0 |
| 45067 | 15000 | 67000 | 2.0 | 9.0 | 50.8 | 228.6 | 23.6 | 19.0 | 32.5 | 19.0 | 46.0 | 38.1 | 3.8 | 5.1 | 22.1 |
| 55134 | 30000 | 134000 | 3.5 | 12.0 | 88.9 | 304.8 | 33.2 | 25.4 | 43.0 | 26.9 | 60.0 | 51.0 | 5.1 | 7.1 | 29.7 |
| 65200 | 45000 | 200000 | 5.0 | 18.0 | 127.0 | 457.2 | 38.1 | 38.1 | 59.0 | 31.8 | 82.0 | 61.0 | 7.6 | 8.9 | 34.8 |
| 75267 | 60000 | 267000 | 6.0 | 18.0 | 152.4 | 457.2 | 38.1 | 38.1 | 59.0 | 23.0 | 80.0 | 61.0 | 7.6 | 8.9 | 34.8 |
| 85400 | 90000 | 400000 | 6.0 | 24.0 | 152.4 | 609.6 | 38.1 | 38.1 | 66.3 | 29.4 | 94.0 | 63.5 | 10.0 | 13.0 | 35.8 |

The dimensions listed will not vary with pitch size for each given breaking load. Stainless steel and zinc plated chains are available to order. For mass of chains see page 9.

Elevator Chain

BS K Attachments



Technical Details (mm)

| Breaking Load lbf | Breaking Load (Newtons) | Platform Height | Transverse Pitch | Width Over Attachment Inner/Outer | Attachment Thickness Inner/Outer | Attachment Type | Attachment Minimum Outer Pitch | Attachment Minimum Inner Pitch | Centre Hole Diam | Outer Holes Diam | Attachment Hole Pitch | Platform Length | Mass (kg/Att) |
|----------------------|----------------------------|-----------------|------------------|--------------------------------------|-------------------------------------|-----------------|-----------------------------------|-----------------------------------|------------------|------------------|-----------------------|-----------------|------------------|
|----------------------|----------------------------|-----------------|------------------|--------------------------------------|-------------------------------------|-----------------|-----------------------------------|-----------------------------------|------------------|------------------|-----------------------|-----------------|------------------|

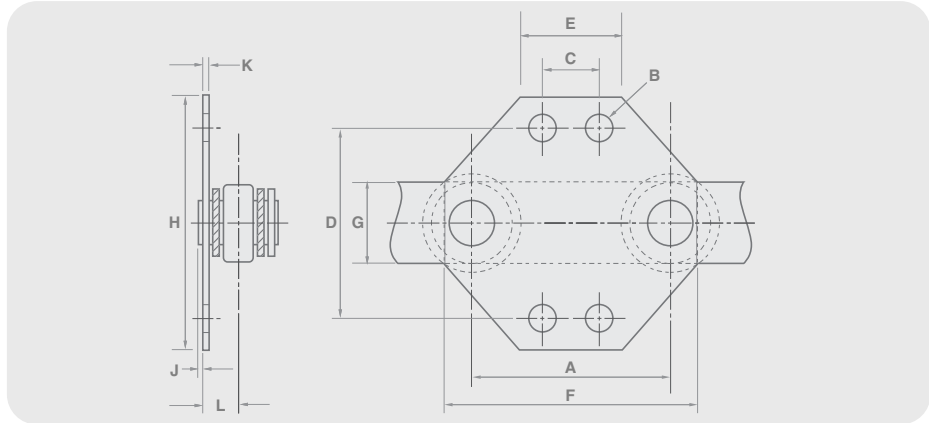
BS K Attachments (Welded)

| | | A | B | C | D | | E | F | H | I | J | K | |
|-------|--------|-------|-------|---------|-------|-----|-------|-------|------|------|-------|-----|-------|
| 7500 | 33000 | 19.0 | 76.2 | 102/118 | 4 | K1 | 63.5 | 76.2 | 10.5 | - | - | 28 | 0.054 |
| | | | | | | K1 | 88.9 | 101.6 | 10.6 | - | - | 56 | 0.104 |
| | | | | | | K2 | 88.9 | 101.6 | - | 9.2 | 31.8 | 56 | 0.104 |
| | | | | | | K2 | 114.3 | 127.0 | - | 9.2 | 57.2 | 84 | 0.163 |
| 15000 | 67000 | 31.8 | 88.9 | 125/136 | 5 | K1 | 88.9 | 101.6 | 13.7 | - | - | 56 | 0.193 |
| | | | | | | K2 | 88.9 | 101.6 | - | 10.5 | 31.8 | 56 | 0.193 |
| | | | | | | K2 | 114.3 | 152.4 | - | 10.5 | 57.2 | 84 | 0.289 |
| | | | | | | K2 | 152.4 | 177.8 | - | 10.5 | 88.9 | 127 | 0.443 |
| 30000 | 134000 | 38.0 | 108.0 | 145/159 | 6 | K2 | 127.0 | 127.0 | - | 12.2 | 31.8 | 56 | 0.299 |
| | | | | | | K2 | 152.4 | 152.4 | - | 12.2 | 57.2 | 84 | 0.449 |
| | | | | | | K2 | 177.8 | 177.8 | - | 12.2 | 69.9 | 108 | 0.581 |
| | | | | | | K2 | 203.2 | 203.2 | - | 12.2 | 88.9 | 127 | 0.685 |
| K2 | 228.6 | 228.6 | - | 12.2 | 133.4 | 168 | 0.907 | | | | | | |
| 45000 | 200000 | 51.0 | 146.0 | 182/200 | 8 | K2 | 152.4 | 152.4 | - | 13.7 | 38.1 | 70 | 0.581 |
| | | | | | | K2 | 203.2 | 203.2 | - | 13.7 | 76.2 | 112 | 0.930 |
| | | | | | | K2 | 228.6 | 228.6 | - | 13.7 | 88.9 | 152 | 1.220 |
| | | | | | | K2 | 304.8 | 304.8 | - | 13.7 | 165.1 | 229 | 1.905 |
| 90000 | 400000 | 57.0 | 171.5 | 229/252 | 10 | K1 | 228.6 | 228.6 | 19.5 | - | - | 89 | 1.050 |
| | | | | | | K2 | 228.6 | 228.6 | - | 19.5 | 44.5 | 89 | 1.050 |
| | | | | | | K2 | 228.6 | 228.6 | - | 19.5 | 88.9 | 152 | 1.810 |
| | | | | | | K2 | 304.8 | 304.8 | - | 19.5 | 165.1 | 229 | 2.710 |

Elevator Chain

G2 Attachments

Produced to order; modifications to design and dimensions can be made to suit customer's own requirements.



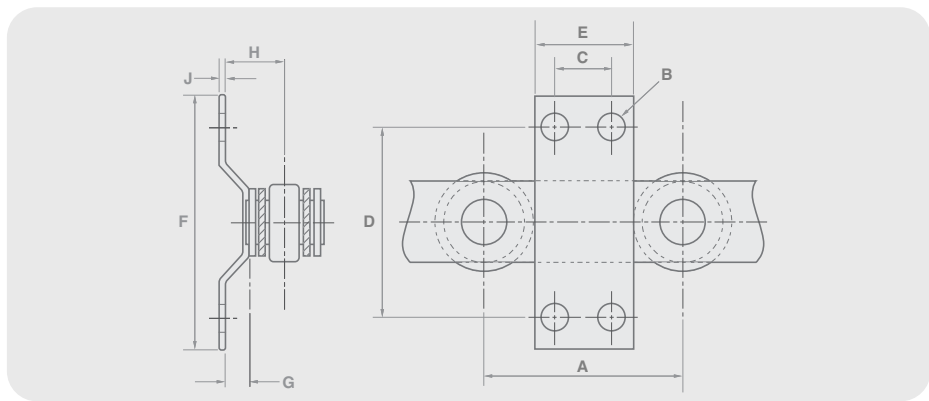
| Technical Details (mm) | | | | | | | | | | | | | |
|------------------------|---------------|-------|------------|--------------------|------------------|---------------------------|---------------|-------------------|---------------|----------------|-----------------|---------------------------|-----------|
| Breaking Load | Breaking Load | Pitch | Hole* Diam | Horizontal Centres | Vertical Centres | Flat at top of Attachment | Overall Width | Chain Plate Depth | Overall Depth | Pin Projection | Plate Thickness | Face to Chain Centre Line | Mass Each |
| lbf | (Newtons) | | | | | | | | | | | | kg |

BS G2 Attachments (Internal)

| | | A | B | C | D | E | F | G | H | J | K | L | |
|--------|---------|-------|-------|-------|-------|--------|--------|-------|-------|------|------|-------|------|
| 7,500 | 33,000 | 76.2 | 9.35 | 22.23 | 57.15 | 44.45 | 105.41 | 25.40 | 82.55 | 1.91 | 3.80 | 16.76 | 0.12 |
| | | 101.6 | 9.35 | 38.10 | 57.15 | 69.85 | 130.81 | 25.40 | 82.55 | 1.91 | 3.80 | 16.76 | 0.16 |
| | | 152.4 | 9.35 | 38.10 | 57.15 | 69.85 | 181.61 | 25.40 | 82.55 | 1.91 | 3.80 | 16.76 | 0.20 |
| 15,000 | 67,000 | 101.6 | 10.69 | 31.75 | 76.20 | 57.15 | 143.51 | 38.10 | 101.6 | 2.29 | 3.80 | 20.32 | 0.19 |
| | | 152.4 | 10.69 | 63.50 | 76.20 | 107.95 | 194.31 | 38.10 | 101.6 | 2.29 | 3.80 | 20.32 | 0.29 |
| 30,000 | 134,000 | 152.4 | 12.30 | 50.80 | 101.6 | 88.9 | 208.28 | 50.80 | 139.7 | 3.05 | 5.08 | 26.67 | 0.50 |
| | | 203.2 | 12.30 | 76.20 | 114.3 | 114.3 | 259.10 | 50.80 | 152.4 | 3.05 | 5.08 | 26.67 | 0.80 |
| 45,000 | 200,000 | 203.2 | 13.87 | 88.90 | 127.0 | 127.0 | 269.20 | 60.96 | 165.1 | 3.30 | 7.60 | 37.34 | 1.23 |
| | | 304.8 | 13.87 | 88.90 | 127.0 | 127.0 | 370.80 | 60.96 | 165.1 | 3.30 | 7.60 | 37.34 | 1.55 |

* Alternatively, square holes can be provided
Wheels to have shroud removed on one side.

Produced to order; modifications to design and dimensions can be made to suit customer's own requirements.



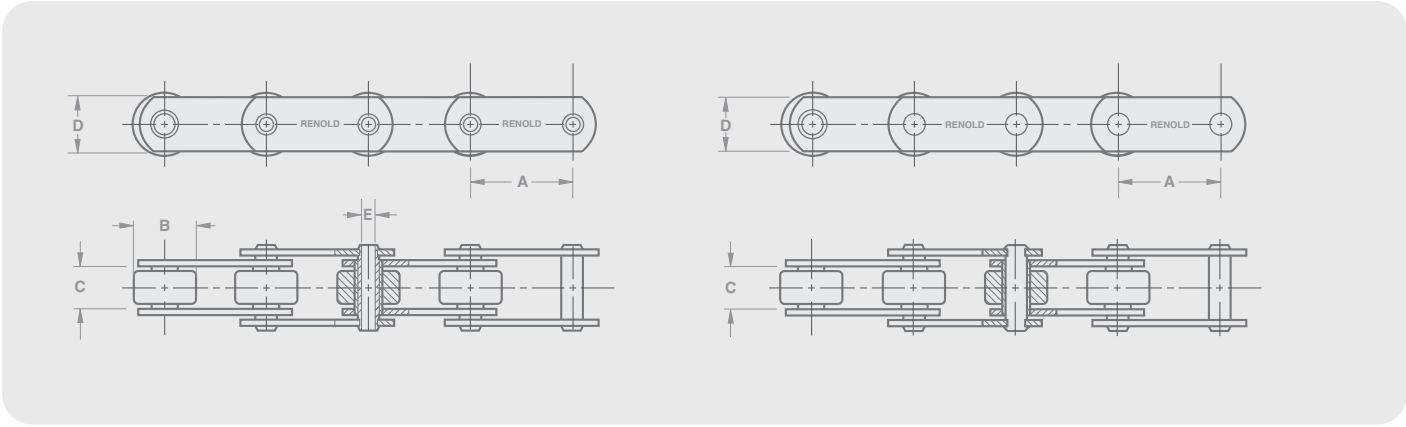
| Technical Details (mm) | | | | | | | | | | | |
|------------------------|---------------|-------|-----------|--------------------|------------------|------------------|------------------|-----------------------------|------------------------------|----------------------|-----------|
| Breaking Load | Breaking Load | Pitch | Hole Diam | Horizontal Centres | Vertical Centres | Attachment Width | Attachment Depth | Projection from chain plate | Projection from chain centre | Attachment Thickness | Mass each |
| lbf | (Newtons) | | | | | | | | | | kg |

BS G2 Attachments (Welded)

| | | A | B | C | D | E | F | G | H | J | |
|--------|---------|-------|-------|-------|-------|--------|--------|-------|-------|------|------|
| 7,500 | 33,000 | 76.2 | 9.35 | 22.23 | 57.15 | 44.45 | 82.55 | 14.99 | 31.75 | 3.80 | 0.12 |
| | | 101.6 | 9.35 | 38.10 | 57.15 | 69.85 | 82.55 | 14.99 | 31.75 | 3.80 | 0.19 |
| | | 152.4 | 9.35 | 38.10 | 57.15 | 69.85 | 82.55 | 14.99 | 31.75 | 3.80 | 0.19 |
| 15,000 | 67,000 | 101.6 | 10.69 | 31.75 | 76.2 | 57.15 | 101.60 | 17.78 | 38.10 | 4.75 | 0.24 |
| | | 152.4 | 10.69 | 63.50 | 76.2 | 107.95 | 101.60 | 17.78 | 38.10 | 4.75 | 0.45 |
| 30,000 | 134,000 | 152.4 | 12.30 | 50.80 | 101.6 | 88.9 | 139.70 | 24.13 | 50.80 | 6.35 | 0.67 |
| | | 203.2 | 12.30 | 76.20 | 114.3 | 114.3 | 152.40 | 24.13 | 50.80 | 6.35 | 0.94 |
| 45,000 | 200,000 | 203.2 | 12.30 | 76.20 | 114.3 | 114.3 | 152.40 | 24.13 | 50.80 | 6.35 | 0.94 |
| | | 304.8 | 13.87 | 88.90 | 127.0 | 127.0 | 165.10 | 26.16 | 63.50 | 7.92 | 1.41 |

Elevator Chain

ISO - 1977, DIN8167, BS4116



| Chain Ref. | Technical Details (mm) | | | | | | | | | | | |
|------------|-----------------------------|-----------|-----------|----------------|------------------------|------------------------|-------------|----------------|--------------|-------------|-------------|----------|
| Chain No | Breaking Load (Newtons) MIN | Pitch MIN | Pitch MAX | Roller Dia MAX | Inside Width Inner MIN | Inside Width Outer MIN | Pin Dia MAX | Pin Length MAX | Plate Height | Width Outer | Width Inner | Head MAX |

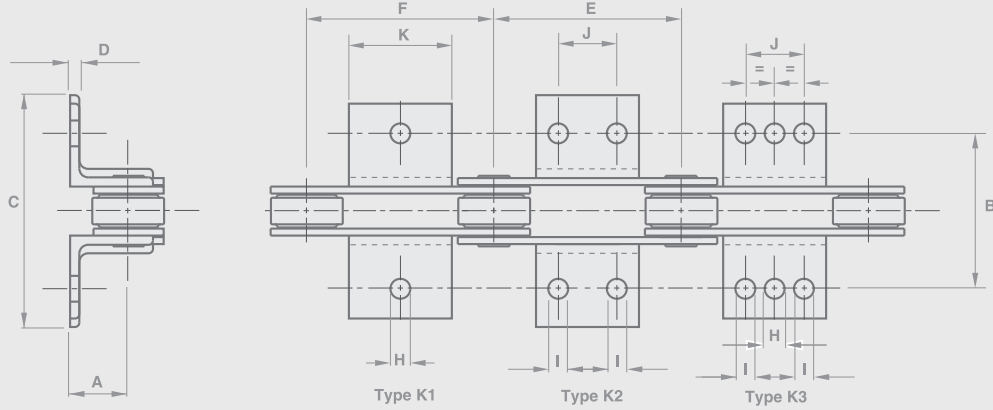
ISO Elevator Chain - Solid Bearing Pin

| | | A | A | B | D | E | F | G | H1 | J | K | L |
|------|--------|-----|------|------|------|-------|------|-------|-------|------|------|------|
| M40 | 40000 | 63 | 250 | 12.5 | 20.0 | 28.3 | 6.5 | 41.0 | 25.0 | 3.5 | 3.5 | 15.0 |
| M56 | 56000 | 63 | 250 | 15.0 | 24.0 | 33.3 | 10.0 | 46.5 | 30.0 | 4.0 | 4.0 | 17.5 |
| M80 | 80000 | 80 | 315 | 18.0 | 28.0 | 39.4 | 12.0 | 55.0 | 35.0 | 5.0 | 5.0 | 20.2 |
| M112 | 112000 | 80 | 400 | 21.0 | 32.0 | 45.5 | 15.0 | 63.5 | 40.0 | 6.0 | 6.0 | 23.0 |
| M160 | 160000 | 100 | 500 | 25.0 | 37.0 | 52.5 | 18.0 | 73.5 | 50.0 | 7.0 | 7.0 | 29.0 |
| M224 | 224000 | 125 | 630 | 30.0 | 43.0 | 60.6 | 21.0 | 84.0 | 60.0 | 8.0 | 8.0 | 35.0 |
| M315 | 315000 | 160 | 630 | 36.0 | 48.0 | 70.7 | 25.0 | 97.0 | 70.0 | 10.0 | 10.0 | 38.1 |
| M450 | 450000 | 200 | 800 | 42.0 | 56.0 | 82.8 | 30.0 | 114.0 | 80.0 | 12.0 | 12.0 | 43.4 |
| M630 | 630000 | 250 | 1000 | 50.0 | 66.0 | 97.0 | 36.0 | 133.0 | 100.0 | 14.0 | 14.0 | 54.1 |
| M900 | 900000 | 250 | 1000 | 60.0 | 78.0 | 113.0 | 44.0 | 153.0 | 120.0 | 16.0 | 16.0 | 64.7 |

Dimensions listed above will not vary with pitch size in each given breaking load.
 Stainless and zinc plated chains are available to order.
 For mass of chains see page 24.

Elevator Chain

ISO K Attachments



| Chain Ref. | | Technical Details (mm) | | | | | | | | | | | |
|------------|-------------------------|------------------------|------------------|-----------------------------------|----------------------------------|-----------------|--------------------------------|--------------------------------|------------------|------------------|-----------------------|-----------------|---------------|
| Chain No | Breaking Load (Newtons) | Platform Height | Transverse Pitch | Width Over Attachment Inner/Outer | Attachment Thickness Inner/Outer | Attachment Type | Attachment Minimum Outer Pitch | Attachment Minimum Inner Pitch | Centre Hole Diam | Outer Holes Diam | Attachment Hole Pitch | Platform Length | Mass (kg/Att) |

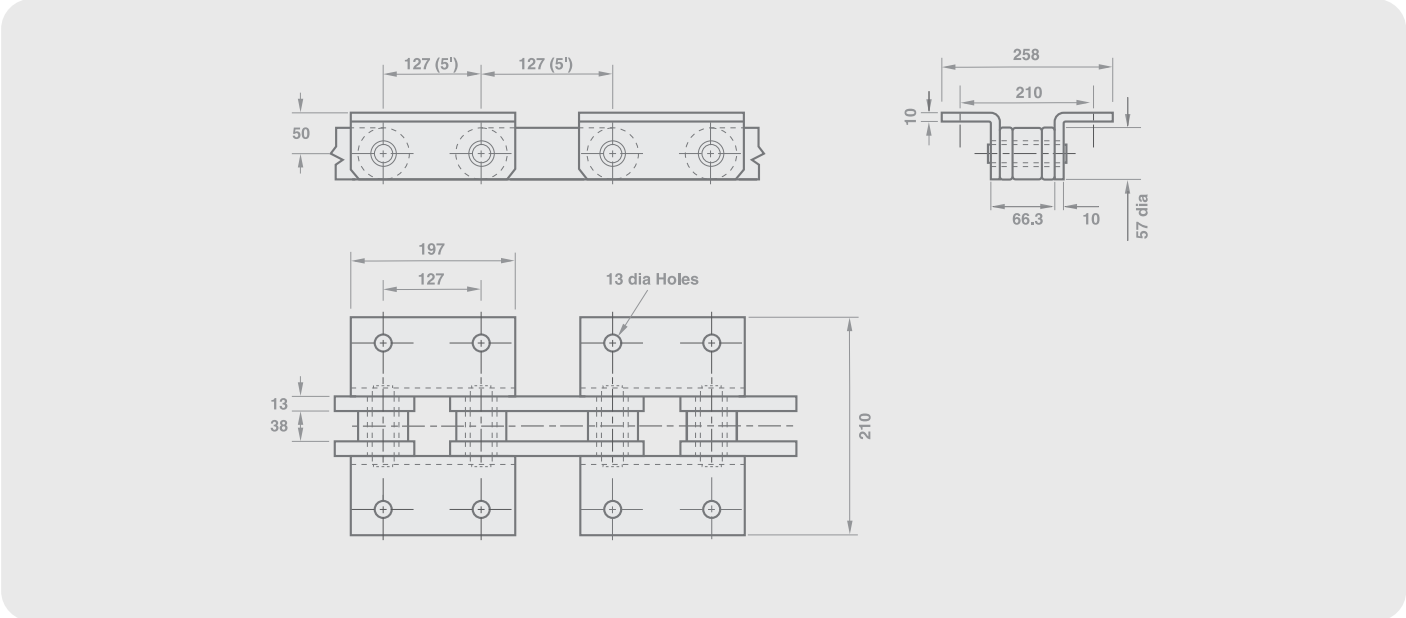
ISO K Attachments (Welded)

