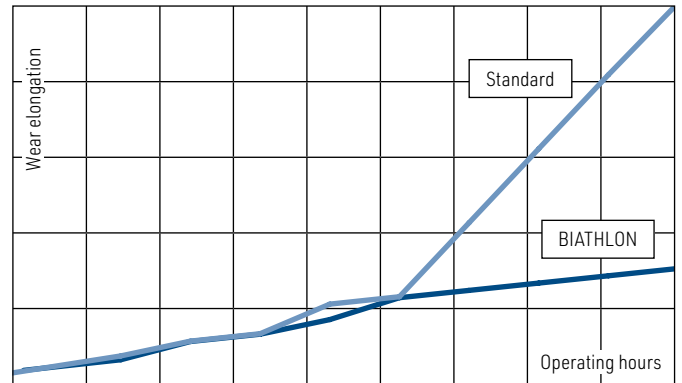


Cross-section polish of coated chain pin



Wear diagram

BIATHLON

Highest wear resistance – also in case of minor maintenance

Range of application

The high-performance chain BIATHLON shows its advantages wherever the use of standard roller chains is not economical due to difficult maintenance conditions.

The special coating of chain pins and rollers allows for excellent dry-running operation characteristics and thus makes this chain particularly resistant against phases without sufficient relubrication. The extended wear life increases the availability of machines and equipment.

The BIATHLON chain can also be supplied in a corrosion-protected design (see page 32).

Coating

The special surface coating of the BIATHLON chain guarantees a high resistance against abrasive and adhesive wear even in case of poor lubrication. Thus fretting will be avoided to a large extent. Due to special finishing treatment procedures the surface has an optimal ductility despite its hardness.

The coating process features a reproducible layer thickness as well as an extraordinary outline constancy and an even layer thickness on the chain components.

Technical features

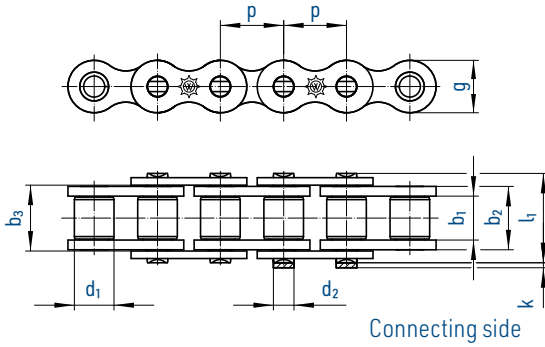
- Coated chain pins
- Coated rollers
- Special long-term lubricants

Benefits for application

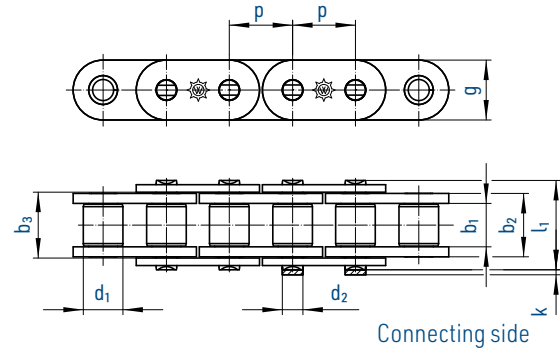
- Particularly efficient
- Dry-running operation characteristics in case of deficient lubrication
- Corrosion-protection on request (see page 32)



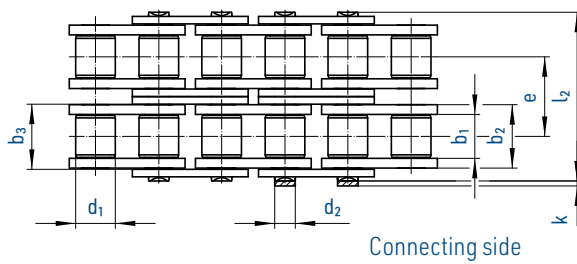
Simplex chains



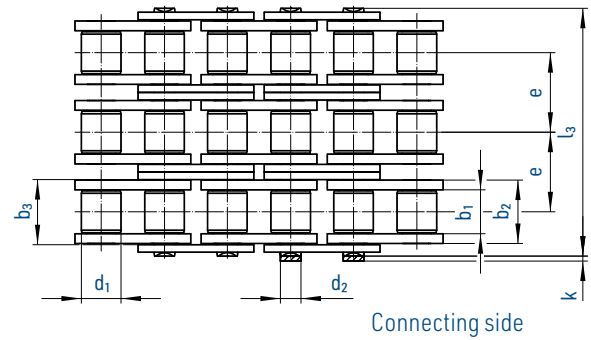
Simplex chains GL (straight plates)