| | | A | B | C | D | | E | F | H | I | J | K | |
|------|--------|-----|-----|---------|------|----|-----|-----|----|----|-----|-----|------|
| M40 | 40000 | 25 | 70 | 104/112 | 3.5 | K1 | 63 | 63 | 9 | - | - | 20 | 0.04 |
| | | | | | | K2 | 80 | 80 | - | 9 | 20 | 40 | 0.07 |
| | | | | | | K3 | 100 | 100 | 9 | 9 | 40 | 60 | 0.11 |
| | | | | | | K3 | 125 | 125 | 9 | 9 | 65 | 85 | 0.15 |
| M56 | 56000 | 30 | 88 | 119/129 | 5.0 | K1 | 63 | 63 | 11 | - | - | 25 | 0.04 |
| | | | | | | K2 | 100 | 100 | - | 11 | 25 | 50 | 0.07 |
| | | | | | | K3 | 125 | 125 | 11 | 11 | 50 | 75 | 0.11 |
| | | | | | | K3 | 160 | 160 | 11 | 11 | 85 | 110 | 0.15 |
| M80 | 80000 | 35 | 96 | 135/147 | 5.0 | K1 | 80 | 80 | 11 | - | - | 25 | 0.10 |
| | | | | | | K3 | 125 | 125 | 11 | 11 | 50 | 75 | 0.25 |
| | | | | | | K3 | 160 | 160 | 11 | 11 | 85 | 110 | 0.37 |
| | | | | | | K3 | 200 | 200 | 11 | 11 | 125 | 150 | 0.50 |
| M112 | 112000 | 40 | 110 | 151/165 | 6.0 | K1 | 80 | 80 | 14 | - | - | 30 | 0.20 |
| | | | | | | K2 | 125 | 125 | - | 14 | 35 | 65 | 0.35 |
| | | | | | | K3 | 160 | 160 | 14 | 14 | 65 | 95 | 0.50 |
| | | | | | | K3 | 200 | 200 | 14 | 14 | 100 | 130 | 0.75 |
| M160 | 160000 | 45 | 124 | 178/195 | 6.0 | K1 | 100 | 100 | 14 | - | - | 30 | 0.20 |
| | | | | | | K2 | 160 | 160 | - | 14 | 50 | 80 | 0.45 |
| | | | | | | K3 | 200 | 200 | 14 | 14 | 85 | 115 | 0.65 |
| | | | | | | K3 | 250 | 250 | 14 | 14 | 145 | 175 | 0.95 |
| M224 | 224000 | 55 | 140 | 206/224 | 8.0 | K1 | 125 | 125 | 18 | - | - | 40 | 0.30 |
| | | | | | | K2 | 200 | 200 | - | 18 | 65 | 105 | 0.80 |
| | | | | | | K3 | 250 | 250 | 18 | 18 | 125 | 165 | 1.20 |
| | | | | | | K3 | 315 | 315 | 18 | 18 | 190 | 230 | 1.65 |
| M315 | 315000 | 65 | 160 | 216/240 | 10.0 | K1 | 160 | 160 | 18 | - | - | 35 | 0.50 |
| | | | | | | K2 | 200 | 200 | - | 18 | 50 | 85 | 0.85 |
| | | | | | | K2 | 250 | 250 | - | 18 | 100 | 135 | 1.40 |
| | | | | | | K2 | 315 | 315 | - | 18 | 155 | 190 | 1.85 |
| M450 | 450000 | 75 | 180 | 228/255 | 10.0 | K1 | 200 | 200 | 18 | - | - | 40 | 0.60 |
| | | | | | | K2 | 250 | 250 | - | 18 | 85 | 125 | 1.40 |
| | | | | | | K2 | 315 | 315 | - | 18 | 155 | 195 | 2.40 |
| | | | | | | K2 | 400 | 400 | - | 18 | 240 | 280 | 3.50 |
| M630 | 630000 | 90 | 230 | 302/333 | 12.0 | K1 | 250 | 250 | 24 | - | - | 50 | 1.30 |
| | | | | | | K2 | 315 | 315 | - | 24 | 100 | 150 | 3.70 |
| | | | | | | K2 | 400 | 400 | - | 24 | 190 | 240 | 5.60 |
| | | | | | | K2 | 500 | 500 | - | 24 | 300 | 350 | 7.50 |
| M900 | 900000 | 110 | 280 | 358/393 | 15.0 | K1 | 250 | 250 | 30 | - | - | 60 | 1.70 |
| | | | | | | K2 | 315 | 315 | - | 30 | 65 | 125 | 4.80 |
| | | | | | | K2 | 400 | 400 | - | 30 | 155 | 215 | 7.50 |
| | | | | | | K2 | 500 | 500 | - | 30 | 240 | 300 | 9.80 |

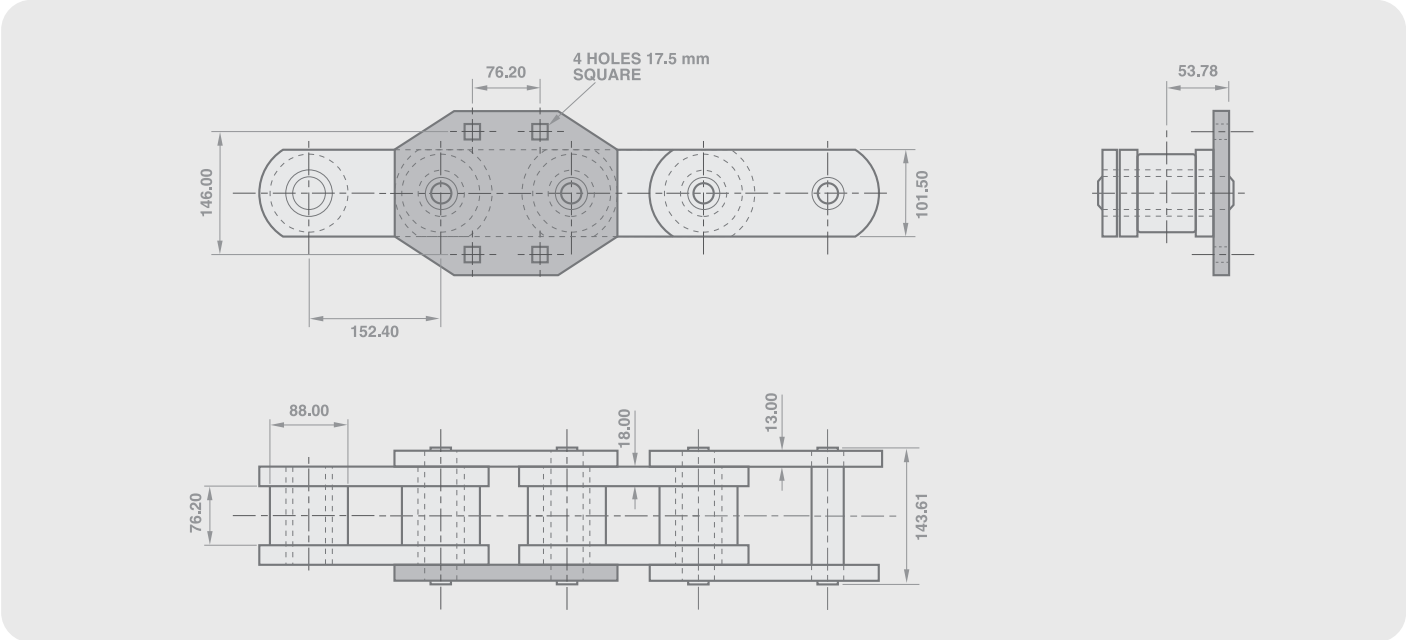
Elevator Chain

Heavy Duty Elevator Chain

Heavy duty elevator chain - 378kn breaking load for dynamic discharge elevator



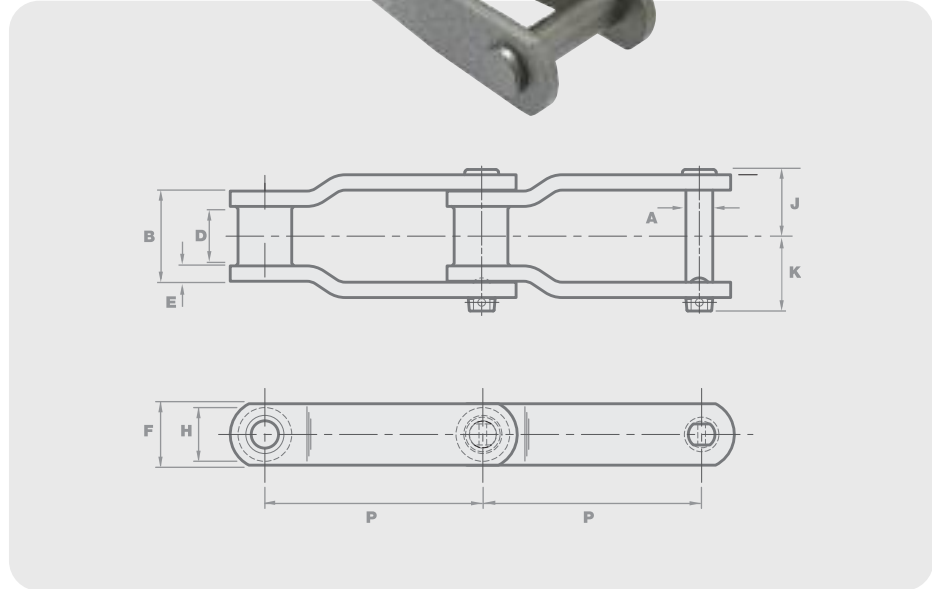
Heavy duty elevator chain - 711kn breaking load for positive discharge elevator



Welded Steel Chain

Type W

Permweld chains are normally of cranked link construction. The pins have a press fit into the side plates, thus eliminating unnecessary wear due to pin movement. Accurate punching of the plate, automated machine welding and assembly of the bushes to side plates ensures high quality and dimensional control. Steels of medium carbon grades are used for pin and plates and may be heat treated to produce greater strength and wear resistance. Bushes are of carburizing grades of carbon steel which may be case hardened.



| Chain Ref. | Technical Details (mm) | | | | | | | | | | | |
|------------|------------------------|------------|-----------|-------------------------------------|--------------|------------------------|-----------------|--------------|---------------|----------------|---------------|------------------------------|
| Chain No | Pitch mm | Pitch inch | Mass kg/m | Average Ultimate Strength (Newtons) | Pin Diameter | Sprocket Thickness MAX | Plate Thickness | Plate Height | Bush Diameter | CL to Pin Head | CL to Pin End | Outside Width at Inner Plate |

Permweld W

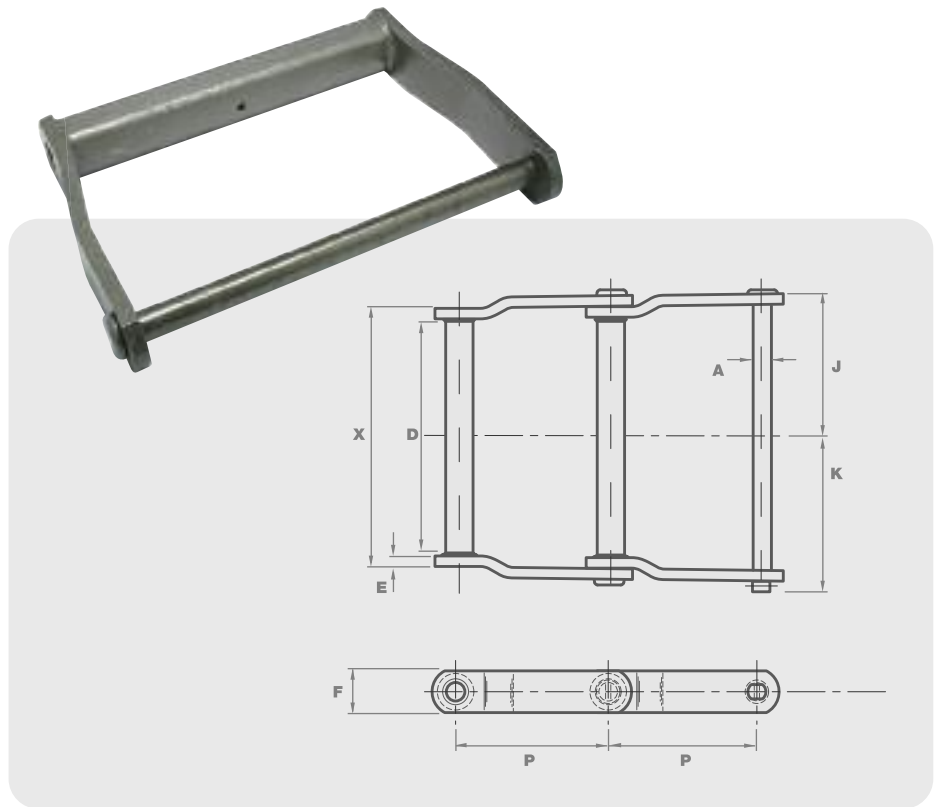
| | P | P | | | A | D | E | F | H | J | K | B |
|----------|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| W-78 | 66.269 | 2.609 | 6.251 | 106762 | 12.700 | 28.575 | 6.350 | 28.575 | 22.225 | 36.116 | 40.084 | 50.800 |
| W-78P | 66.269 | 2.609 | 6.251 | 133452 | 12.700 | 28.575 | 6.350 | 28.575 | 22.225 | 36.116 | 40.081 | 50.800 |
| W-82 | 78.105 | 3.075 | 7.442 | 115658 | 14.288 | 31.750 | 6.350 | 31.750 | 26.988 | 38.497 | 43.259 | 57.150 |
| W-82P | 78.105 | 3.075 | 7.442 | 155694 | 14.288 | 31.750 | 6.350 | 31.750 | 26.988 | 38.506 | 43.256 | 57.150 |
| W-82XHD | 78.105 | 3.075 | 13.097 | 204626 | 19.050 | 31.750 | 9.525 | 38.100 | 34.925 | 45.641 | 53.578 | 63.500 |
| W-106 | 152.400 | 6.000 | 9.972 | 164591 | 19.050 | 41.275 | 9.525 | 38.100 | 34.925 | 49.609 | 56.753 | 71.438 |
| W-106P | 152.400 | 6.000 | 9.972 | 260231 | 19.050 | 41.275 | 9.525 | 38.100 | 34.925 | 49.606 | 56.744 | 71.450 |
| W-106HD | 152.400 | 6.000 | 12.204 | 222420 | 19.050 | 41.275 | 12.700 | 38.100 | 31.750 | 56.356 | 63.500 | 77.788 |
| W-110 | 152.400 | 6.000 | 9.674 | 204626 | 19.050 | 47.625 | 9.525 | 38.100 | 31.750 | 51.991 | 59.134 | 76.200 |
| W-110P | 152.400 | 6.000 | 9.674 | 266904 | 19.050 | 47.625 | 9.525 | 38.100 | 36.513 | 51.994 | 59.131 | 76.200 |
| W-111 | 120.900 | 4.760 | 12.204 | 204626 | 19.050 | 57.150 | 9.525 | 38.100 | 36.513 | 56.753 | 63.897 | 85.725 |
| W-111P | 120.900 | 4.760 | 12.204 | 266904 | 19.050 | 57.150 | 9.525 | 38.100 | 41.275 | 56.744 | 63.907 | 85.725 |
| W-124 | 101.600 | 4.000 | 12.353 | 204626 | 19.050 | 41.275 | 9.525 | 38.100 | 41.275 | 49.606 | 56.744 | 71.438 |
| W-124P | 101.600 | 4.000 | 12.353 | 266904 | 19.050 | 41.275 | 9.525 | 38.100 | 41.275 | 49.606 | 56.744 | 71.450 |
| W-124HD | 103.200 | 4.063 | 20.241 | 373665 | 22.225 | 41.275 | 12.700 | 50.800 | 41.275 | 55.959 | 62.706 | 76.200 |
| W-124HDP | 103.200 | 4.063 | 20.241 | 400356 | 22.225 | 41.275 | 12.700 | 50.800 | 41.275 | 55.956 | 62.713 | 76.200 |
| W-132 | 153.670 | 6.050 | 19.497 | 373665 | 25.400 | 73.025 | 12.700 | 50.800 | 41.275 | 74.216 | 82.550 | 111.125 |
| W-132P | 153.670 | 6.050 | 19.497 | 444840 | 25.400 | 73.025 | 12.700 | 50.800 | 41.275 | 74.219 | 82.550 | 111.125 |
| W-132HD | 153.670 | 6.050 | 22.920 | 467082 | 25.400 | 73.025 | 15.875 | 50.800 | 41.275 | 80.566 | 88.900 | 117.475 |
| W-132HDP | 153.670 | 6.050 | 22.920 | 533808 | 25.400 | 73.025 | 15.875 | 50.800 | 41.275 | 80.569 | 88.900 | 117.475 |
| W-134 | 103.200 | 4.063 | 24.855 | 458185 | 25.400 | 41.275 | 12.700 | 63.500 | 41.275 | 56.744 | 62.706 | 76.200 |
| W-134P | 103.200 | 4.063 | 24.855 | 498221 | 25.400 | 41.275 | 12.700 | 63.500 | 41.275 | 56.744 | 62.713 | 76.200 |
| WS-150 | 153.670 | 6.050 | 23.515 | 373665 | 25.400 | 73.025 | 12.700 | 63.500 | 44.450 | 74.219 | 82.550 | 111.125 |
| WS-150P | 153.670 | 6.050 | 23.515 | 444840 | 25.400 | 73.025 | 12.700 | 63.500 | 44.450 | 74.219 | 82.550 | 111.125 |
| WS-157 | 153.670 | 6.050 | 29.022 | 556050 | 28.575 | 69.850 | 15.875 | 63.500 | 44.450 | 80.963 | 92.075 | 117.475 |
| WS-157P | 153.670 | 6.050 | 29.022 | 622776 | 28.575 | 69.850 | 15.875 | 63.500 | 44.450 | 80.975 | 92.075 | 117.475 |
| W-182 | 78.105 | 3.075 | 12.353 | 204626 | 19.050 | 28.575 | 9.525 | 38.100 | 34.925 | 42.466 | 50.403 | 57.150 |
| WS-784 | 101.600 | 4.000 | 4.911 | 106762 | 12.700 | 28.575 | 6.350 | 28.575 | 22.225 | 36.119 | 40.081 | 50.800 |
| WS-784P | 101.600 | 4.000 | 4.911 | 133452 | 12.700 | 28.575 | 6.350 | 28.575 | 22.225 | 36.119 | 40.081 | 50.800 |
| WS-855PB | 153.670 | 6.050 | 27.534 | 667260 | 28.575 | 69.850 | 14.288 | 63.500 | 44.450 | 76.994 | 89.694 | 112.713 |

Welded Steel Chain

Type WD

Type WD Permaweld drag chains are furnished with heat treated pins and formed steel bushes. The bushes are shaped to provide maximum conveying capacity, shock resistance, toughness and higher yield strength in bending than many comparable cast and other welded links. Precise press fits of the pins in the side plates and single flats milled on the pin ends prevent unnecessary wear due to pin movement.

Pins and side plates are made of medium carbon steels. Bushes are of carburizing grade steels which are case hardened on the heat treated chains. Accurately punched holes and assembly procedures ensure dimensional control. The flexibility of welded construction provides a wider range of attachment links than is normally offered for similar cast chains.



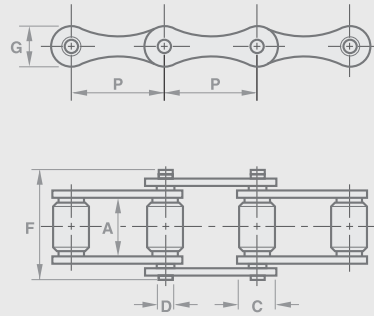
| Chain Ref. | Technical Details (mm) | | | | | | | | | | |
|------------|------------------------|------------|-----------|-------------------------------------|--------------|---------------------------|-----------------|--------------|----------------|---------------|------------------------------|
| Chain No | Pitch mm | Pitch inch | Mass kg/m | Average Ultimate Strength (Newtons) | Pin Diameter | Sprocket Thickness MAX | Plate Thickness | Plate Height | CL to Pin Head | CL to Pin End | Outside Width at Inner Plate |

Permaweld WD

| | P | P | | | A | D | E | F | J | K | X |
|------------|-------|-----|--------|--------|--------|---------|--------|--------|---------|---------|---------|
| WD-102 | 127.0 | 5.0 | 15.478 | 226868 | 19.050 | 161.925 | 9.525 | 38.100 | 113.903 | 121.047 | 196.850 |
| WD-102P | 127.0 | 5.0 | 15.478 | 266904 | 19.050 | 161.925 | 9.525 | 38.100 | 113.894 | 121.057 | 196.850 |
| WD-104 | 76.2 | 3.0 | 11.758 | 226868 | 19.050 | 104.775 | 9.525 | 38.100 | 83.741 | 90.885 | 136.525 |
| WD-104P | 76.2 | 3.0 | 11.758 | 266904 | 19.050 | 104.775 | 9.525 | 38.100 | 83.744 | 90.881 | 136.525 |
| WD-110 | 76.2 | 3.0 | 16.074 | 226868 | 19.050 | 228.600 | 9.525 | 38.100 | 147.241 | 154.385 | 263.526 |
| WD-110P | 76.2 | 3.0 | 16.074 | 266904 | 19.050 | 228.600 | 9.525 | 38.100 | 147.244 | 154.382 | 263.526 |
| WD-112 | 203.2 | 8.0 | 13.544 | 226868 | 19.050 | 228.600 | 9.525 | 38.100 | 147.241 | 154.385 | 263.526 |
| WD-112P | 203.2 | 8.0 | 13.544 | 266904 | 19.050 | 228.600 | 9.525 | 38.100 | 147.244 | 154.382 | 263.526 |
| WD-116 | 203.2 | 8.0 | 20.985 | 226868 | 19.050 | 330.201 | 9.525 | 44.450 | 194.866 | 202.010 | 358.776 |
| WD-116P | 203.2 | 8.0 | 20.985 | 306940 | 19.050 | 330.201 | 9.525 | 44.450 | 194.869 | 202.007 | 358.776 |
| WD-120 | 152.4 | 6.0 | 26.939 | 311388 | 22.225 | 222.250 | 12.700 | 50.800 | 150.019 | 156.369 | 260.351 |
| WD-120P | 152.4 | 6.0 | 26.939 | 400356 | 22.225 | 222.250 | 12.700 | 50.800 | 150.013 | 156.363 | 260.351 |
| WD-122 | 203.2 | 8.0 | 22.771 | 311388 | 22.225 | 222.250 | 12.700 | 50.800 | 150.013 | 156.369 | 260.351 |
| WD-122P | 203.2 | 8.0 | 22.771 | 400356 | 22.225 | 222.250 | 12.700 | 50.800 | 150.013 | 156.363 | 260.351 |
| WD-480 | 203.2 | 8.0 | 25.450 | 311388 | 22.225 | 282.576 | 12.700 | 50.800 | 181.769 | 188.119 | 323.851 |
| WD-480P | 203.2 | 8.0 | 25.450 | 400356 | 22.225 | 282.576 | 12.700 | 50.800 | 181.763 | 188.113 | 323.851 |
| WD-480HP | 203.2 | 8.0 | 27.980 | 449288 | 25.400 | 282.576 | 12.700 | 50.800 | 181.763 | 188.113 | 323.851 |
| WD-480XHD | 203.2 | 8.0 | 31.255 | 378114 | 25.400 | 282.576 | 15.875 | 50.800 | 188.119 | 194.469 | 330.201 |
| WD-480XDHP | 203.2 | 8.0 | 31.255 | 542705 | 25.400 | 282.576 | 15.875 | 50.800 | 188.113 | 194.463 | 330.201 |

Agricultural Chain Range

ISO 487



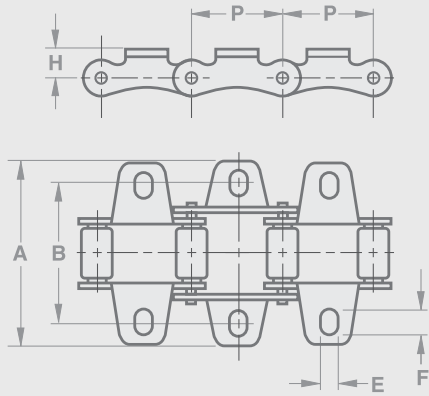
| Chain Ref. | Technical Details (mm) | | | | | | |
|----------------------|------------------------|--------------|------------|---------|----------|--------------|------------------|
| Chain Number | Pitch Inch | Inside Width | Roller Dia | Pin Dia | Over Pin | Plate Height | Breaking Load kN |
| ISO 487 Chain | | | | | | | |
| | P | A | C | D | F | G | |
| S32 | 1.15 | 15.90 | 11.40 | 4.47 | 26.70 | 13.50 | 20.0 |
| S42 | 1.375 | 19.10 | 14.27 | 7.01 | 34.30 | 19.80 | 42.3 |
| S45 | 1.63 | 22.23 | 15.20 | 5.74 | 38.10 | 17.30 | 32.9 |
| S52 | 1.50 | 22.23 | 15.20 | 5.74 | 38.10 | 17.30 | 32.9 |
| S55 | 1.63 | 22.23 | 17.80 | 5.74 | 38.10 | 17.30 | 32.9 |
| S62 | 1.65 | 25.40 | 19.10 | 5.74 | 40.60 | 17.30 | 34.7 |
| S77 | 2.297 | 22.23 | 18.30 | 8.92 | 43.20 | 26.20 | 56.1 |
| S88 | 2.609 | 28.60 | 22.90 | 8.92 | 50.80 | 26.20 | 56.1 |
| CA550 | 1.63 | 19.81 | 16.70 | 7.19 | 36.00 | 19.30 | 45.0 |

All chains are electroless nickel plated

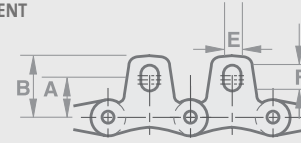
Agricultural Chain Range

K Attachment and M Attachment

K ATTACHMENT



M ATTACHMENT



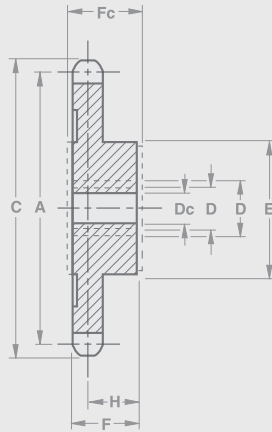
| Chain Ref. | Technical Details (mm) | | | | |
|----------------------|------------------------|---------------|-----------------|------------|-------------|
| Chain No | Transverse Pitch | Overall Width | Platform Height | Hole Width | Hole Length |
| K Attachments | | | | | |
| | B | A | H | E | F |
| S32 | 42.9 | 60.0 | 8.6 | 6.5 | 8.1 |
| S42 | 54.0 | 74.0 | 14.0 | 8.3 | 12.5 |
| S45 | 54.0 | 74.0 | 11.4 | 8.3 | 11.5 |
| S52 | 58.8 | 77.2 | 11.4 | 8.5 | 10.0 |
| S55 | 54.0 | 74.0 | 11.4 | 8.3 | 11.5 |
| S62 | 66.6 | 95.0 | 11.4 | 8.5 | 14.8 |
| S77 | 76.2 | 101.0 | 20.8 | 8.5 | 11.5 |
| S88 | 96.8 | 119.0 | 20.8 | 8.5 | 10.0 |
| CA550 | 54.0 | 71.4 | 12.7 | 8.35 | 11.5 |

| Chain Ref. | Technical Details (mm) | | | |
|----------------------|------------------------|-------------|------------|-------------|
| Chain No | Attachment Height | Hole Centre | Hole Width | Hole Length |
| M Attachments | | | | |
| | B | A | E | F |
| S32 | 26.0 | 17.3 | 6.5 | 6.9 |
| S42 | 34.1 | 23.6 | 8.3 | 11.5 |
| S45 | 30.0 | 19.8 | 8.3 | 11.5 |
| S52 | 31.6 | 22.1 | 8.5 | 10.0 |
| S55 | 30.0 | 19.8 | 8.3 | 11.5 |
| S62 | 38.1 | 24.6 | 8.5 | 14.7 |
| S77 | 49.8 | 36.3 | 8.5 | 11.5 |
| S88 | 55.4 | 43.7 | 8.5 | 10.0 |

Agricultural Chain

Standard Sprockets

Section 1



| Chain Ref. | | Technical Details (mm) | | | | | | | | | |
|--------------|----------|------------------------|----------|-----------------|---------------|---------------|-----------|------------------|----------------------|---|--------------------|
| No. of Teeth | Part No. | P.C.D. | Top Diam | Bore Stock Cast | Bore Machined | Bore Machined | Boss Diam | Boss Length Cast | Boss Length Machined | Chain ϕ from Boss Face when Machined | Weight (Cast Bore) |
| | | | | | MIN | MAX | | | | | kg |

For Chain No. S32

| | | A | C | Dc | D | D | E | Fc | F | H | |
|----|---------|--------|-----|----|----|----|----|----|----|------|------|
| 9 | 281063* | 85.39 | 94 | - | - | 38 | 64 | 41 | 38 | 31.0 | 1.13 |
| 10 | 281064* | 94.51 | 103 | - | - | 38 | 70 | 41 | 38 | 31.0 | 1.36 |
| 11 | 281065* | 103.68 | 113 | - | - | 38 | 70 | 41 | 38 | 31.0 | 1.47 |
| 12 | 281066* | 112.85 | 122 | - | - | 38 | 70 | 41 | 38 | 31.0 | 1.59 |
| 14 | 281068* | 131.27 | 140 | - | - | 45 | 76 | 41 | 38 | 31.0 | 2.15 |
| 15 | 281069* | 140.49 | 149 | - | - | 45 | 76 | 41 | 38 | 31.0 | 2.38 |
| 16 | 281070* | 149.73 | 159 | - | - | 45 | 76 | 41 | 38 | 31.0 | 2.49 |
| 18 | 281072 | 168.22 | 177 | - | - | 45 | 76 | 41 | 38 | 31.0 | 2.61 |
| 27 | 281078 | 251.61 | 261 | 19 | 24 | 50 | 89 | 51 | 44 | 32.0 | 4.54 |
| 30 | 281080 | 279.45 | 288 | 19 | 24 | 50 | 89 | 51 | 44 | 32.0 | 4.99 |
| 34 | 281082 | 316.59 | 325 | 19 | 24 | 50 | 89 | 51 | 44 | 32.0 | 5.44 |

For Chain No. S52

| | A | C | Dc | D | D | E | Fc | F | H | | |
|----|---------|--------|-----|----|----|----|-----|----|----|------|-------|
| 9 | 281123* | 111.40 | 125 | - | - | 48 | 83 | 54 | 51 | 41.0 | 2.38 |
| 10 | 281124* | 123.39 | 136 | - | - | 50 | 89 | 54 | 51 | 41.0 | 2.84 |
| 11 | 281125* | 135.23 | 148 | - | - | 50 | 89 | 54 | 51 | 41.0 | 3.29 |
| 12 | 281126* | 147.22 | 161 | - | - | 50 | 89 | 54 | 51 | 41.0 | 3.63 |
| 13 | 281127* | 159.21 | 172 | - | - | 50 | 89 | 54 | 51 | 41.0 | 4.08 |
| 14 | 281128* | 171.22 | 184 | - | - | 60 | 102 | 54 | 51 | 41.0 | 4.99 |
| 15 | 281129* | 183.26 | 197 | - | - | 60 | 102 | 54 | 51 | 41.0 | 5.44 |
| 16 | 281130 | 195.30 | 209 | 19 | 24 | 60 | 102 | 57 | 51 | 41.0 | 5.44 |
| 17 | 281131 | 207.34 | 220 | 19 | 24 | 60 | 102 | 57 | 51 | 41.0 | 5.67 |
| 18 | 281132 | 219.41 | 233 | 19 | 24 | 60 | 102 | 57 | 51 | 41.0 | 5.90 |
| 27 | 281138 | 328.19 | 341 | 24 | 28 | 65 | 108 | 64 | 57 | 41.5 | 9.07 |
| 30 | 281140 | 364.49 | 378 | 24 | 28 | 65 | 108 | 64 | 57 | 41.5 | 9.98 |
| 34 | 281142 | 412.93 | 426 | 24 | 28 | 70 | 121 | 64 | 57 | 41.5 | 13.15 |

For Chain No. S45

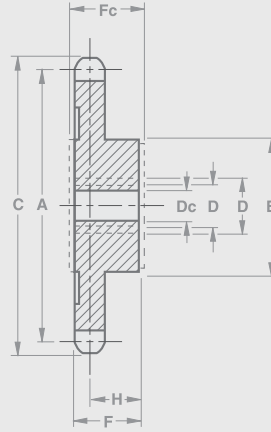
| | A | C | Dc | D | D | E | Fc | F | H | | |
|----|---------|--------|-----|----|----|----|-----|----|----|------|-------|
| 9 | 281093* | 121.06 | 134 | - | - | 50 | 89 | 54 | 51 | 41.0 | 2.95 |
| 10 | 281094* | 133.99 | 147 | - | - | 50 | 89 | 54 | 51 | 41.0 | 3.29 |
| 12 | 281096* | 159.97 | 173 | - | - | 50 | 89 | 54 | 51 | 41.0 | 4.08 |
| 15 | 281099 | 199.14 | 212 | 19 | 24 | 60 | 102 | 57 | 51 | 41.0 | 5.44 |
| 18 | 281102 | 238.43 | 252 | 19 | 24 | 60 | 102 | 57 | 51 | 41.0 | 6.58 |
| 27 | 281108 | 356.62 | 370 | 24 | 28 | 65 | 108 | 64 | 57 | 41.5 | 9.98 |
| 30 | 281110 | 396.09 | 409 | 24 | 28 | 65 | 108 | 64 | 57 | 41.5 | 10.89 |
| 34 | 281112 | 448.72 | 462 | 24 | 28 | 70 | 121 | 70 | 64 | 48.0 | 14.51 |

* Small solid sprockets. Other sprockets available on request.

Sprockets can be modified on request. When keyways are requested, large sprockets are faced both sides of the boss - small solid sprockets are faced on boss side only. Sprockets for other sizes of chain - details on request.

Agricultural Chain

Standard Sprockets



| Chain Ref. | | Technical Details (mm) | | | | | | | | | |
|--------------|----------|------------------------|----------|-----------------|---------------|---------------|-----------|------------------|----------------------|------------------------------------|--------------------|
| No. of Teeth | Part No. | P.C.D. | Top Diam | Bore Stock Cast | Bore Machined | Bore Machined | Boss Diam | Boss Length Cast | Boss Length Machined | Chain from Boss Face when Machined | Weight (Cast Bore) |
| | | | | | MIN | MAX | | | | | € kg |

For Chain No. S62

| | | A | C | Dc | D | D | E | Fc | F | H | |
|----|---------|--------|-----|----|----|----|-----|----|----|------|-------|
| 9 | 281153* | 122.53 | 135 | - | - | 50 | 89 | 60 | 57 | 46.0 | 3.29 |
| 10 | 281154* | 135.64 | 149 | - | - | 60 | 102 | 60 | 57 | 46.0 | 4.31 |
| 11 | 281155* | 148.77 | 162 | - | - | 60 | 102 | 60 | 57 | 46.0 | 4.99 |
| 12 | 281156* | 161.93 | 175 | - | - | 60 | 102 | 60 | 57 | 46.0 | 5.44 |
| 13 | 281157* | 175.13 | 188 | - | - | 60 | 102 | 60 | 57 | 46.0 | 6.12 |
| 14 | 281158* | 188.34 | 201 | - | - | 65 | 108 | 60 | 57 | 46.0 | 6.58 |
| 15 | 281159 | 201.57 | 215 | 19 | 24 | 65 | 108 | 64 | 57 | 46.0 | 7.03 |
| 16 | 281160 | 214.83 | 228 | 19 | 24 | 65 | 108 | 64 | 57 | 46.0 | 7.26 |
| 17 | 281161 | 228.09 | 241 | 19 | 24 | 65 | 108 | 64 | 57 | 46.0 | 7.71 |
| 18 | 281162 | 241.35 | 254 | 19 | 24 | 65 | 108 | 64 | 57 | 46.0 | 8.16 |
| 27 | 281168 | 361.01 | 374 | 24 | 28 | 70 | 121 | 70 | 64 | 46.5 | 12.70 |
| 30 | 281170 | 400.94 | 414 | 24 | 28 | 70 | 121 | 70 | 64 | 46.5 | 14.06 |
| 34 | 281172 | 454.23 | 467 | 24 | 28 | 75 | 133 | 76 | 70 | 53.0 | 19.05 |

* Small solid sprockets. Other sprockets available on request.

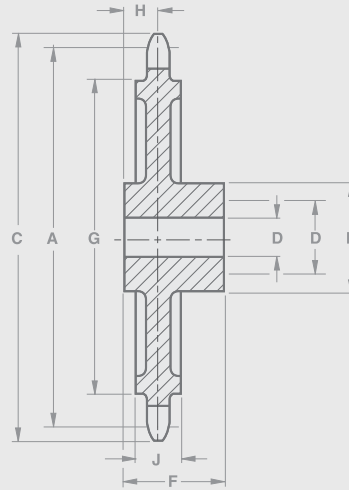
Sprockets can be modified on request. When keyways are requested, large sprockets are faced both sides of the boss - small solid sprockets are faced on boss side only. Sprockets for other sizes of chain - details on request.

Section 2

Conveyor Sprocket Details

Standard Conveyor Sprockets

To Suit BS4116 Part 4



3000 lbf, 13000 Newtons Breaking Load

| Sprocket Ref. | | | | Technical Details (mm) | | | | | | | | | |
|---------------|----------|--------------|-----------------|------------------------|-----------|--------------|--------------|----------------|----------------|------------|-------------------------|-------------------|------------------|
| Pitch Inch | Pitch mm | No. of Teeth | Renold Part No. | PCD | Top Diam. | Shroud Diam. | Shroud Width | Bore Diam. MIN | Bore Diam. MAX | Boss Diam. | ☺ of Tooth to End Face* | Distance Through* | Weight Approx kg |

12.1mm Diameter Roller

| | | | | A | C | G | J | D | D | E | H | F | |
|-----|------|----|---------|--------|-----|-----|----|----|----|----|-----|----|-----|
| 1.5 | 38.1 | 8 | 208121# | 99.57 | 109 | - | - | 16 | 32 | 57 | 9.5 | 38 | 0.9 |
| | | 12 | 208125# | 147.22 | 157 | - | - | 16 | 38 | 76 | 9.5 | 45 | 2.0 |
| 2.0 | 50.8 | 8 | 208212# | 132.74 | 142 | - | - | 24 | 38 | 76 | 9.5 | 45 | 1.8 |
| | | 12 | 208216# | 196.27 | 207 | 156 | 19 | 24 | 45 | 89 | 9.5 | 51 | 3.9 |
| 3.0 | 76.2 | 8 | 208391# | 199.11 | 208 | 150 | 19 | 24 | 45 | 89 | 9.5 | 51 | 3.7 |
| | | 12 | 208395# | 294.41 | 305 | 250 | 19 | 24 | 45 | 89 | 9.5 | 51 | 7.9 |

25.4mm Diameter Roller

| | | | | A | C | G | J | D | D | E | H | F | |
|-----|-------|----|----------|--------|-----|-----|----|----|----|-----|-----|----|------|
| 1.5 | 38.1 | 8 | 208151## | 99.57 | 105 | - | - | 16 | 32 | 57 | 9.5 | 38 | 0.9 |
| | | 12 | 208155## | 147.22 | 157 | - | - | 16 | 38 | 76 | 9.5 | 45 | 2.0 |
| 2.0 | 50.8 | 8 | 208241## | 132.74 | 142 | - | - | 24 | 38 | 76 | 9.5 | 45 | 1.8 |
| | | 12 | 208245## | 196.27 | 207 | 156 | 19 | 24 | 45 | 89 | 9.5 | 51 | 3.9 |
| 3.0 | 76.2 | 8 | 208422## | 199.11 | 208 | 150 | 19 | 24 | 45 | 89 | 9.5 | 51 | 3.7 |
| | | 12 | 208426## | 294.41 | 306 | 250 | 19 | 24 | 45 | 89 | 9.5 | 51 | 7.9 |
| 4.0 | 101.6 | 8 | 208501## | 265.51 | 274 | 212 | 19 | 24 | 45 | 89 | 9.5 | 51 | 7.0 |
| | | 12 | 208505## | 392.56 | 404 | 345 | 19 | 24 | 50 | 102 | 9.5 | 64 | 12.2 |

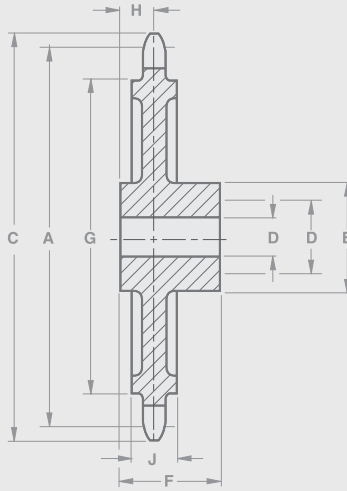
Sprockets with cut teeth ## sprockets with cast teeth.

* After machine facing the boss.

Boss and Distance Through dimensions may vary, please call to discuss your requirements.

Standard Conveyor Sprockets

To Suit BS4116 Part 4



4500 lbf, 20000 Newtons Breaking Load

| Sprocket Ref. | | | | Technical Details (mm) | | | | | | | | | |
|---------------|----------|--------------|-----------------|------------------------|-----------|--------------|--------------|----------------|----------------|------------|-------------------------|-------------------|------------------|
| Pitch Inch | Pitch mm | No. of Teeth | Renold Part No. | PCD | Top Diam. | Shroud Diam. | Shroud Width | Bore Diam. MIN | Bore Diam. MAX | Boss Diam. | ∅ of Tooth to End Face* | Distance Through* | Weight Approx kg |

25.4mm Diameter Roller

| | | | | A | C | G | J | D | D | E | H | F | |
|-----|------|----|----------|--------|-----|-----|----|----|----|----|-----|----|-----|
| 1.5 | 38.1 | 8 | 208151## | 99.57 | 105 | - | - | 16 | 32 | 57 | 9.5 | 38 | 0.9 |
| | | 12 | 208155## | 147.22 | 157 | - | - | 16 | 38 | 76 | 9.5 | 45 | 2.0 |
| 2.0 | 50.8 | 8 | 208241## | 132.74 | 142 | - | - | 24 | 38 | 76 | 9.5 | 45 | 1.8 |
| | | 12 | 208245## | 196.27 | 207 | 156 | 19 | 24 | 45 | 89 | 9.5 | 51 | 3.9 |
| 3.0 | 76.2 | 8 | 208422## | 199.11 | 208 | 150 | 19 | 24 | 45 | 89 | 9.5 | 51 | 3.7 |
| | | 12 | 208426## | 294.41 | 306 | 250 | 19 | 24 | 45 | 89 | 9.5 | 51 | 7.9 |

6000 lbf, 27000 Newtons and 7500 lbf, 33000 Newtons Breaking Load

| Sprocket Ref. | | | | Technical Details (mm) | | | | | | | | | |
|---------------|----------|--------------|-----------------|------------------------|-----------|--------------|--------------|----------------|----------------|------------|-------------------------|-------------------|------------------|
| Pitch Inch | Pitch mm | No. of Teeth | Renold Part No. | PCD | Top Diam. | Shroud Diam. | Shroud Width | Bore Diam. MIN | Bore Diam. MAX | Boss Diam. | ∅ of Tooth to End Face* | Distance Through* | Weight Approx kg |
| | | | | A | C | G | J | D | D | E | H | F | |
| 2.0 | 50.8 | 8 | 200121## | 132.74 | 144 | - | - | 24 | 38 | 76 | 12.5 | 51 | 2.3 |
| | | 12 | 200125## | 196.27 | 212 | - | - | 24 | 50 | 102 | 12.5 | 51 | 5.4 |
| 3.0 | 76.2 | 8 | 200302## | 199.11 | 215 | - | - | 24 | 50 | 102 | 12.5 | 51 | 5.4 |
| | | 10 | 200304## | 246.58 | 264 | 193 | 25 | 28 | 65 | 114 | 12.5 | 64 | 8.6 |
| 4.0 | 101.6 | 12 | 200306## | 294.41 | 314 | 243 | 25 | 28 | 65 | 114 | 12.5 | 64 | 10.0 |
| | | 8 | 200392## | 265.51 | 281 | 204 | 25 | 35 | 65 | 114 | 12.5 | 64 | 8.6 |
| 6.0 | 152.4 | 10 | 200394## | 328.78 | 347 | 272 | 25 | 35 | 65 | 114 | 12.5 | 64 | 13.8 |
| | | 12 | 200396## | 392.56 | 411 | 338 | 25 | 38 | 70 | 127 | 12.5 | 70 | 16.1 |
| 6.0 | 152.4 | 8 | 200571## | 398.25 | 414 | 326 | 25 | 38 | 70 | 127 | 12.5 | 70 | 19.7 |
| | | 12 | 200575## | 588.82 | 608 | 527 | 25 | 38 | 75 | 133 | 12.5 | 76 | 34.2 |

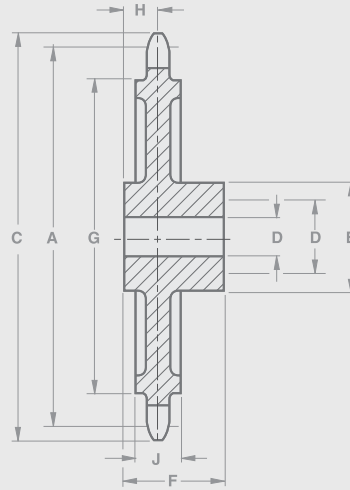
Sprockets with cast teeth.

* After machine facing the boss.

Boss and Distance Through dimensions may vary, please call to discuss your requirements.

Standard Conveyor Sprockets

To Suit BS4116 Part 4



12000 lbf, 54000 Newtons and 15000 lbf, 67000 Newtons Breaking Load

| Sprocket Ref. | | | | Technical Details (mm) | | | | | | | | | |
|---------------|-------------|-----------------|--------------------|------------------------|-----------|--------------|-----------------|-------------------|-------------------|------------|----------------------------|----------------------|------------------------|
| Pitch Inch | Pitch mm | No. of Teeth | Renold Part No. | PCD | Top Diam. | Shroud Diam. | Shroud Width | Bore Diam. MIN | Bore Diam. MAX | Boss Diam. | ∠ of Tooth to End Face* | Distance Through* | Weight Approx kg |
| | | | | A | C | G | J | D | D | E | H | F | |
| 3.0 | 76.2 | 8 | 201211## | 199.11 | 218 | - | - | 38 | 70 | 114 | 16 | 70 | 8.4 |
| | | 12 | 201215## | 294.41 | 318 | 230 | 32 | 38 | 75 | 133 | 16 | 76 | 15.0 |
| 4.0 | 101.6 | 8 | 201301## | 265.51 | 286 | 192 | 32 | 38 | 70 | 127 | 16 | 70 | 10.9 |
| | | 12 | 201305## | 392.56 | 415 | 325 | 32 | 48 | 80 | 140 | 16 | 76 | 20.2 |
| 6.0 | 152.4 | 8 | 201481## | 398.25 | 418 | 314 | 32 | 48 | 80 | 140 | 16 | 76 | 21.5 |
| | | 12 | 201485## | 588.82 | 612 | 514 | 32 | 48 | 90 | 165 | 16 | 89 | 41.3 |

24000 lbf, 107000 Newtons and 30000 lbf, 134000 Newtons Breaking Load

| Sprocket Ref. | | | | Technical Details (mm) | | | | | | | | | |
|---------------|-------------|-----------------|--------------------|------------------------|-----------|--------------|-----------------|-------------------|-------------------|------------|----------------------------|----------------------|------------------------|
| Pitch Inch | Pitch mm | No. of Teeth | Renold Part No. | PCD | Top Diam. | Shroud Diam. | Shroud Width | Bore Diam. MIN | Bore Diam. MAX | Boss Diam. | ∠ of Tooth to End Face* | Distance Through* | Weight Approx kg |
| | | | | A | C | G | J | D | D | E | H | F | |
| 4.0 | 101.6 | 8 | 202121## | 265.51 | 290 | - | - | 48 | 85 | 152 | 19 | 83 | 16.6 |
| | | 12 | 202125## | 392.56 | 420 | 312 | 38 | 55 | 95 | 165 | 19 | 95 | 31.3 |
| 6.0 | 152.4 | 8 | 202301## | 398.25 | 423 | 301 | 38 | 55 | 95 | 165 | 19 | 95 | 32.2 |
| | | 12 | 202305## | 588.82 | 617 | 502 | 38 | 60 | 110 | 196 | 19 | 130 | 63.0 |

Sprockets with cast teeth.

* After machine facing the boss.

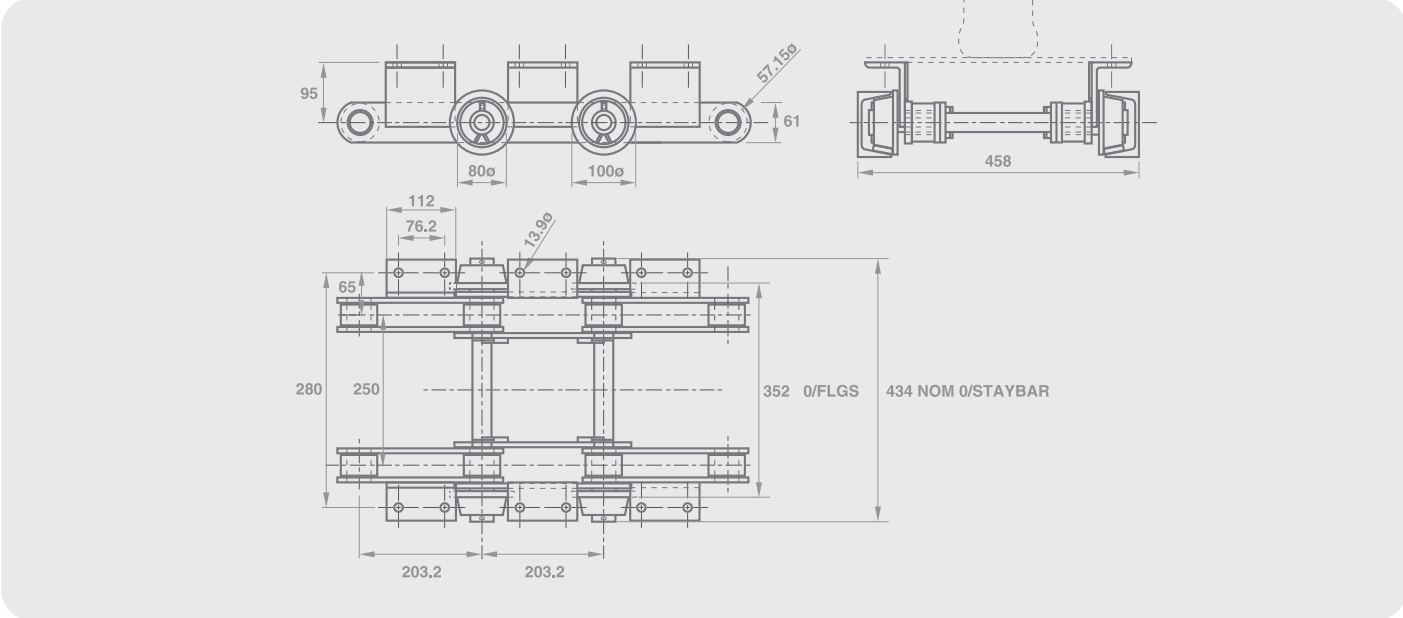
Boss and Distance Through dimensions may vary, please call to discuss your requirements.

Section 3

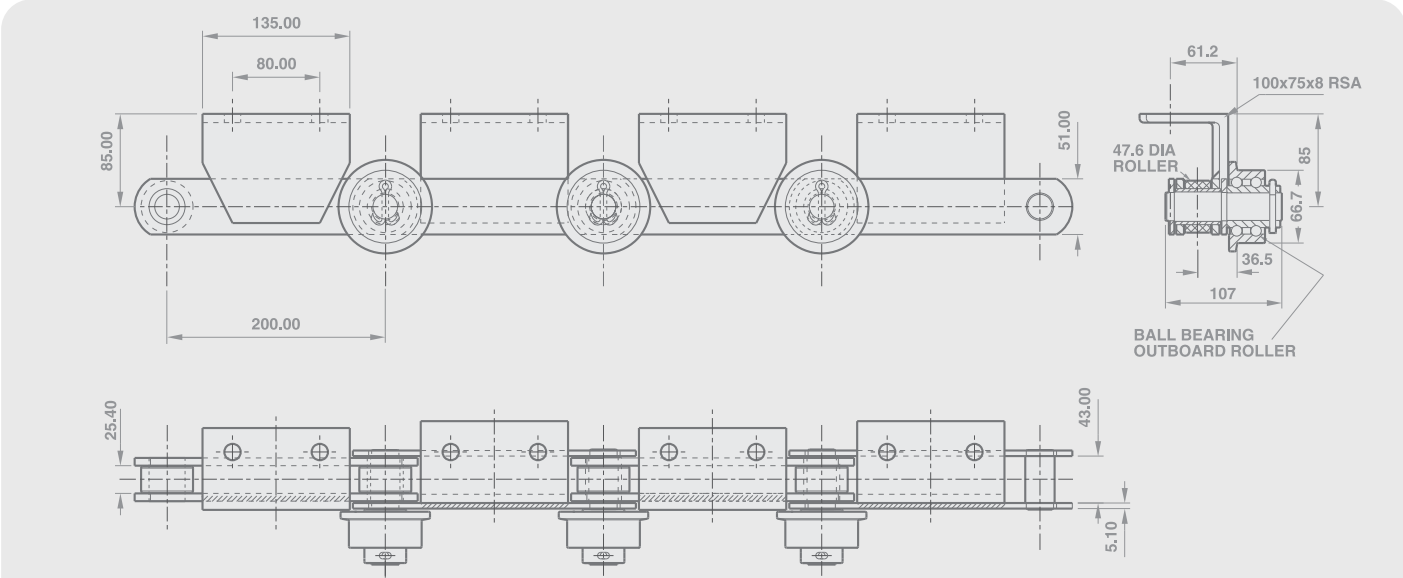
Industrial Applications & Special Engineered Chain

Automotive Manufacturing Industry

Final Assembly Conveyor



Water Test Station Conveyor



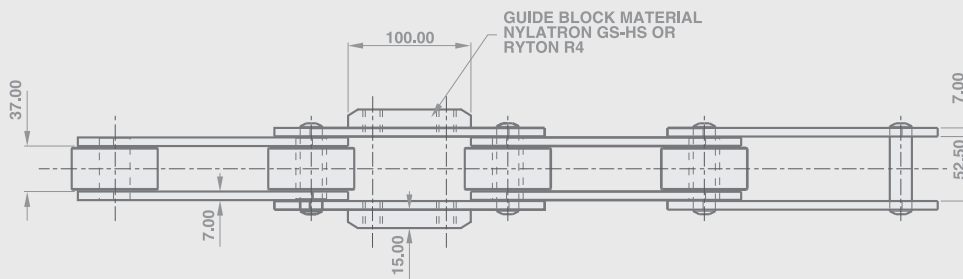
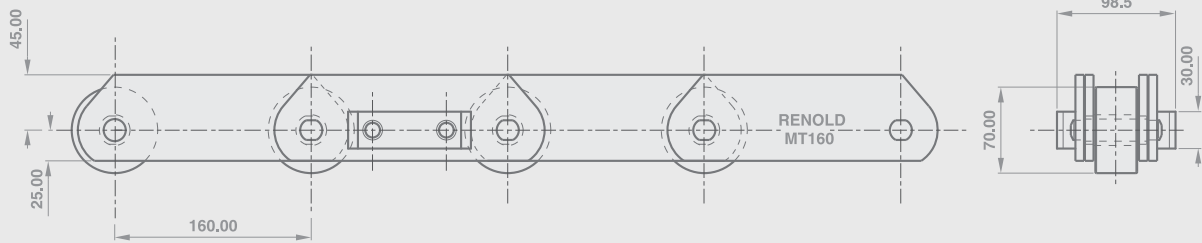
134 kN BREAKING LOAD CHAIN, 200mm PITCH
USED FOR TRANSPORTING COMPLETED CARS
THROUGH THE WATER TEST STATION.

Renold currently manufacture a range of chains that have been tailored for the specific needs of the automotive manufacturing industry. The chains used range from the British Standard, ISO Standard, adapted standard chains and in some cases chains specifically designed for particular applications.

The special environments range from assembly conveyors - some incorporating assembly jigs - to water test and oven chains for the drying of body coatings.

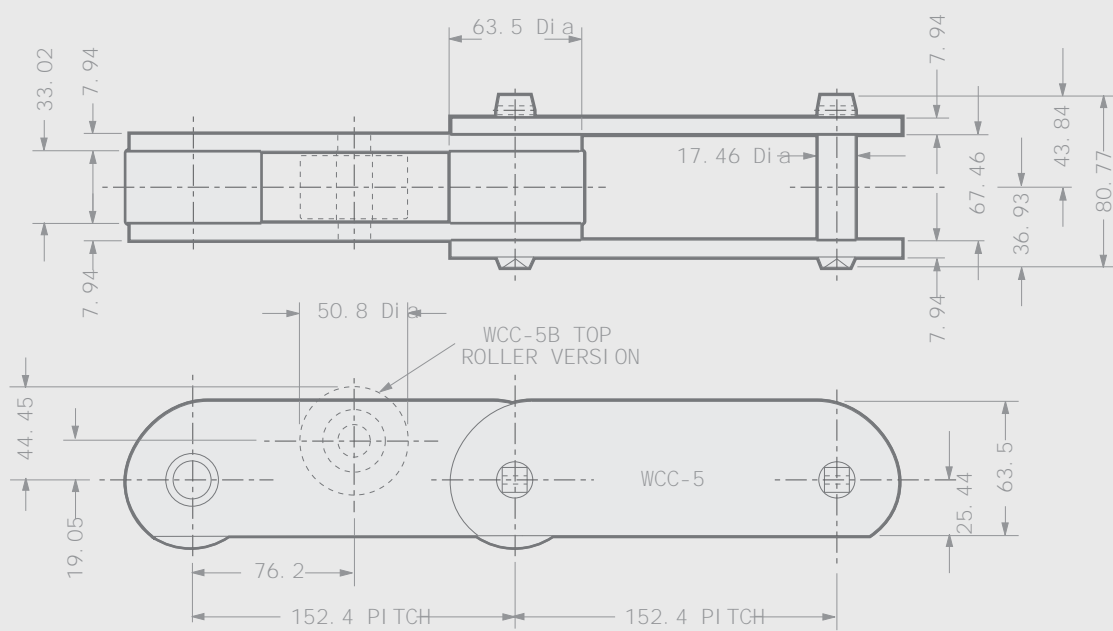
Automotive Manufacturing Industry

Assembly or Drying Oven Conveyor



160 mm PITCH 160 kN BREAKING LOAD I.S.O. CHAIN
USED FOR CAR BODY MOVEMENT THROUGH ASSEMBLY
OR THROUGH DRYING OVENS

Assembly or Drying Oven Conveyor



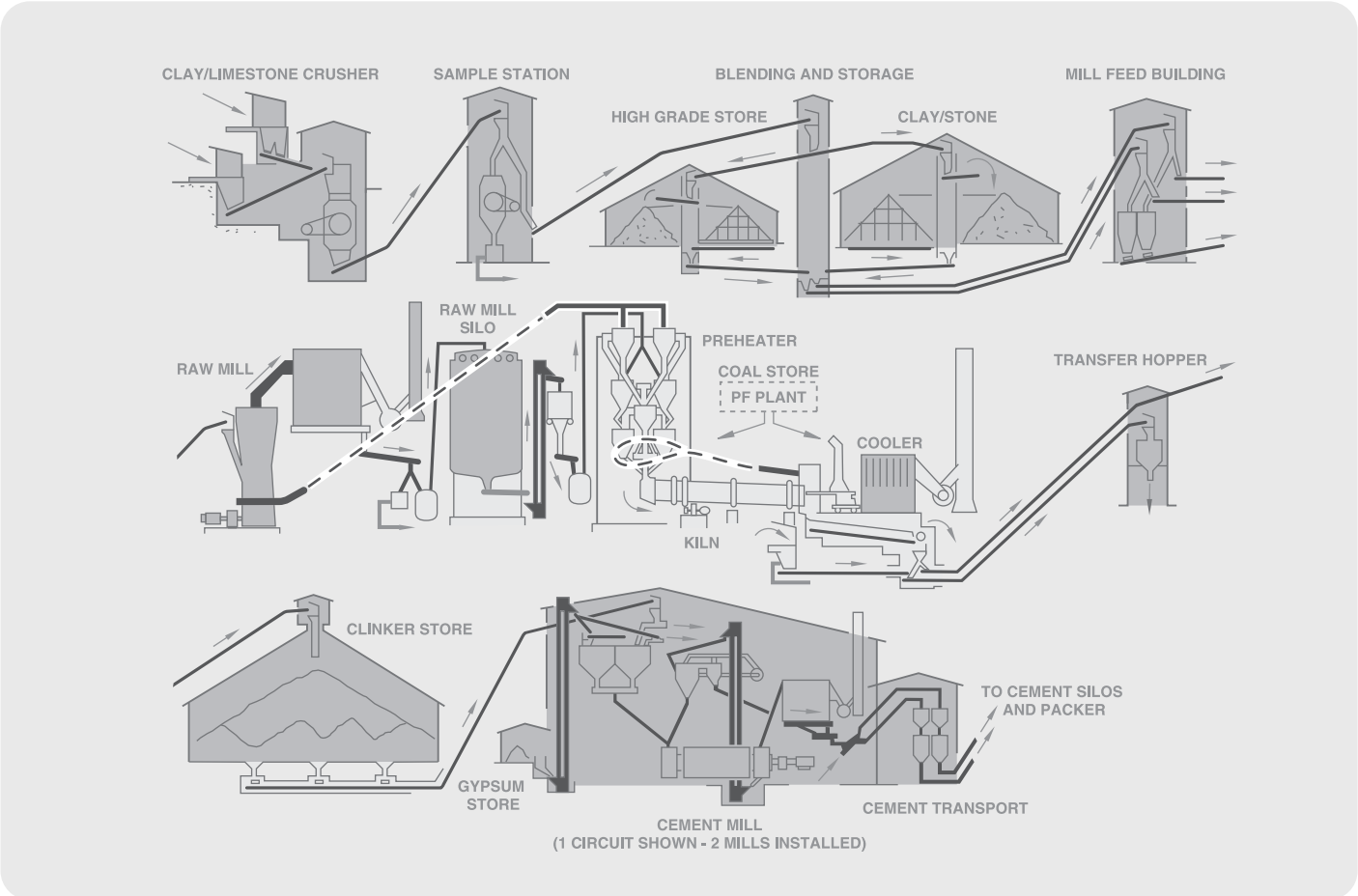
Cement Industry



Special Double Strand Conveyor Chain is designed to give an enhanced chain life in the hot and dusty conditions of a Cement Clinker.

Section 3

Flow Chart - Cement Works



Cement Industry

Raw Material Reclaim Conveyors

These are situated in the raw material store. Their function is to move the raw material to a distribution conveyor, which is usually a belt conveyor.

The raw material stores are either circular buildings around which the material is piled, or long rectangular areas down which piles of material are kept.

The reclaimer conveyor is usually a twin strand scraper conveyor with the bottom strand used to scrape the raw material from the pile to a collection point. Because of the arduous duty these chains are usually quite high breaking load (i.e. 500 KN +). The chains used are either to ISO or German DIN standards.



Clay/Limestone Store showing stacker and reclaimer. Max. capacity 43000 tonnes, rail dia. 88m.

Apron Feeder Conveyors



These conveyors are usually situated under hoppers, and are used to control feed material from the hopper for process i.e. to a crusher.

Apron feeders are frequently called on to handle heavy bulk material in large pieces, often abrasive in character, such as limestone rock. Material can be loaded into the bunker from an appreciable height straight onto the conveyor, i.e. from a 60 ton dumper truck, and

in large pieces up to 5 tons. In these circumstances all components, particularly the chains, have to be of extremely robust construction.

Usually a layer of material is left on the conveyor so that when a further load is dropped, the original material acts as a cushion for the conveyor.



The conveyor consists of two or more strands of solid bearing pin chain bolted to heavy cast or fabricated apron slats. They are driven at a very slow speed intermittently to ensure regulation of material flow.

Escalator Chain

Renold has manufactured and supplied several hundred thousand metres of escalator chain to manufacturers and end users of this precision product. With over 40 years' experience of supplying the industry, product quality monitored to ISO9002 / BS5750 standards and statistical process control (SPC), Renold is recognised as one of the world's leading manufacturers of escalator chain.

Chain Life

With safety factors that meet or exceed the standard, Renold step chain is designed for extended trouble-free life to meet the demands of the industry.

Chain Performance

The optimum combination of materials, heat treatment and maximum bearing surfaces is used to produce a durable and reliable chain for most operating environments.

Step Pitch Accuracy

Renold escalator step chains are manufactured to exact specifications. Computer controlled matching and pairing ensures better gearing, lower friction, reduced wear and low levels of noise, resulting in a longer chain life.

Lubrication

All step chains are lubricated and protected against corrosion, ready for assembly into new or existing escalators. Specific customer requirements for factory lubrication, both grease and oil, can be included in the chain specification.

Packaging

Whether for on-site replacement or factory assembly, all step chains can be packaged to allow for special storage or unusual transport arrangements, with the chains clearly identified in paired handling lengths ready for installation.

Product Range

The extensive Renold step chain product range covers low rise store types, medium to high rise public service escalators and moving walkways. For specific design details on new or existing applications, contact our technical sales staff.

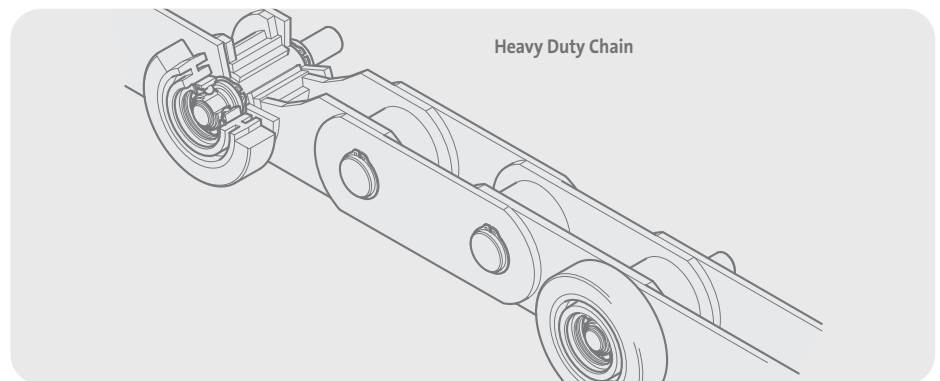
Shown here are some examples of Renold step chains.

Transmission Chain

Renold transmission chains, fitted as original equipment on many escalators, also available to both British or American standards.

Product Development

Escalators in airports, train stations, metro links, bus terminals and ferry ports are conveying an ever increasing number of people. The introduction of large shopping malls, ever larger office blocks and leisure complexes set new standards for the escalator manufacturer with reduced opportunities for maintenance. Renold escalator chains have been designed using advanced CAD techniques to meet these new demands. Reduced maintenance options are available for some of these chains.



Heavy Duty Chain

BS 5750/ISO 9002 approved

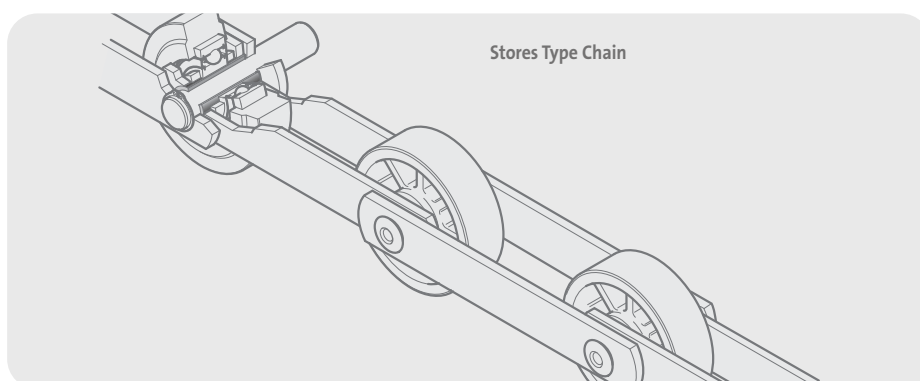
Supplier to major European escalator manufacturers

Proven performance

Technical innovation and product development

Applicational back-up

Worldwide distribution



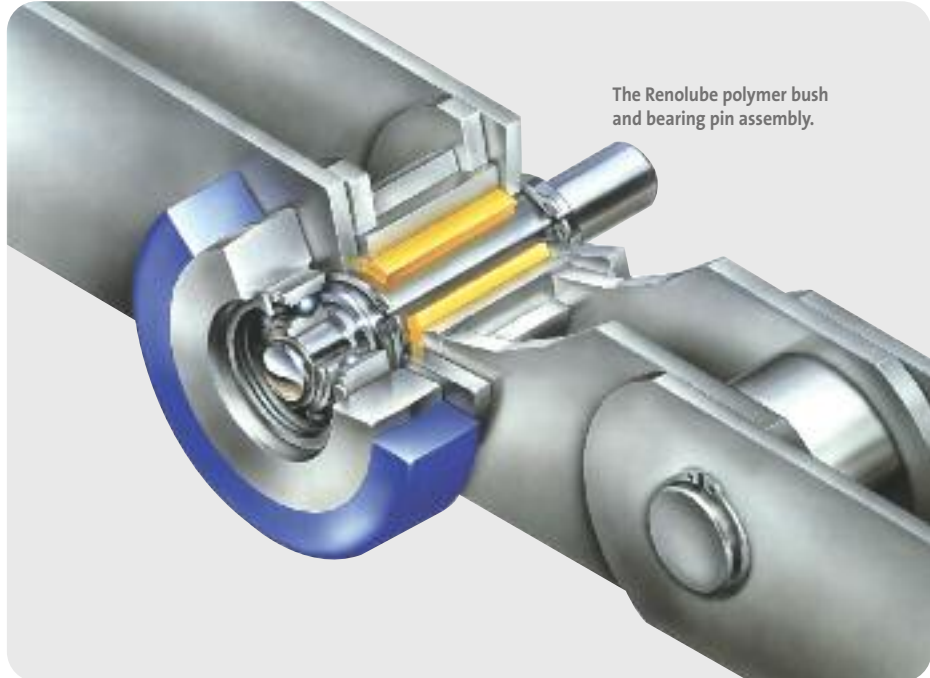
Stores Type Chain

Renolube - Escalator Step Chain

Renolube Escalator Chain has been developed as a result of extensive prototype testing in arduous applications to exceed the industry's ever increasing demand for lower service costs and longer lifetime operation. Renold is recognised, with over 40 years' experience, as one of the world's leading manufacturers of escalator chains. The Renolube composite polymer bush, in conjunction with a specially designed bearing pin, has been formulated to ensure maximum lifetime operation. The principle advantages are:-

- Substantially lower life cycle costs with development and field tests indicating a life in excess of 40 years.
- Cleaner environment because of reduced free grease lubrication.
- Significantly lower service costs in that periodic grease lubrication is not required.
- Stable and predictable wear rates are a particular feature of Renolube when compared to conventionally greased chains which are prone to random failure.

RENOLUBE



Economy

Renolube offers a fully cost effective solution when replacing grease lubrication systems by considerably reducing expensive maintenance and life cycle costs.

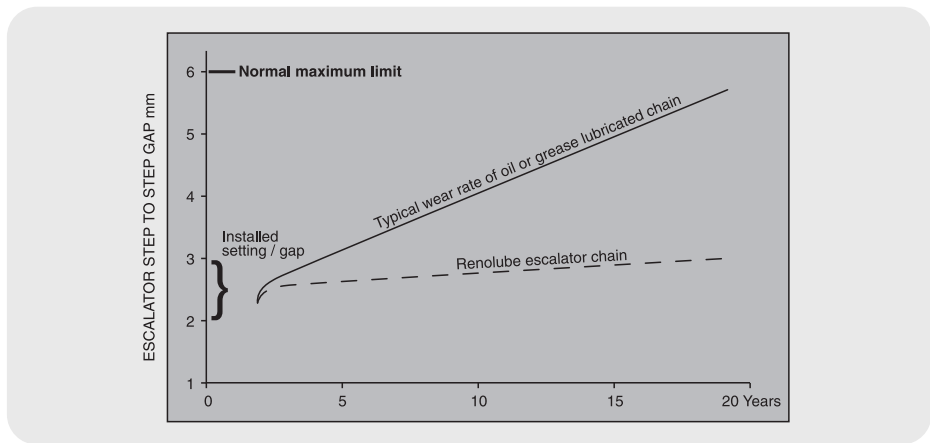
Endurance

Renolube Escalator Chain in the public service environment has proven to be extremely wear resistant. Installation of the Renolube Escalator Chain provides lifetime confidence with a chain design life of over 40 years.

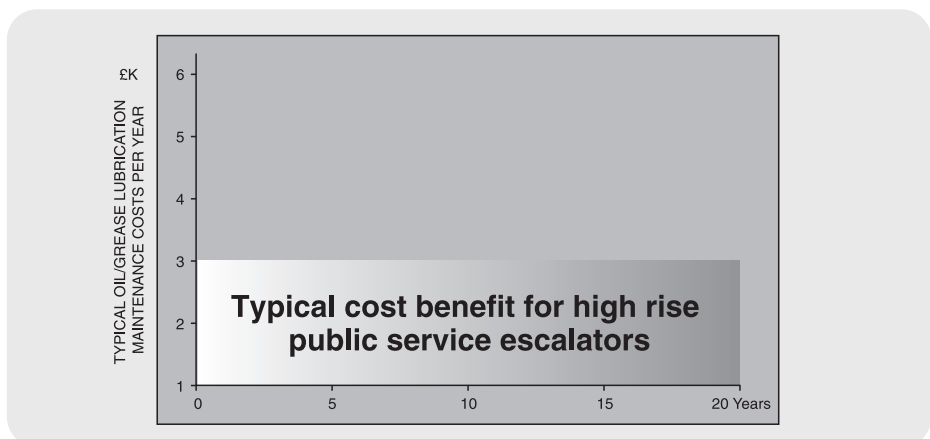
Environment and Safety

The elimination of copious amounts of lubricating oils and grease creates a cleaner and safer environment, thereby reducing fire risk.

TYPICAL WEAR/LIFE



REDUCED MAINTENANCE - WHOLE LIFE COST BENEFIT



Palm Oil Industry

Renold - ultimate design

Renold have enhanced the specifications of its new range of chain to surpass the increasing demands of today and tomorrow. When reliability is paramount, choose Renold.

Special Design Features

Correct chain selection is essential for optimum performance. Renold's experienced sales, production and design staff are always available to advise on particular products and applications.



Section 3

Large diameter deep case hardened bearing pin with softened ends and all round riveting for additional security. The Renold large pin diameter increases the bearing area thus reducing bearing pressure and prolonging chain life.

Optimum heat treatment processes on pin, bush and roller for greater wear resistance.

Robust bush with keyed feature to prevent distortion during assembly ensuring excellent concentricity.

Substantial diameter rollers coupled with a large bush diameter to reduce bearing pressure and improve wear performance.

Bush projection designed to reduce friction between the inner and outer plates and maintain clearances during operation allowing efficient lubricant penetration.

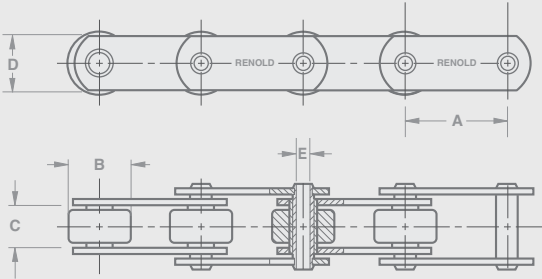
Tightly controlled plate production methods resulting in the optimum interference fits for increased fatigue resistance.

Precise pitch control ensures excellent gearing with chain wheels resulting in improved performance.

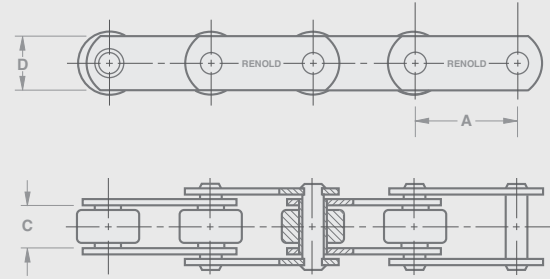
New material specification for increased strength with significant increase in chain breaking load.

Palm Oil Industry

HOLLOW BEARING PINS



SOLID BEARING PINS



Standard

| Chain Ref. | Pitch | | Breaking Load | | Roller Dia | | Inside Width | | Plate Depth | | Hollow Pin Bore Dia | | Pin/Bush Bearing Area | | Mass kg/m |
|------------|-------|----|---------------|---------|------------|----|--------------|----|-------------|----|---------------------|----|-----------------------|-------|-----------|
| | inch | mm | lbf | Newtons | inch | mm | inch | mm | inch | mm | inch | mm | sq inch | sq mm | |
| | A | A | | | B | B | C | C | D | D | E | E | | | |

Solid Bearing Pin

| | | | | | | | | | | | | | | | |
|--------|-----|-------|-------|--------|-------|------|------|------|------|------|---|---|------|------|-------|
| S45161 | 4.0 | 101.6 | 18000 | 80000 | 1.875 | 47.6 | 0.75 | 19.0 | 1.50 | 38.1 | - | - | 0.94 | 603 | 6.43 |
| S45241 | 6.0 | 152.4 | 18000 | 80000 | 1.875 | 47.6 | 0.75 | 19.0 | 1.50 | 38.1 | - | - | 0.94 | 603 | 5.24 |
| S45162 | 4.0 | 101.6 | 32000 | 142000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | - | - | 1.75 | 1128 | 14.22 |
| S45242 | 6.0 | 152.4 | 32000 | 142000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | - | - | 1.75 | 1128 | 11.18 |
| S45243 | 6.0 | 152.4 | 50000 | 222000 | 3.50 | 88.9 | 1.50 | 38.1 | 2.40 | 61.0 | - | - | 2.88 | 1856 | 24.15 |

Hollow Bearing Pin

| | | | | | | | | | | | | | | | |
|--------|-----|-------|-------|--------|-------|------|------|------|------|------|------|------|------|------|-------|
| S05161 | 4.0 | 101.6 | 15000 | 67000 | 1.875 | 47.6 | 0.75 | 19.0 | 1.50 | 38.1 | 0.52 | 13.2 | 0.94 | 603 | 5.91 |
| S05162 | 4.0 | 101.6 | 26000 | 116000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | 0.79 | 20.1 | 1.75 | 1128 | 12.74 |
| S05242 | 6.0 | 152.4 | 26000 | 116000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | 0.79 | 20.1 | 1.75 | 1128 | 10.91 |
| S05243 | 6.0 | 152.4 | 44000 | 196000 | 3.500 | 88.9 | 1.50 | 38.1 | 2.40 | 61.0 | 0.91 | 23.1 | 2.88 | 1856 | 22.18 |

Premier

| Chain Ref. | Pitch | | Breaking Load | | Roller Dia | | Inside Width | | Plate Depth | | Hollow Pin Bore Dia | | Pin/Bush Bearing Area | | Mass kg/m |
|------------|-------|----|---------------|---------|------------|----|--------------|----|-------------|----|---------------------|----|-----------------------|-------|-----------|
| | inch | mm | lbf | Newtons | inch | mm | inch | mm | inch | mm | inch | mm | sq inch | sq mm | |
| | A | A | | | B | B | C | C | D | D | E | E | | | |

Solid Bearing Pin

| | | | | | | | | | | | | | | | |
|--------|-----|-------|-------|--------|-------|------|------|------|------|------|---|---|------|------|-------|
| E45161 | 4.0 | 101.6 | 26000 | 116000 | 1.875 | 47.6 | 0.75 | 19.0 | 1.50 | 38.1 | - | - | 0.94 | 603 | 6.43 |
| E45241 | 6.0 | 152.4 | 26000 | 116000 | 1.875 | 47.6 | 0.75 | 19.0 | 1.50 | 38.1 | - | - | 0.94 | 603 | 5.24 |
| E45162 | 4.0 | 101.6 | 50000 | 222000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | - | - | 1.75 | 1128 | 14.22 |
| E45242 | 6.0 | 152.4 | 50000 | 222000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | - | - | 1.75 | 1128 | 11.18 |

Hollow Bearing Pin

| | | | | | | | | | | | | | | | |
|--------|-----|-------|-------|--------|-------|------|------|------|------|------|------|------|------|------|-------|
| E05161 | 4.0 | 101.6 | 17000 | 76000 | 1.875 | 47.6 | 0.75 | 19.0 | 1.50 | 38.1 | 0.52 | 13.2 | 0.94 | 603 | 5.91 |
| E05162 | 4.0 | 101.6 | 36000 | 160000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | 0.79 | 20.1 | 1.75 | 1128 | 12.74 |
| E05242 | 6.0 | 152.4 | 36000 | 160000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | 0.79 | 20.1 | 1.75 | 1128 | 10.91 |

Premier Extra

| Chain Ref. | Pitch | | Breaking Load | | Roller Dia | | Inside Width | | Plate Depth | | Hollow Pin Bore Dia | | Pin/Bush Bearing Area | | Mass kg/m |
|------------|-------|----|---------------|---------|------------|----|--------------|----|-------------|----|---------------------|----|-----------------------|-------|-----------|
| | inch | mm | lbf | Newtons | inch | mm | inch | mm | inch | mm | inch | mm | sq inch | sq mm | |
| | A | A | | | B | B | C | C | D | D | E | E | | | |

Solid Bearing Pin

| | | | | | | | | | | | | | | | |
|--------|-----|-------|-------|--------|-------|------|------|------|------|------|---|---|------|------|-------|
| X62161 | 4.0 | 101.6 | 30000 | 134000 | 1.875 | 47.6 | 0.75 | 19.0 | 1.50 | 38.1 | - | - | 0.94 | 603 | 6.43 |
| X62241 | 6.0 | 152.4 | 30000 | 134000 | 1.875 | 47.6 | 0.75 | 19.0 | 1.50 | 38.1 | - | - | 0.94 | 603 | 5.24 |
| X62162 | 4.0 | 101.6 | 60000 | 267000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | - | - | 1.75 | 1128 | 14.22 |
| X62242 | 6.0 | 152.4 | 60000 | 267000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | - | - | 1.75 | 1128 | 11.18 |

Hollow Bearing Pin

| | | | | | | | | | | | | | | | |
|--------|-----|-------|-------|--------|-------|------|------|------|------|------|------|------|------|------|-------|
| X02161 | 4.0 | 101.6 | 24000 | 107000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | 0.79 | 20.1 | 1.75 | 1128 | 12.74 |
| X02242 | 6.0 | 152.4 | 50000 | 222000 | 2.625 | 66.7 | 1.00 | 25.4 | 2.00 | 50.8 | 0.79 | 20.1 | 1.75 | 1128 | 10.91 |

For standard range of K attachments see page 14.

Steel Industry



Tube Manufacture

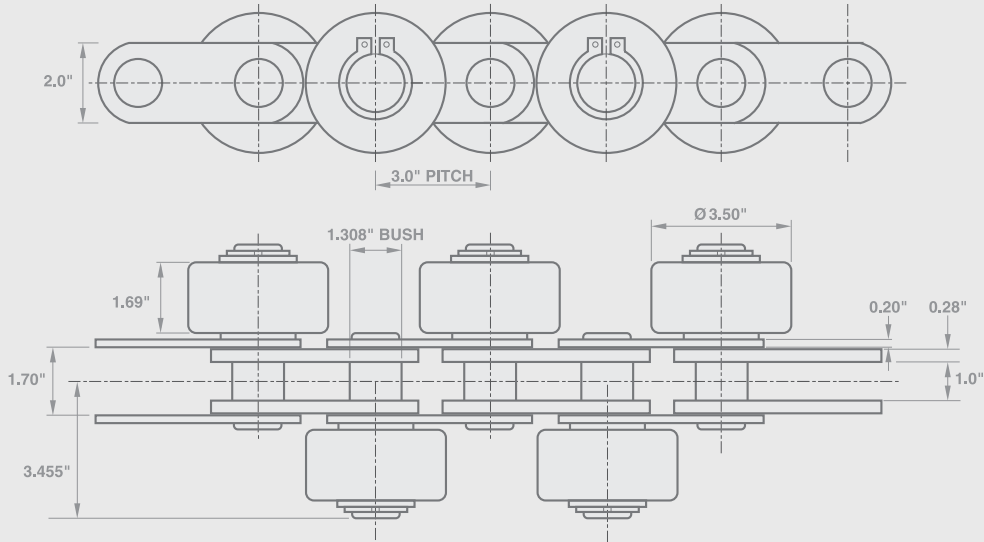
- A conveyor for delivering spun cast iron pipes after normalising bore grinding and inspecting. Two strands of conveyor chain fitted with combination cradle and pusher attachments are used.
- 6.0" pitch, 45,000 lbf, breaking load conveyor chains.
- Tube bore sizes from 80 - 300mm can be accommodated.
- Earlier in the system a similar chain handles the tubes as they pass through the bore grinding process.

Raw Material Processing

- PRODUCT No. 179936
- A bucket elevator type bush chain 7.0" pitch, 200,000 lbf breaking load integral K3 attachment plates. Headed pin design to enable detachability flattened pins and bushes for security.
- Conveys raw material.

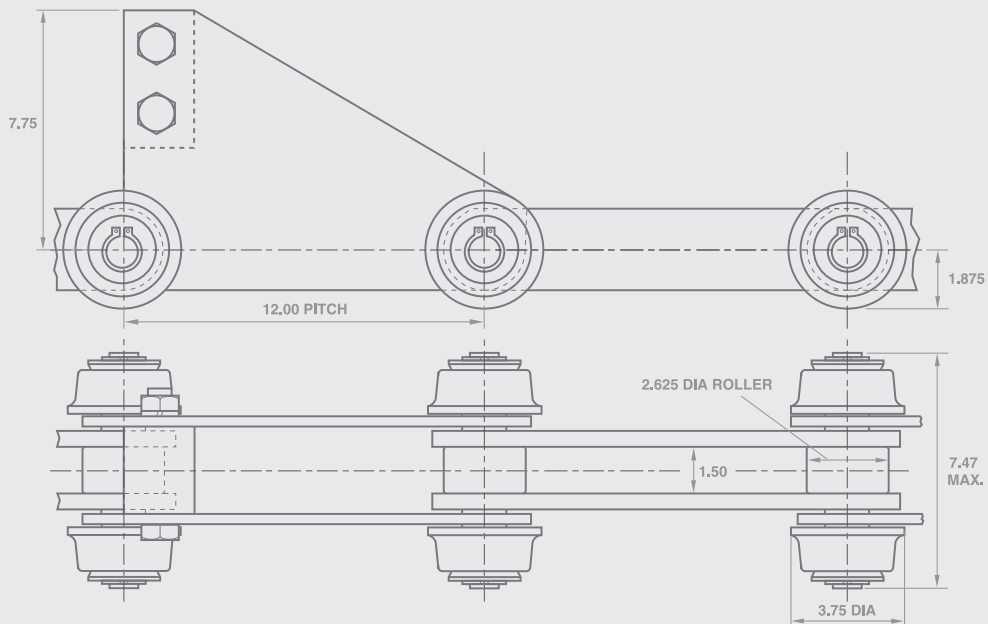
Steel Industry

Coil Handling



- PRODUCT NO. 178289
- Base chain 3" pitch, 30,000 lbf breaking load bush chain fitted with large diameter plain outboard rollers on alternate sides.
- Steel coils on skids are handled on a twin strand system moving on the outboard rollers at twice the speed of chain.

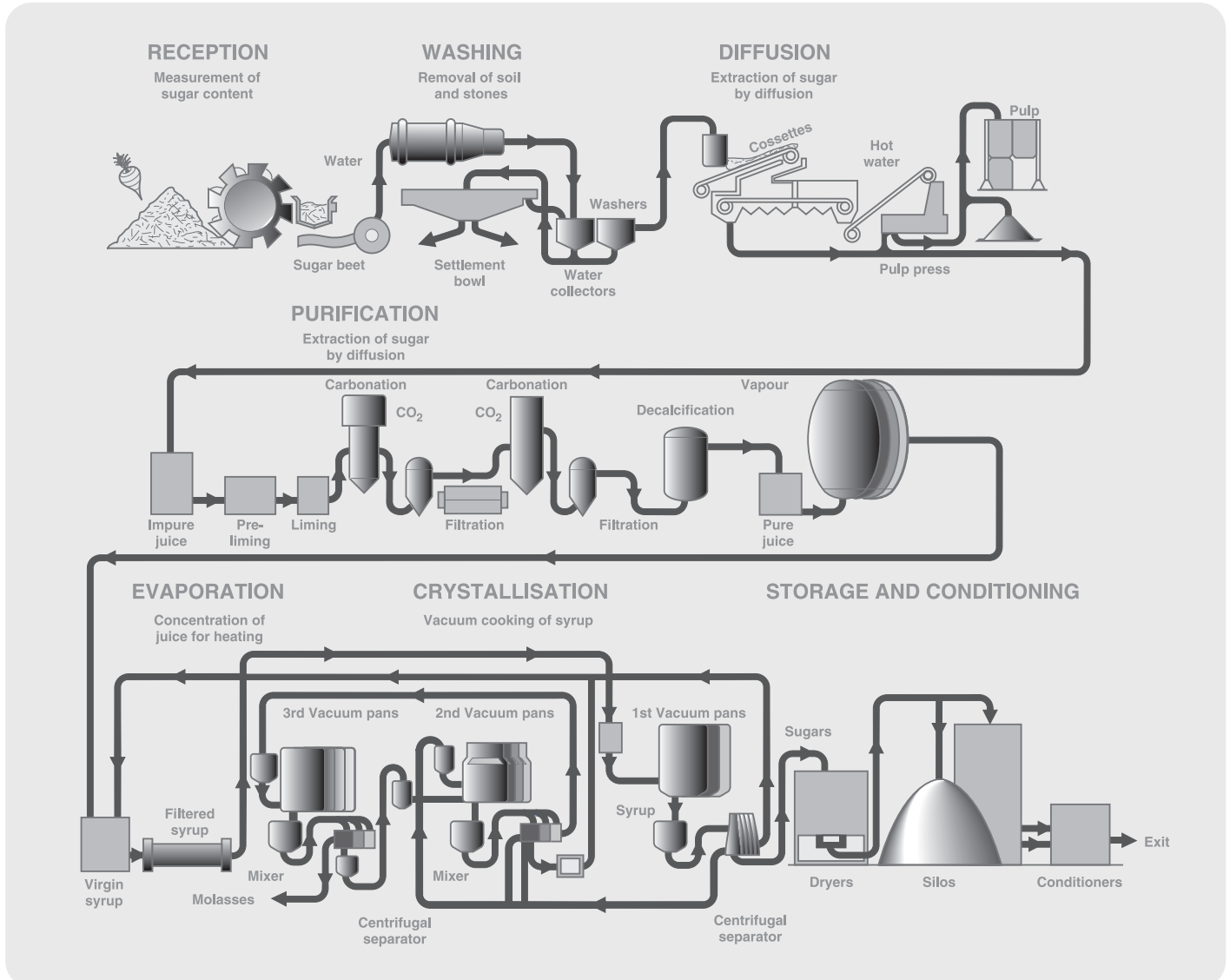
Transfer Chain for Steel Mill Use



- CHAIN NO: 179 701/90
- PITCH: 12.0 IN
- BREAKING LOAD: 90,000 LBF (400000 N)
- Chain equipped with flanged outboard rollers both sides at every pitch to run in channel support rails. Special pusher attachment plates at suitable spacings to push steel sections along skidder bars or plates.

Sugar Beet Industry

Technical Data



Chains for the Sugar Beet Industry

The sugar beet industry, like the more widely known sugar cane industry, uses many different chains in the manufacture of crystallised sugar used in most households around the world. Chain is found in reception, washing and diffuser processes within a sugar beet plant. Within these areas there are around eight different conveyor chains currently in use and these are detailed later. When visiting a sugar beet plant, drives of different sizes are also found driving these conveyors. Renold have supplied large volumes of 3/4" pitch standard transmission chain for sugar beet harvesting machine OEMs following intensive field trials. Due to the arduous nature of the application they are changed after every season.

Product Description

Chain for this industry are specially engineered to suit the conveyor application within each manufacturing process. The pitch size is normally in millimetres and the chains incorporate a number of different attachments, fixing holes and special pins.

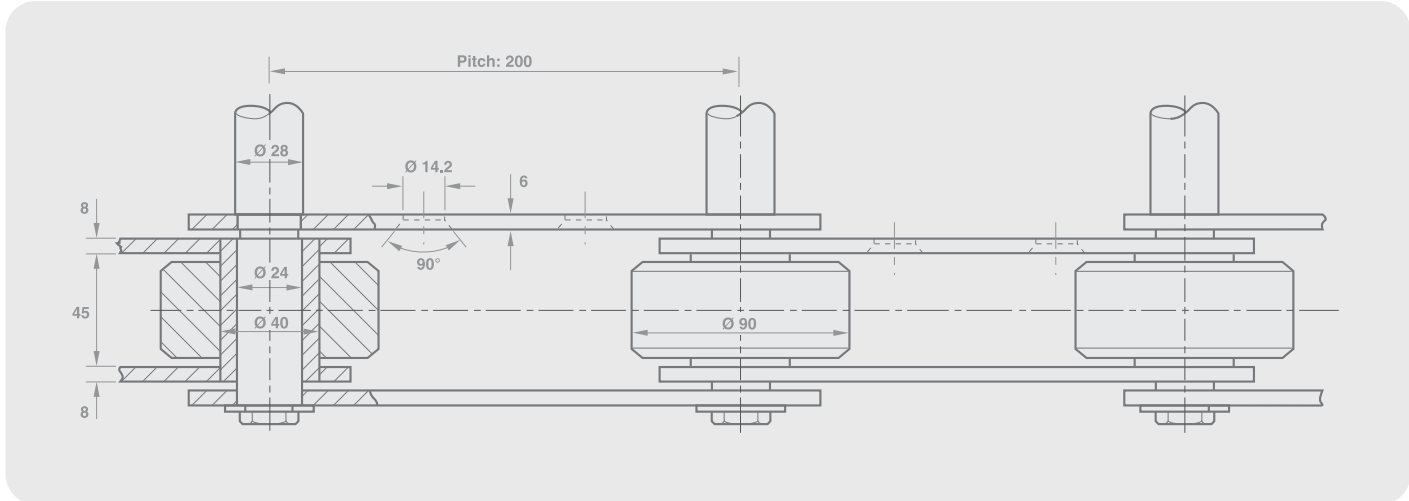
Renold manufacture a wide range of special conveyor chains for this industry.

Our technical staff can help with the identification or advise on the interchangeability of a Renold chain within a sugar plant.

A typical sugar beet processing plant is shown above.

Sugar Beet Industry

Beet Conveyor

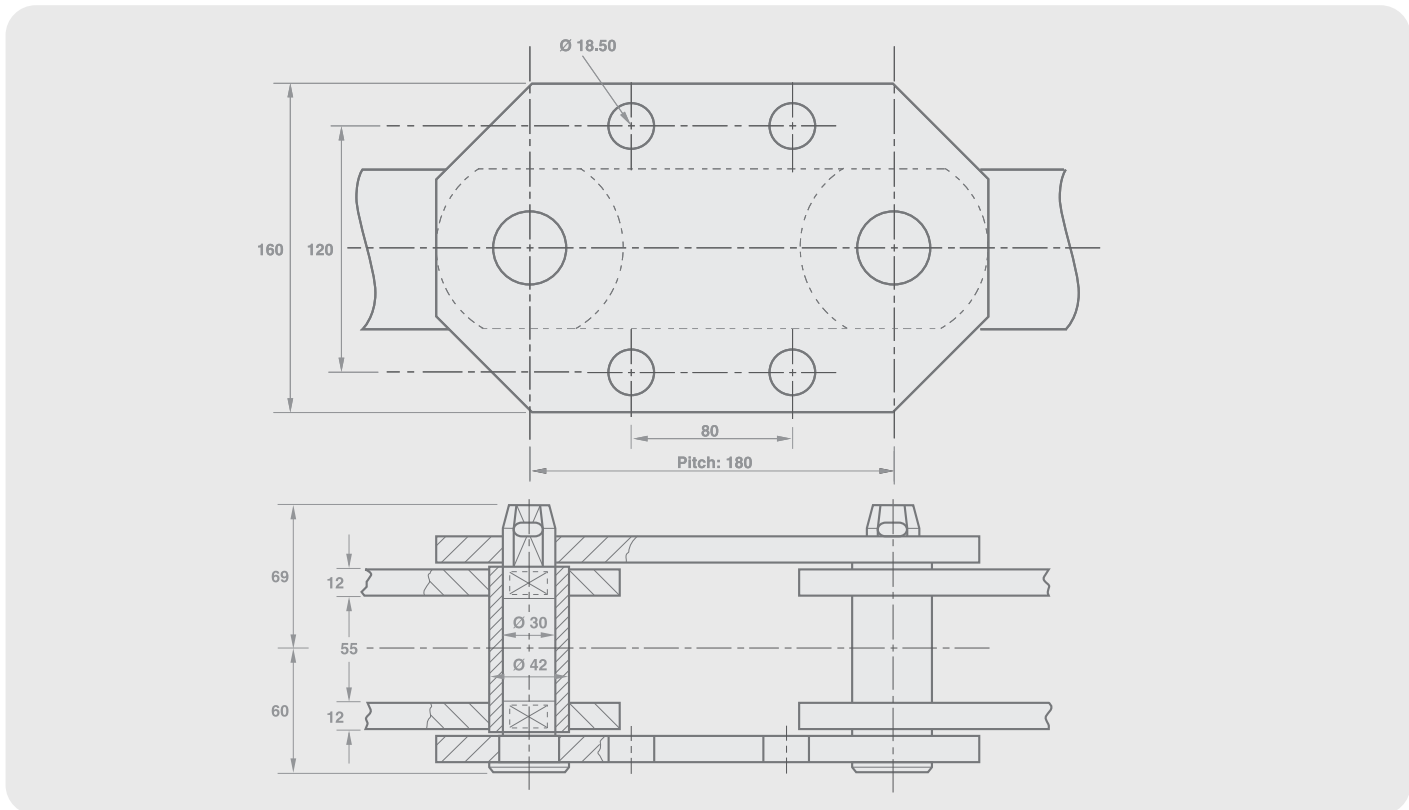


Reception area:

An inclined conveyor which carries the beet from the beet slab to the beet washer.

The chain is an integral component within conveyor.

Rock Catcher

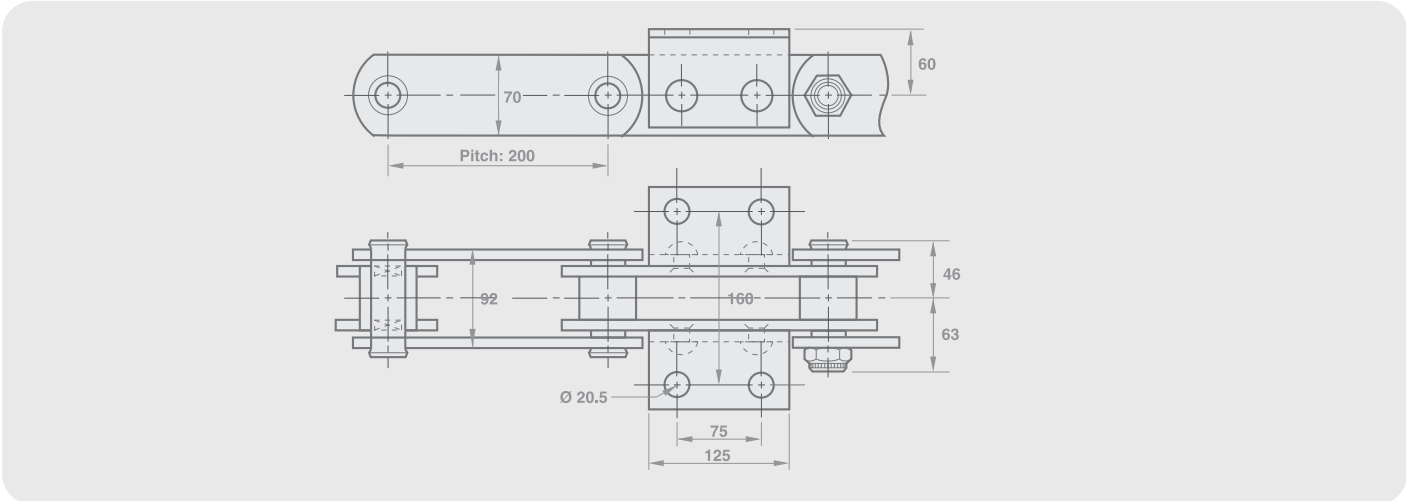


Washing area:

This chain is used to carry away stones removed during the washing of the sugar beet.

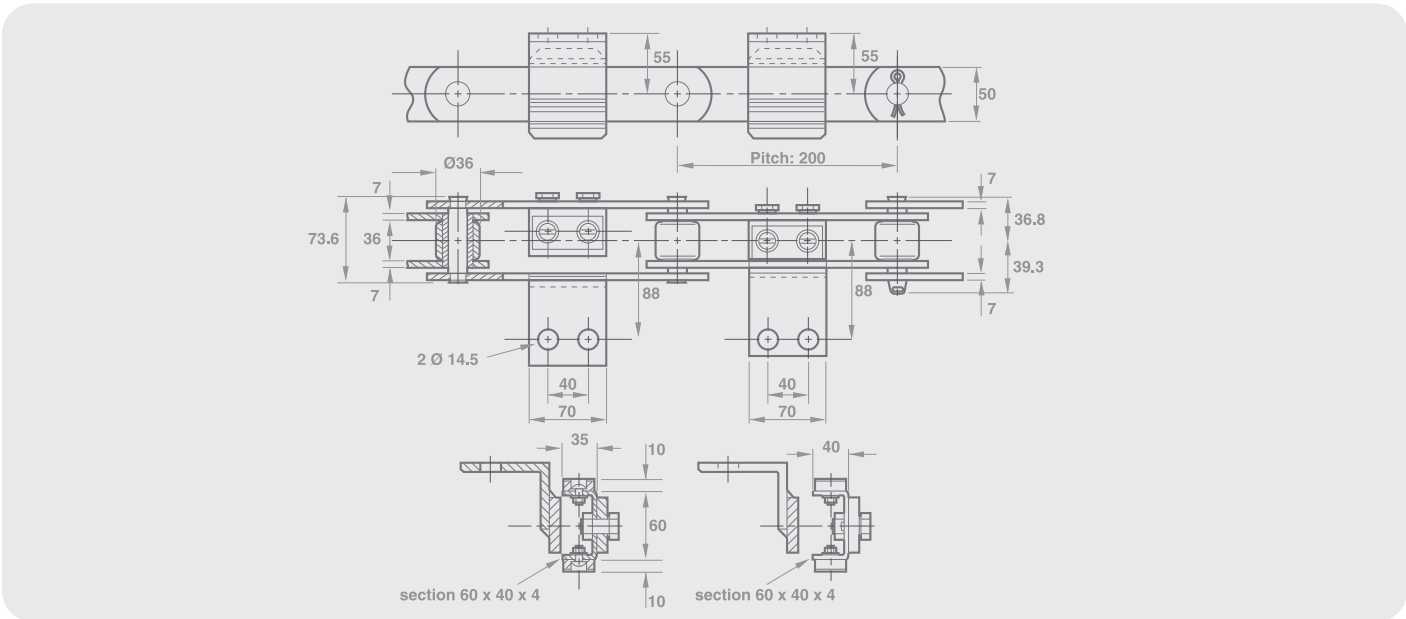
Sugar Beet Industry

Cossette Conveyor



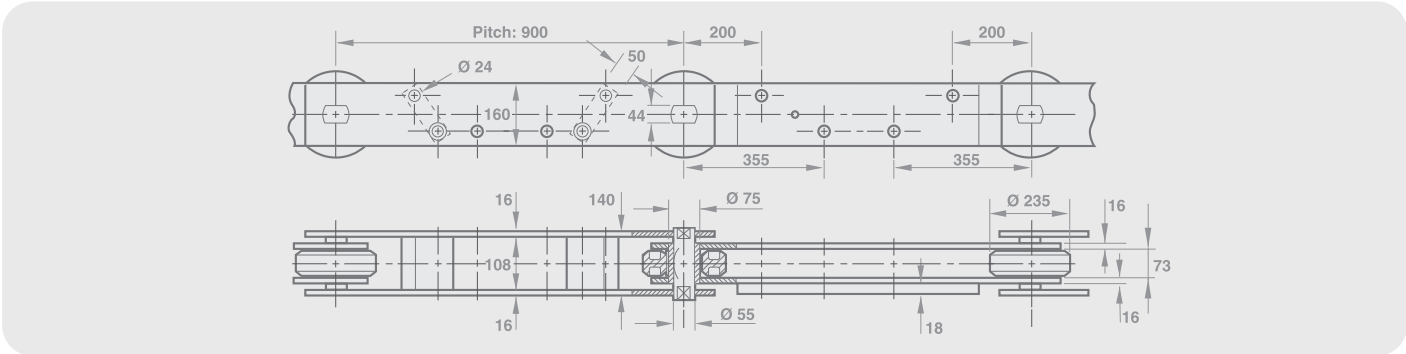
Diffuser area: These chains are fitted with rakes and run in inclined conveyors, scraping the beet pulp to the scalding tub.

Scalding Tub



Diffuser area

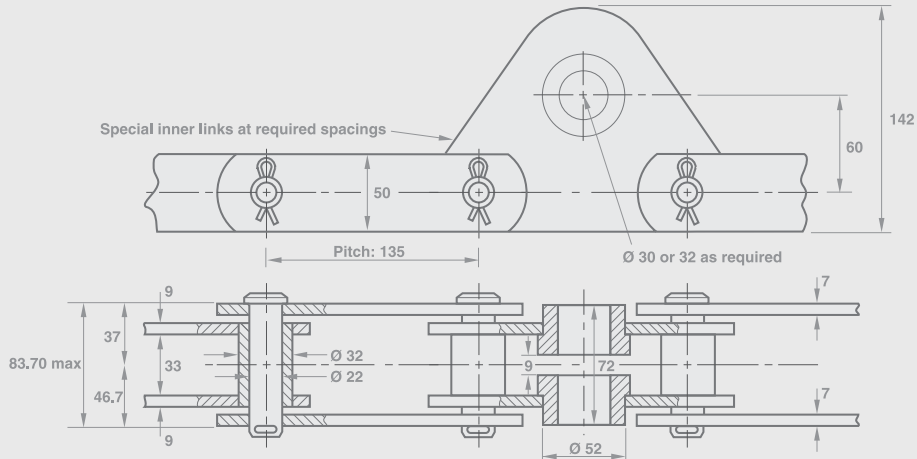
Sugar Beet Diffuser



Diffuser area: Used on a continuous sugar beet diffuser. Two chains run in parallel connected by perforated steel slats forming a continuous apron.

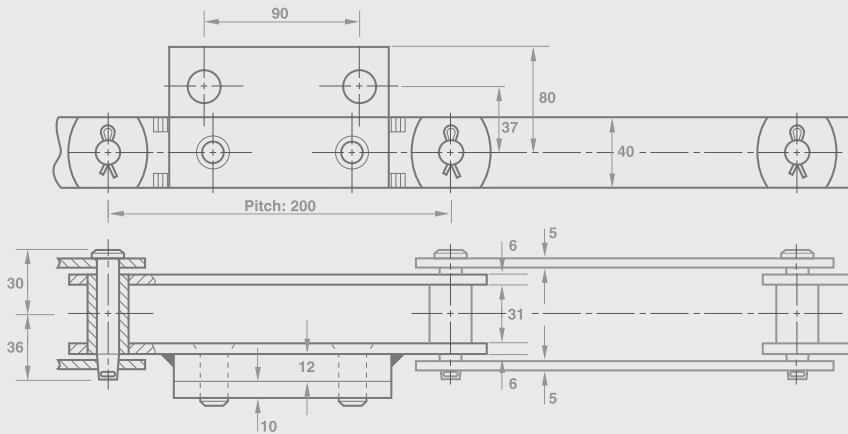
Sugar Beet Industry

Trash Catcher



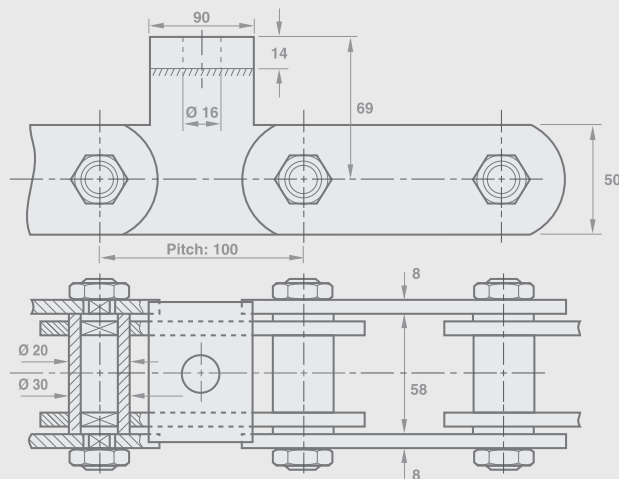
Washing area: Within the washer a water flume carries away grass washed from the sugar beet. The chain, fitted with rakes, removes this trash from the water and the washer.

Hydro Trash Catcher



Washing area: This chain is used to convey the beet through a washer.

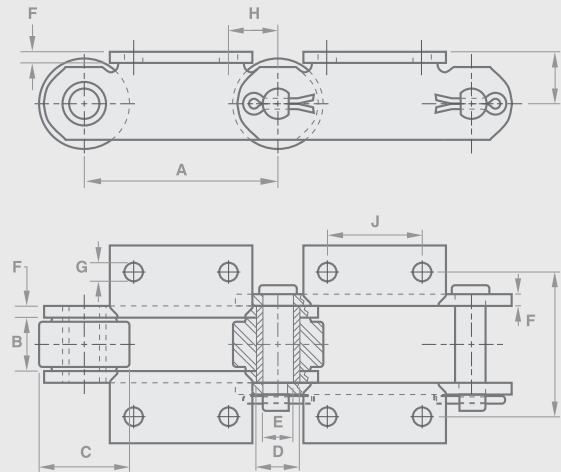
Feed Conveyor



Diffusion area: This chain carries beet pulp to the drying kilns.

Sugar Cane Industry

Technical Data



Cane Carrier Chains

Cane Carrier Chain is used in the second operation within a sugar mill. The cane is fed onto the conveyor which is usually sized to match the mill roller width and operates as a corrugated overlapping slat conveyor.

Two or three strands of chain are normal in such conveyors with the corrugated slats bolted on to the K attachments with angle cleats at intervals to prevent cane slippage.

The chopping of the cane on these conveyors can cause problems, in that juice and chopped cane, together with contamination from sand etc, attack the chain by corrosion and abrasion.

Product Description

This chain is interchangeable in all respects with corresponding products supplied to the Cane Sugar Industry by other established manufacturers. It is estimated that this range covers up to 80% of main and auxiliary carriers worldwide. Breaking loads range from 31,800 kgf to 63,500 kgf (70,000-140,000 lbf).

The advantage Renold has over all other competitors is experience. As the originators of the bush roller chain in 1879 and being the first company to incorporate these features for cane carrier applications during the 1920's, we are uniquely placed to offer the finest products for carrying cane from the yard to the first mill.

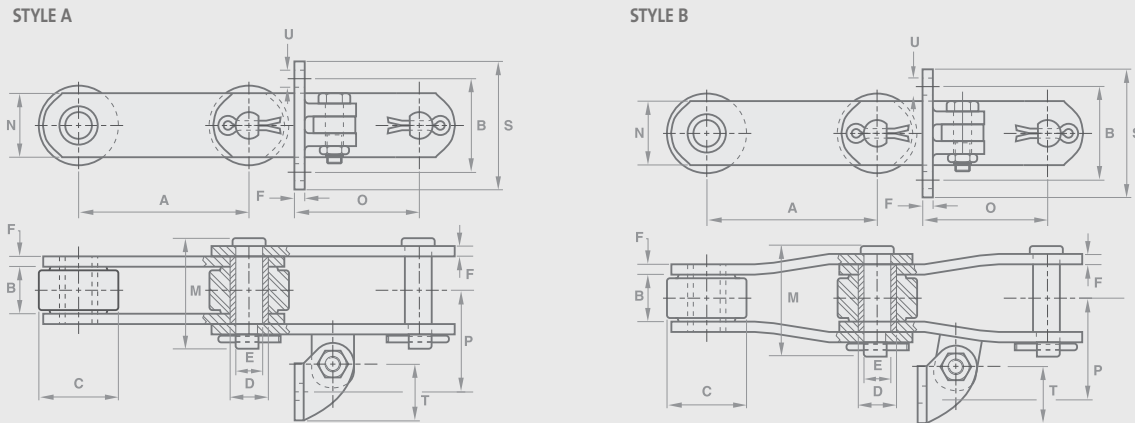
Materials, heat treatment and design have been developed to ensure optimum chain life and maximum value for modest cost.

Grease gun lubrication through the chain pin is available on request and heat treated stainless steel pins, bushes and rollers can be supplied.

| Renold Chain No. Metric | Average breaking load Newtons | Pitch mm. | Width between inner plates mm. | Roller dia. mm. | Bush dia. mm. | Connecting pin dia. mm. | Plate thickness mm. | Attachment hole dia. mm. | Distance from pitch point mm. | Hole centres mm. | Hole transverse centres mm. | Platform height mm. | Approx. mass (weight) kg/m. |
|-------------------------|-------------------------------|-----------|--------------------------------|-----------------|---------------|-------------------------|---------------------|--------------------------|-------------------------------|------------------|-----------------------------|---------------------|-----------------------------|
| | | A | B | C | D | E | F | G | H | J | K | L | |
| R.9060 | 312000 | 152.4 | 38.1 | 69.85 | 28.58 | 19.05 | 9.53 | 13.87 | 38.1 | 76.2 | 111.13 | 41.28 | 24.7 |
| R.9061 | 379000 | 152.4 | 38.1 | 69.85 | 28.58 | 19.05 | 9.53 | 13.87 | 38.1 | 76.2 | 111.13 | 41.28 | 25.3 |
| R.1796 | 445000 | 152.4 | 38.1 | 69.85 | 31.75 | 22.23 | 9.53 | 13.87 | 38.1 | 76.2 | 111.13 | 41.28 | 26.2 |
| R.9063 | 623000 | 152.4 | 38.1 | 76.20 | 31.75 | 23.83 | 10.31 | 13.87 | 38.1 | 76.2 | 111.13 | 44.45 | 27.5 |

Sugar Cane Industry

Technical Data



Average breaking loads and dimensions A to F inclusive are common with Cane Carrier Chains:- See page 125.

Bagasse Carrier Chain

Bagasse (the residue of milled cane) has a small amount of sugar left in it, contains approximately 50% moisture and is a substance that will easily burn. This residue is used as a fuel for the sugar mill boilers to make steam to drive turbines producing the mill's electricity.

The Bagasse conveyors are usually of a scraper construction carrying away the bagasse directly to the boiler input chutes or into a separate bagasse store. In some cases the conveyor will also double up as a bagasse return conveyor. If not, a separate return conveyor will have been installed.

Product Description

Using the same round components as the cane carrier range, these chains provide the capacity to meet the majority of bagasse conveying requirements. They are available with straight plates, STYLE A, or cranked plates, STYLE B, EXCEPT R.9063 which is produced in STYLE A only.

Although two standard roller sizes are available, other diameters are available on request. Additionally, stainless pins, bushes and rollers can be supplied. The lug and flight attachments are spaced according to individual requirements.

All the chain components are replaceable.

| Renold Chain No. Metric | Average Breaking Load Newtons | Pitch mm. | Connecting pin length mm. | Plate depth mm. | Flight face from pitch point mm. | Flight hole centre to chain centre mm. | Flight hole vertical centres mm. | Flight depth (nominal) mm. | Flight width (nominal) mm. | Bolt dia. mm. | Approx. mass (weight) plain chain kg/m. |
|-------------------------|-------------------------------|-----------|---------------------------|-----------------|----------------------------------|--|----------------------------------|----------------------------|----------------------------|---------------|---|
| | | A | M | N | O | P | R | S | T | U | |
| R.9060 | 312000 | 152.4 | 95.25 | 50.80 | 111.12 | 88.90 | 82.55 | 114.30 | 50.80 | 12.70 | 16.7 |
| R.9061 | 379000 | 152.4 | 95.25 | 57.15 | 111.12 | 88.90 | 82.55 | 114.30 | 50.80 | 12.70 | 16.7 |
| R.1796 | 445000 | 152.4 | 100.08 | 57.15 | 111.12 | 88.90 | 82.55 | 114.30 | 50.80 | 12.70 | 18.2 |
| R.9063# | 623000 | 152.4 | 101.60 | 63.50 | 111.12 | 89.66 | 82.55 | 114.30 | 50.80 | 12.70 | 20.2 |

Weight of lug, fulcrum bolt and flight complete - 1.36kg. (3.0lb.)
STYLE A ONLY

Sugar Industry Conveyor Sprocket Details

Sugar Industry Sprockets

General Description

The normal function of a chain sprocket is not only to drive or be driven by the chain, but also to guide and support it in its intended path.

Sprockets can be manufactured from good quality cast iron or fabricated steel. For arduous duty, it may be necessary to use steel sprockets having a 0.4% carbon content. For extremely arduous duty the tooth flanks should be flame hardened. There are other materials which may be specified for particular requirements. Stainless steel for example is used in high temperature or corrosive conditions.

Table 1 gives a guide to the material required.

Table 1

| Normal Conditions | Moderate Shock Loading | Heavy Shock Loading | Abrasion, No Shock Loading | Abrasion and Heavy Shock Loading |
|-------------------------------|-------------------------------|---------------------|----------------------------|---------------------------------------|
| Cast Iron or Fabricated Steel | Cast Iron or Fabricated Steel | 0.4% Carbon Steel | Cast Iron | 0.4% Carbon Steel with hardened teeth |

The vast majority of sprockets in use are of the one piece cast iron or fabricated steel design and are usually parallel or taper keyed to a through shaft. In this case it is necessary to remove the complete shaft to be able to remove the sprockets.

If quick detachability is necessary without dismantling shafts or bearings, then sprockets may be of the split type. These are made in two half sections and the mating faces machined to allow accurate assembly with the shaft in place.

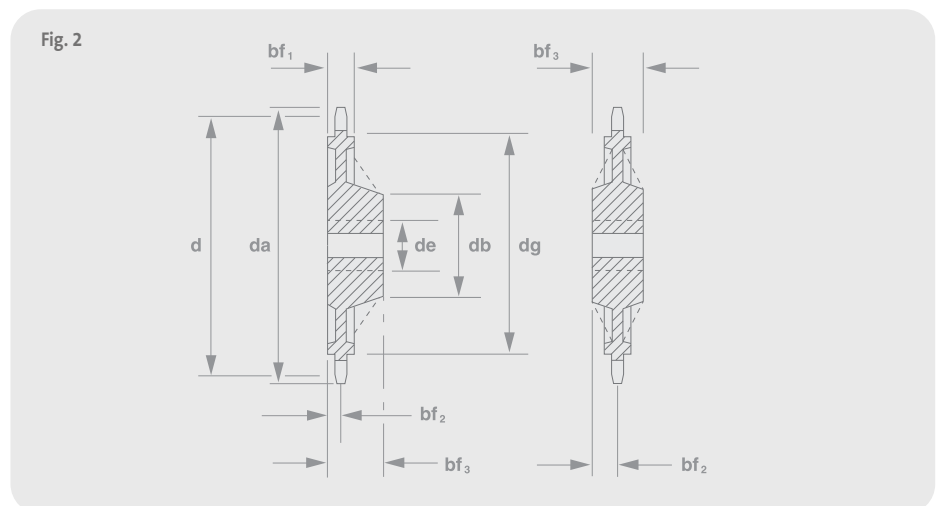
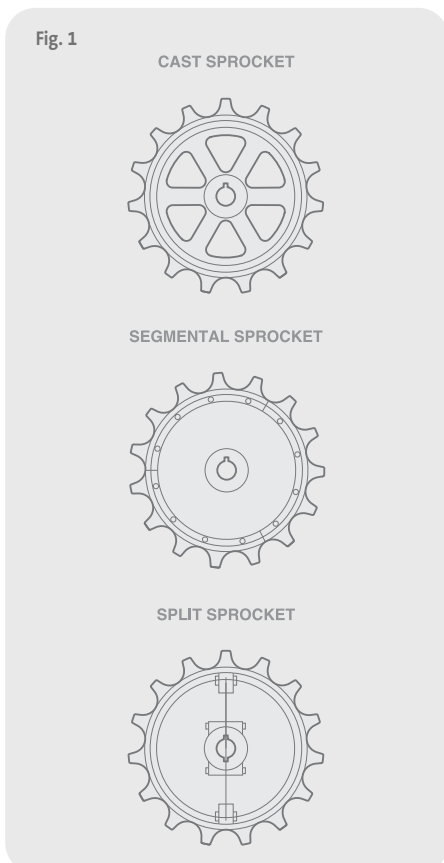
This type of sprocket is particularly useful on multi-strand conveyors where long through-shafts are used. Considerable expense can be saved in sprocket replacement time.

Sprockets with removable tooth segments are particularly useful where sprocket tooth wear is much more rapid than chain wear. With this type of sprocket, segments of teeth can be replaced one at a time without having to disconnect or remove the chain, thus considerable expense and downtime can be saved.

Shafts, whether they are through shafts or of the stub type, should be of such proportions and strength that sprocket alignment remains unimpaired under load. Shaft sizes should be selected taking into account combined bending and torsional moments.

Sprocket dimensions

Salient sprocket dimensions are shown in fig. 2.



- d** = Pitch circle diameter
- da** = Top diameter
- db** = Boss diameter
- de** = Bore diameter
- dg** = Shroud diameter
- bf1** = Shroud width
- bf2** = Face to sprocket centreline
- bf3** = Distance through boss

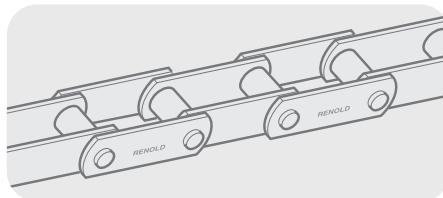
Note: Please consult Renold for details on standard sprockets or designs to meet individual requirements.

Theme Park

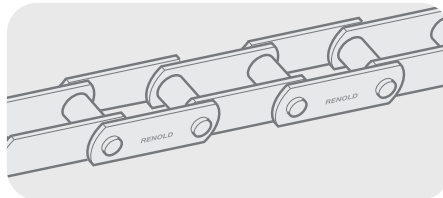
Renold Roller Coaster Chain



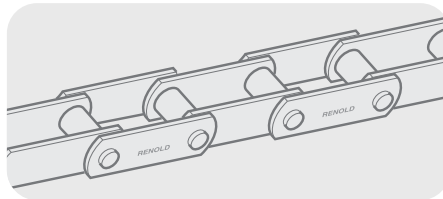
Section 3



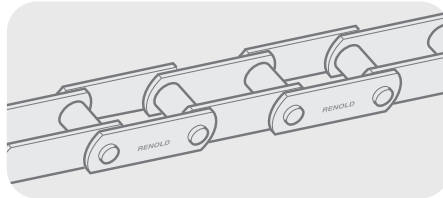
Chain Product No:
◀ 171123. Bush chain.
Description:
4.76" pitch 100,000 lbf (446 KN) Solid pin.



Chain Product No:
◀ 171360. Roller chain.
Description:
4.063" pitch 100,000 lbf (446 KN) Solid pin.
Replaces WH126 4.063" pitch Welded Bush Chain.



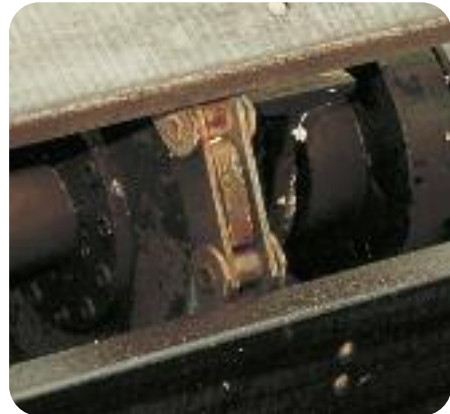
Chain Product No:
◀ 171649. Solid pin.
Description:
4.063" pitch 100,000 lbf (446 KN) Solid pin.
Replaces WH124 4.063" pitch Welded Bush Chain.



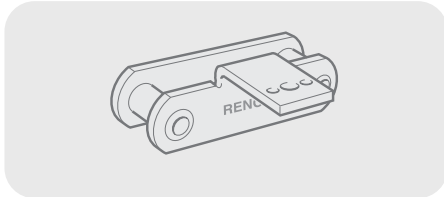
Chain Product No:
◀ 197740. Bush chain.
Description:
4.04" pitch 85,000 lbf (380 KN).

Theme Park

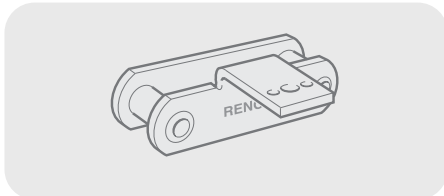
Renold Water Ride Chain



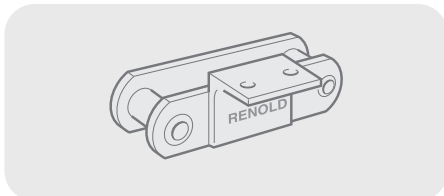
To protect chain like the one seen above, Renold has developed corrosion resistance treatments for water ride applications giving increased service life and reducing maintenance costs.



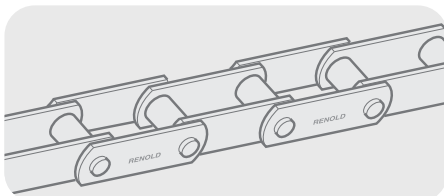
Chain Product No:
◀ 176499. Bush chain.
Description: 4" pitch 15000 lbf (67000 N) Solid Bearing Pin Chain with K3 attachments one side every outer. Zinc plated throughout plus a special lubricant.



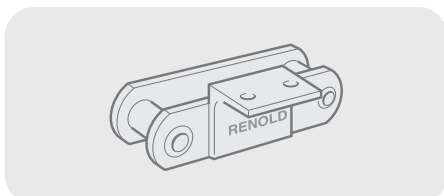
Chain Product No:
◀ 178388. Bush chain.
Description: 4" pitch 30000 lbf (134000 N) Solid Bearing Pin Chain with K2 attachments one side every outer. Zinc plated throughout plus a special lubricant.



Chain Product No:
◀ 179362. Bush chain.
Description: 6" pitch 45000 lbf (200000 N) Solid Bearing Pin Chain with K2 attachments one side every outer. Zinc plated throughout plus a special lubricant.



Chain Product No:
◀ 171749. Bush chain.
Description: 6" pitch 125000 lbf (550 KN) Solid Pin. No attachments. Hydro - Service plus special lubricant.

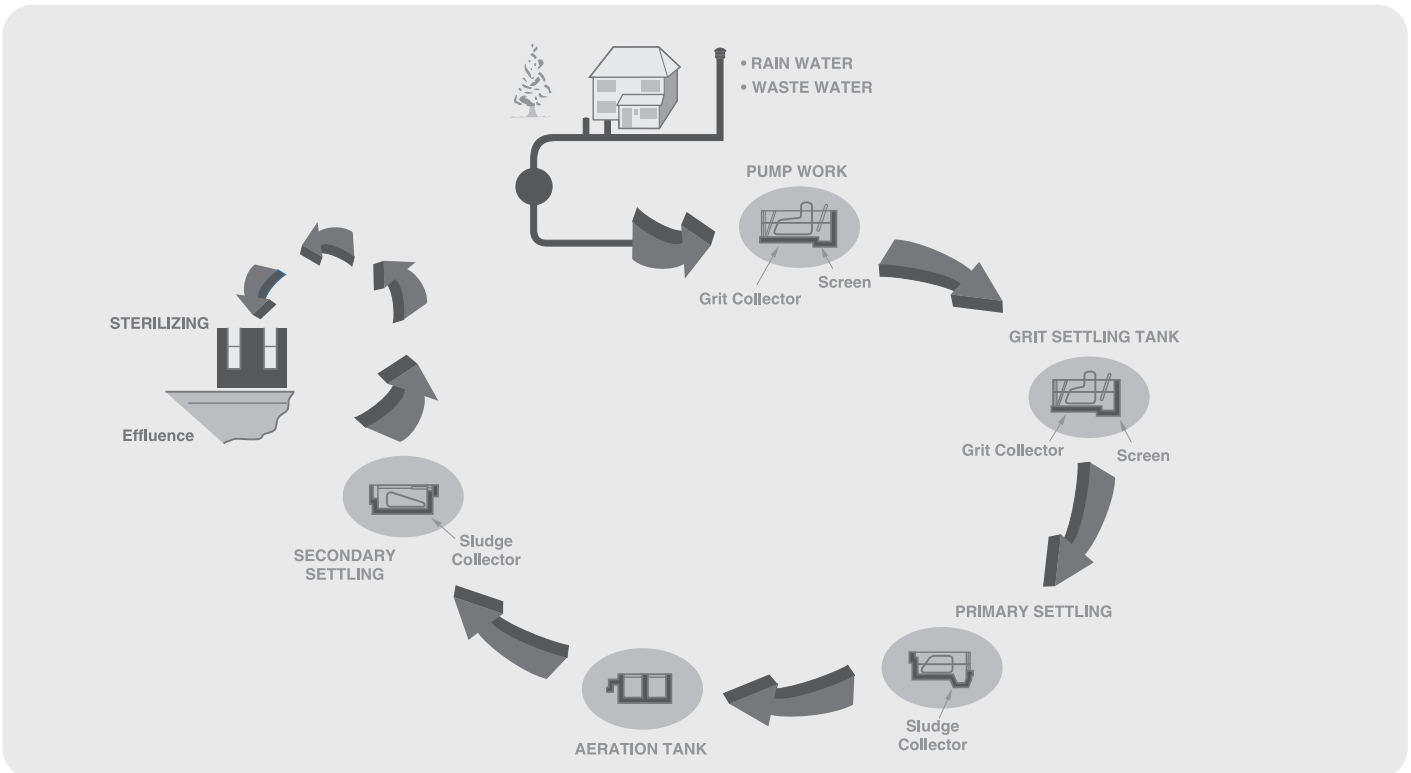


Chain Product No:
◀ 179840. Bush chain.
Description: 6" pitch 90000 lbf (400000 N) with K2 attachments one side every outer. Zinc plated plus special lubricant.

Please consult Renold for other special engineered designs.

Water Treatment Chain

Section 3



Renold manufacture a wide range of Water Treatment Chain for use in sewage and industrial waste water treatment plants.

Renold has been developed to withstand the hostile environments associated with the water industry.

Several specifications of chain are available including special alloy chain, stainless steel chain and special engineered chain.

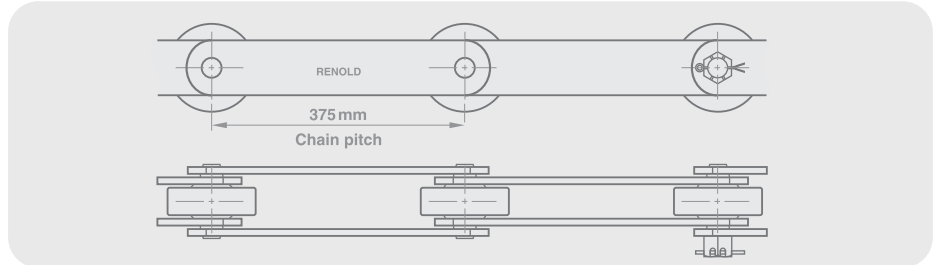
Typical applications are in environments which are corrosive, such as primary settlement tanks, or abrasive such as sludge collector tanks.

Water Treatment Chain

Scraper Chain for Primary Settlement Tank

Renold chain fitted to primary settlement tanks is designed to operate fully immersed with the minimum of attention and lubrication.

- Product No: 797000. Galvanised Plates with Stainless Steel round parts and Cast Iron rollers



Fresh Water Screening Chain

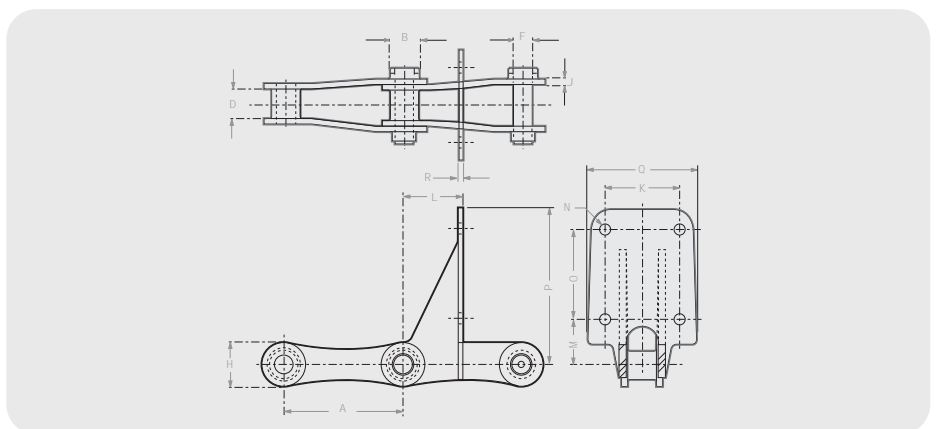
These chains run as pairs and drive mesh screens acting as filters to remove river and sewage debris.

Chain and sprocket life are optimised by the rigid control of pitch accuracy, resulting in excellent gearing, lower friction, reduced wear and a reduction in noise levels during operation.

Maximum chain strength and resistance to wear are achieved by strict control of the material specification and by using state of the art heat treatment processes.

- Chain: 179 701/90
- Pitch: 381mm
- Breaking load: 160kN

Non-Metallic Chain



| Renold Chain No. | Attachment No. | Mass kg/m | A | B | C | D | E | H | S | T |
|------------------|----------------|-----------|--------|---------|--------|--------|---------|---------|---------|-------|
| JCCNCS 720S | F22-6 | 2.084 | 95.250 | 76.2000 | 85.725 | 14.288 | 66.675 | 157.163 | 139.700 | 6.350 |
| JCCNCS 720S | F22-8 | 2.232 | 95.250 | 76.200 | 85.725 | 14.288 | 114.300 | 200.025 | 139.700 | 6.350 |

Lumber industry

81X-81XH Lumber Chain

Part Number:

171306 (81X) 171312 (81XH) 171770 (81XHH)

Application:

These roller chains are specially designed for the rugged and hostile environment found in the lumber industry. These chains are used as an integral part of lumber conveyors for such applications as board ovens, veneer dryers, sorters, unscramblers, trimmer saws, stackers and transfer conveyors.

As well as the lumber industry, these chains can now be found in such applications as grainhandling, plaster and fibre board manufacture. The chain has excellent conveying properties suitable for other hostile applications such as quarrying or the manufacture of concrete products.

Product Description

Renold 81X series chains have identical gearing dimensions and will run on the same sprocket within a given application. The 81XH and 81XHH chains are used on heavy duty conveyor applications where space is limited. Both chains are designed with maximum chain life as the prime objective. Renold standard specification includes:

- Very accurate pitch control that lowers friction resulting in reduced wear.
- Heat-treated side plates for increased wear and fatigue life.
- Rollers designed to cope with this hostile application.
- All chains are pre-lubricated to enhance initial chain life and or protection whilst in storage.
- A material with excellent weldable properties, the standard method of fixing attachments within the industry.

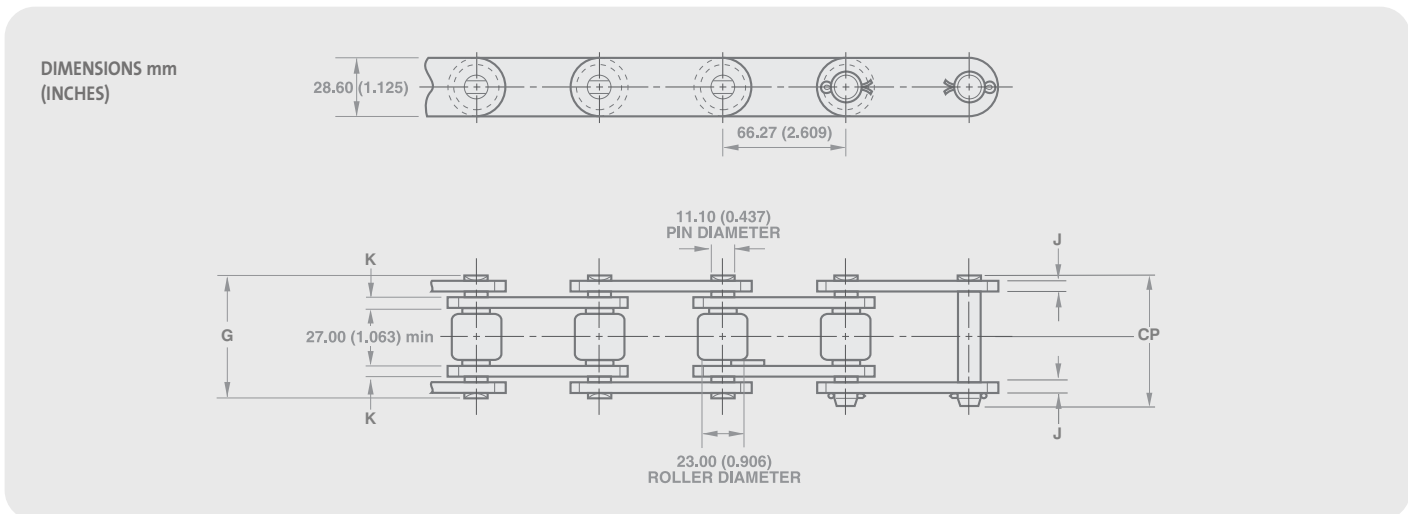
Lubrication

Chains should be protected against dirt/moisture and be lubricated with good quality, non-detergent, petroleum based oil. Renold chains are pre-lubricated before despatch, but like all chains, need regular re-lubrication during their working life.

Specialist advice should be sought for each application to ensure that the lubricant used does not degrade or contaminate the timber product carried.

If you require further information, please consult your local Renold representative or consult the Installation and Maintenance section.

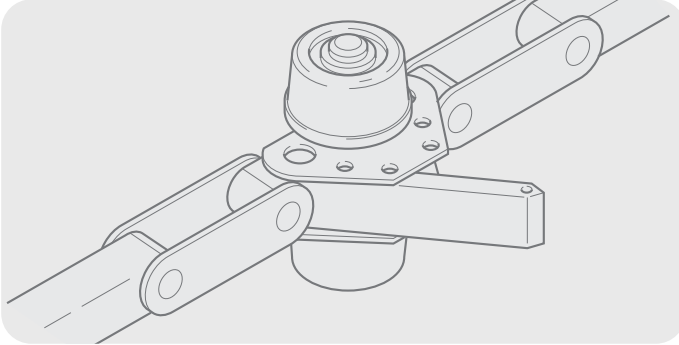
Technical Data



| Chain Number | Renold Chain Number | Pin Length (max) | Con Pin Length (max) | Height | Link Plates Thickness (Inner) | Thickness (Outer) | Minimum Breaking Load kN | Minimum Breaking Load (lbf) | Number of Links (3.05 m) | Average Chain Weight kg/m |
|--------------|---------------------|------------------|----------------------|---------------|-------------------------------|-------------------|--------------------------|-----------------------------|--------------------------|---------------------------|
| | | G | CP | H | K | J | | | | |
| 81X | 171306 | 49.30 (1.94) | 53.65 (2.11) | 28.60 (1.125) | 4.00 (0.157) | 4.00 (0.157) | 107 | (24000) | 46 | 3.56 |
| 81XH | 171312 | 60.25 (2.37) | 64.85 (2.55) | 32.15 (1.266) | 8.00 (0.315) | 5.60 (0.22) | 196 | (44000) | 46 | 5.22 |
| 81XHH | 171770 | 65.18 (2.57) | 69.65 (2.74) | 32.15 (1.266) | 8.00 (0.315) | 8.00 (0.315) | 205 | (46000) | 46 | 6.86 |

Special Engineered Chain

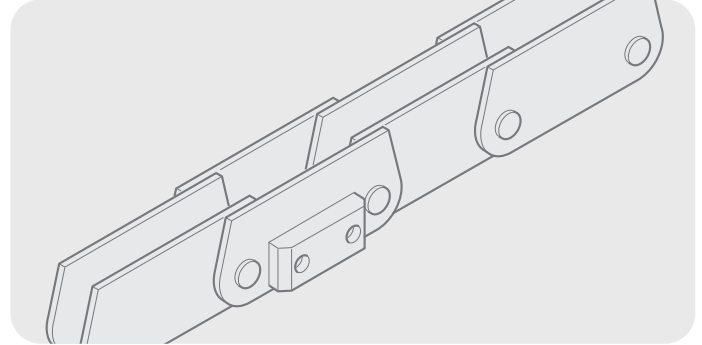
Abattoir chain



- Chain: 176 493 • Pitch: 254mm • Breaking load: 67kN.

Zinc plated bi-planar chain used to carry carcasses through a slaughter house.

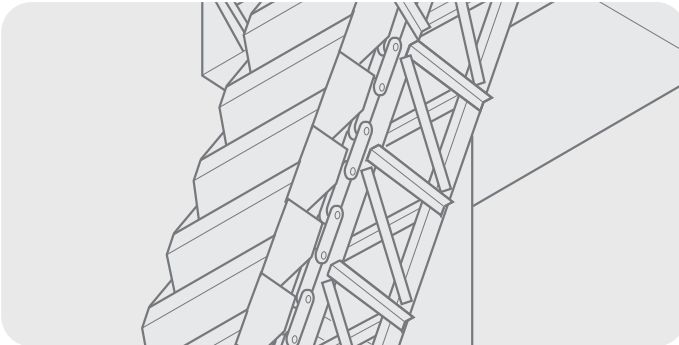
Car conveyor chain



- Chain: 795 034 • Pitch: 152.4mm • Breaking load: 160kN.

Deep link chain fitted with Nylatron wear pads, carries car bodies through assembly and paint spray lines.

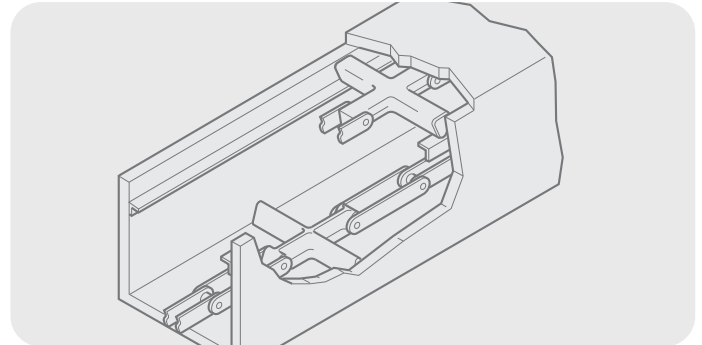
Bucket conveyor or elevator



- Chains selected to suit each application.

These have buckets fixed to one or two strands of chain. The buckets are so shaped that when passing over the headwheel, the back of each bucket acts as a chute for the material discharged from the following bucket. Feeding of the elevator is achieved by a loading leg or chute. Such elevators are suitable for handling lumpy, friable or abrasive materials.

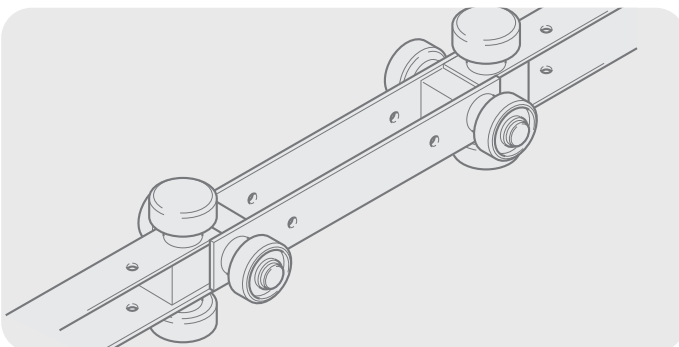
Box scraper conveyor



- Chains selected to suit each application.

Carrying bulk non-abrasive materials, horizontally or up a small incline, these conveyors feature a closed box. The chains scrape the floor of the box and return on guide rails at the top of the box. With a single chain, scraper flights of integral malleable steel or in the form of L attachments protrude on each side to span the box. With two strands of chain, the scraper flight is carried between strands.

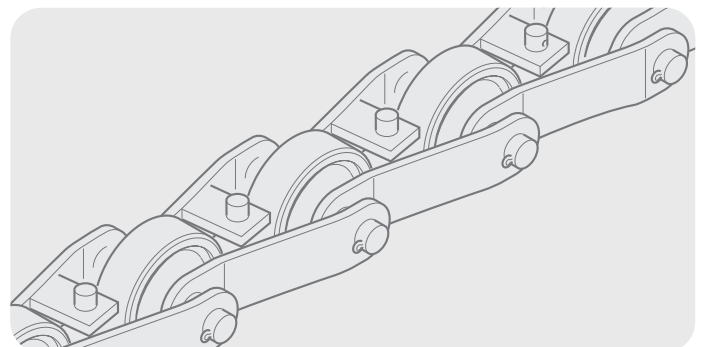
Bi-planar chain



- Chain: 171 044 • Pitch: 280mm • Breaking load: 96kN.

Overhead chain fitted with outboard rollers typically used in the packaging industry.

Cranked link bakery chain

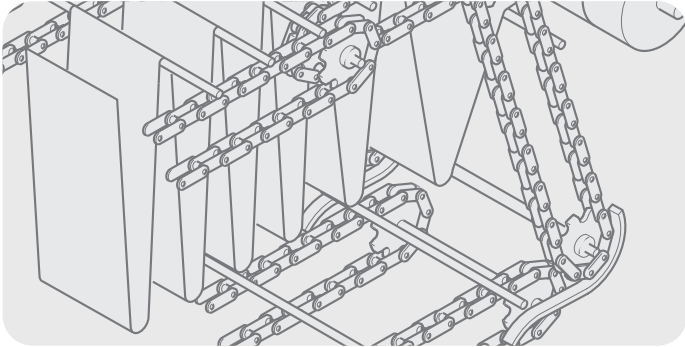


- Chain: 171260/90 • Pitch: 177.8mm • Breaking load: 285kN.

Matched in pairs, all round parts coated in manganese phosphate for conveying bread through provers, ovens and coolers.

Special Engineered Chain

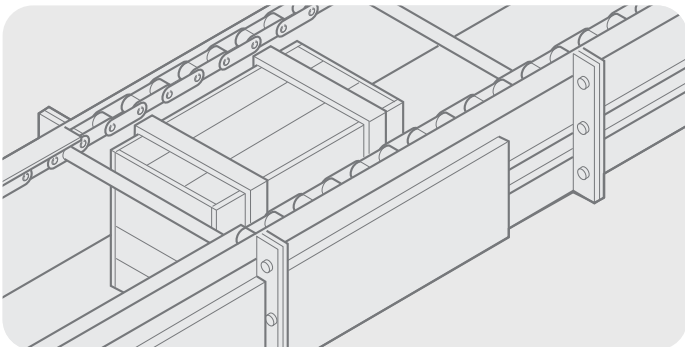
Festoon conveyor



- Chains selected to suit each application.

Generally used to convey paper or linoleum between manufacturing processes when the material must hang for drying without touching. The bars which support the material may be fixed staybars or rollers which are free to rotate. Alternatively, loose crossbars may be used, as shown.

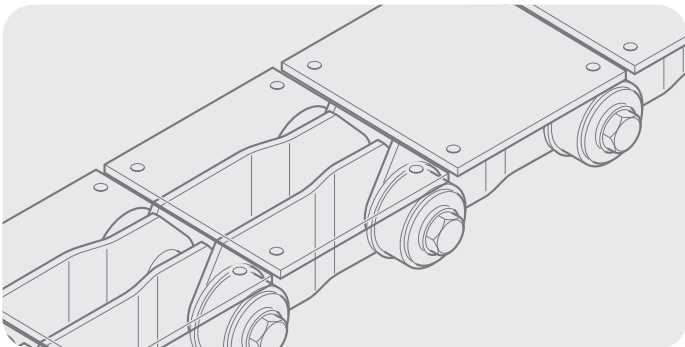
Pusher conveyor



- Chains selected to suit each application.

Used to convey rigid packages or unit loads having an even base by pushing them over a fixed bedplate. The pushers, positioned above the bedplate and spaced at appropriate intervals, are often staybars or angles bolted across a pair of chains. These conveyors operate horizontally or on inclines up to 40°.

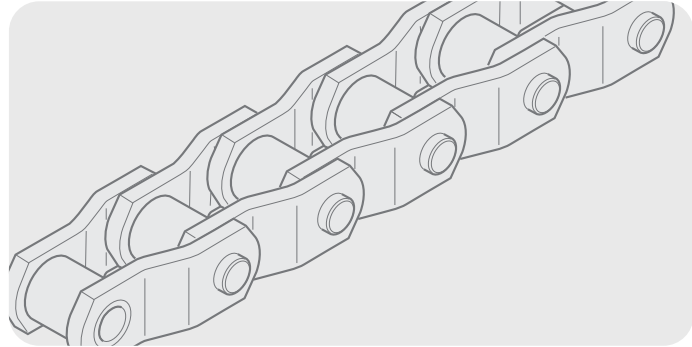
Cranked link conveyor chain



- Chains selected to suit each application.

Commonly known as gull wing chain. Its heavy duty characteristics allow it to cope with the arduous operating conditions encountered in aluminium processing.

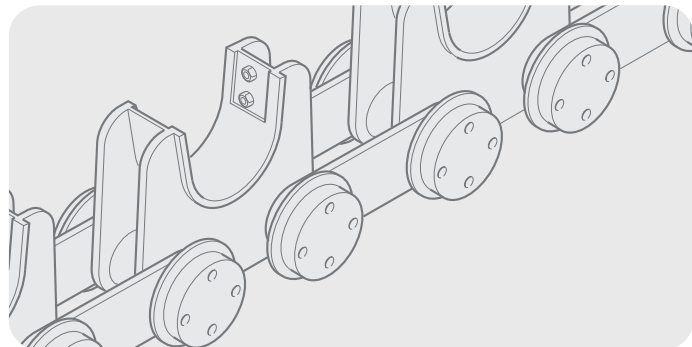
Roller coaster ride - cranked link chain



- 588 506 • 103.2mm pitch • Breaking load 667kN.

New design of cranked link chain for roller coaster rides. Pulls carriages up incline, releasing them onto the ride.

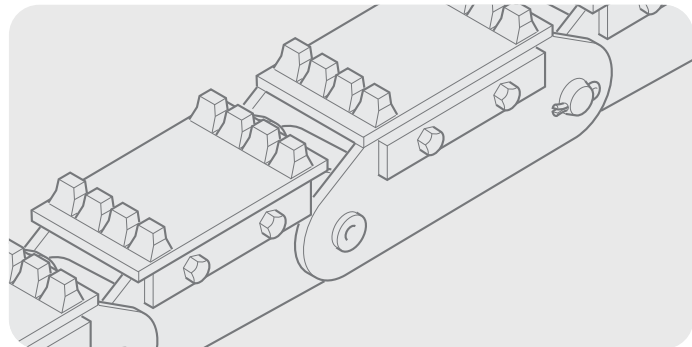
Pipe curing conveyor chain



- 199232/90 • 190 mm pitch • Breaking load 712kN.

These chains cradle newly spun concrete pipes through curing ovens.

Slab conveyor chain

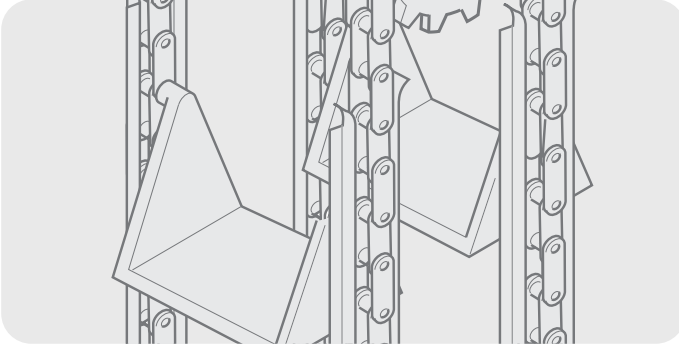


- 600mm pitch • Breaking load 3924kN.

Seven chains running parallel. Steel slabs are carried across the chains.

Special Engineered Chain

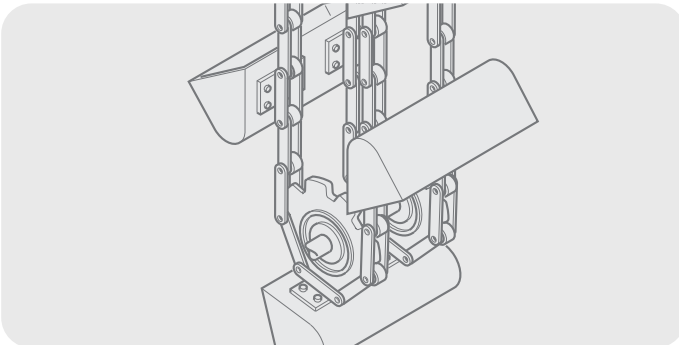
Swing tray elevator



- Chains selected to suit each application.

Swing tray elevators are suitable for elevating any type of package, box or sack. A pair of chains fitted with spigot pins allows the trays to pivot freely, the centre of gravity of the tray and load must be below the spigot pin to eliminate risk of tipping. By fitting finger-type trays, loading and unloading can be automatic.

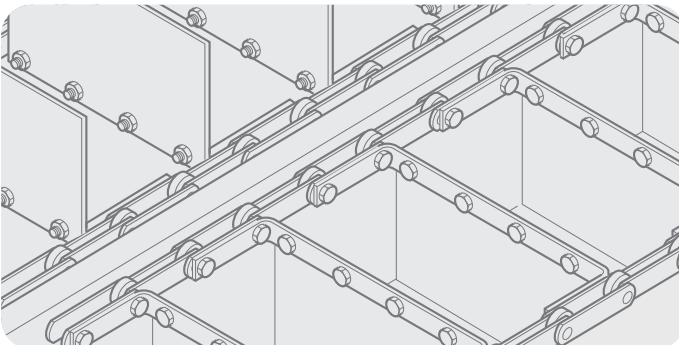
Spaced bucket elevator



- Chains selected to suit each application.

Buckets are fixed at intervals to one or more chains. Bulk materials are fed into the elevator boot and pick-up is by the buckets scooping or dredging. Discharge of material relies on the speed of the bucket around the headwheel to impart a centrifugal force to the material so that it is thrown clear of the preceding bucket.

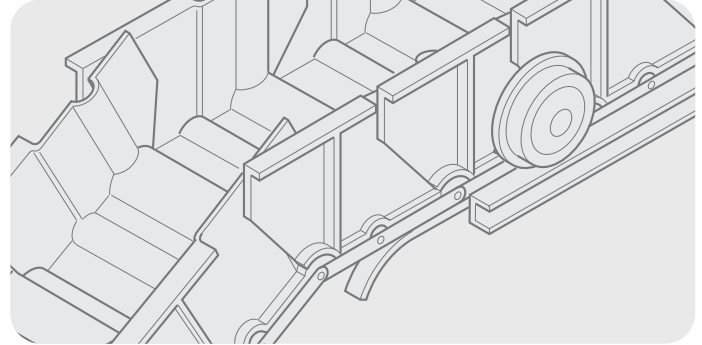
Trough scrapers



- Chains selected to suit each application.

Trough scraper conveyors are designed to move bulk materials along a trough by means of scraper plates fixed at intervals between a pair of conveyor chains, by F or L attachments. The material is normally fed into the trough by a gravity feed and discharged through an opening in the floor of the trough.

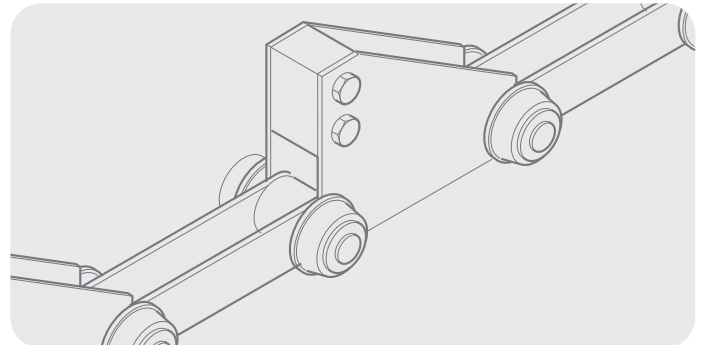
Steel apron / overlapping slats



- Chains selected to suit each application.

A continuous slat conveyor with a series of flat or formed steel slats carried between a pair of conveyor chains on K attachments. Slats may incorporate upturned ends or may run between skirt boards to prevent spillage. This type of conveyor may be used on inclines.

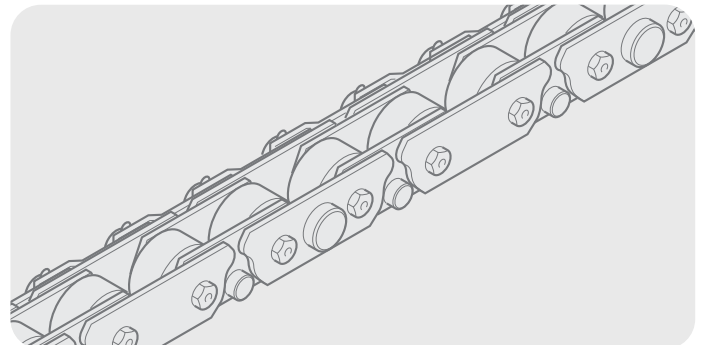
Transfer chain



- 179701/90 • 304.8 mm pitch • Breaking load 400kN.

Pusher attachments drive steel sections in steel mills.

Steriliser chain



- 171 320/90 • 88.9mm pitch • Breaking load 178kN.

Chains are matched to run in pairs within canned food steriliser systems.

Notes

Safety warning

Outer Link: for high speed drives or drives operating in arduous conditions a properly riveted outer link (No 107) must always be used for optimum security, in preference to any other form of chain joint. The use of other connectors and cranked links (No 12 and No 30) must always be restricted to light duty, non-critical applications, in drives where an odd number of pitches is absolutely unavoidable. Wherever possible, drives should have sufficient overall adjustment to ensure the use of an even number of pitches throughout the useful life of the chain. A cranked link joint should only be used as a last resort.

Health and Safety at work

In the interests of safety, customers are reminded that when purchasing any technical product for use at work (or otherwise), any additional or up-to-date information and guidance, which it has not been possible to include in the publication, should be obtained by you from your local sales office in relation to the suitability and the safe and proper use of the product. All relevant information and guidance must be passed on by you to the person engaged in, or likely to be affected by or responsible for the use of the product.

Chain performance

The performance levels and tolerances of our product stated in this catalogue (including without limitation, serviceability, wear life, resistance to fatigue, corrosion protection) have been verified in a programme of testing and quality control in accordance with Renold, independent and/or international standard recommendations.

No representations or warranties are given that our product shall meet the stated performance levels or tolerances for any given application outside the performance levels and tolerances for the product's own specific application and environment.

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