Duplex chains



Triplex chains



| Chain according to ISO 606 | | Pitch | | Inner width | Inner link width | Outer plate width | Roller Ø | Pin Ø | Transverse pitch | Plate height | Projection over connecting link | Width over pin | Bearing area | Breaking load F_B | Weight | Connecting links |
|----------------------------|------|--------|-------|-------------|------------------|-------------------|------------|------------|------------------|--------------|---------------------------------|----------------|---------------------|---------------------|--------|------------------|
| No. | Ind. | mm | inch | b_1 min. | b_2 max. | b_3 min. | d_1 max. | d_2 max. | e | g max. | k max. | l max. | f cm ² | kN | kg/m | No. |
| 08 B-1 BI | | 12,700 | 1/2 | 7,75 | 11,30 | 11,43 | 8,51 | 4,45 | - | 11,8 | 3,9 | 17,0 | 0,50 | 18,6 | 0,70 | 11,12,15 |
| 10 B-1 BI | | 15,875 | 5/8 | 9,65 | 13,28 | 13,41 | 10,16 | 5,08 | - | 14,7 | 4,1 | 19,6 | 0,67 | 27,0 | 0,91 | 11,12,15 |
| 12 B-1 BI | | 19,050 | 3/4 | 11,68 | 15,62 | 15,75 | 12,07 | 5,72 | - | 16,1 | 4,6 | 22,7 | 0,89 | 31,0 | 1,18 | 11,12,15 |
| 16 B-1 BI | | 25,400 | 1 | 17,02 | 25,40 | 25,60 | 15,88 | 8,28 | - | 21,0 | 5,4 | 36,1 | 2,10 | 72,0 | 2,68 | 11,111,12 |
| 20 B-1 BI | | 31,750 | 1 1/4 | 19,56 | 29,00 | 29,20 | 19,05 | 10,19 | - | 26,4 | 6,1 | 43,2 | 2,96 | 105,0 | 3,50 | 111,12 |
| 24 B-1 BI | | 38,100 | 1 1/2 | 25,40 | 37,90 | 38,10 | 25,40 | 14,63 | - | 33,4 | 6,6 | 53,4 | 5,54 | 180,0 | 6,80 | 111,12 |
| 08 B-2 BI | | 12,700 | 1/2 | 7,75 | 11,30 | 11,43 | 8,51 | 4,45 | 13,92 | 11,8 | 3,9 | 31,0 | 1,01 | 37,0 | 1,36 | 11,12,15 |
| 10 B-2 BI | | 15,875 | 5/8 | 9,65 | 13,28 | 13,41 | 10,16 | 5,08 | 16,59 | 14,7 | 4,1 | 36,2 | 1,34 | 54,0 | 1,82 | 11,12,15 |
| 12 B-2 BI | | 19,050 | 3/4 | 11,68 | 15,62 | 15,75 | 12,07 | 5,72 | 19,46 | 16,1 | 4,6 | 42,2 | 1,79 | 63,0 | 2,38 | 11,12,15 |
| 16 B-2 BI | | 25,400 | 1 | 17,02 | 25,40 | 25,60 | 15,88 | 8,28 | 31,88 | 21,0 | 5,4 | 68,0 | 4,21 | 140,0 | 5,30 | 11,111,12 |
| 20 B-2 BI | | 31,750 | 1 1/4 | 19,56 | 25,40 | 29,20 | 19,05 | 10,19 | 36,45 | 26,4 | 6,1 | 79,7 | 5,91 | 210,0 | 7,30 | 111,12 |
| 24 B-2 BI | | 38,100 | 1 1/2 | 25,40 | 37,90 | 38,10 | 25,40 | 14,63 | 48,36 | 33,4 | 6,6 | 101,8 | 11,09 | 360,0 | 13,40 | 111,12 |
| 08 B-3 BI | | 12,700 | 1/2 | 7,75 | 11,30 | 11,43 | 8,51 | 4,45 | 13,92 | 11,8 | 3,9 | 44,9 | 1,51 | 56,0 | 2,01 | 11,12,15 |
| 10 B-3 BI | | 15,875 | 5/8 | 9,65 | 13,28 | 13,41 | 10,16 | 5,08 | 16,59 | 14,7 | 4,1 | 52,8 | 2,02 | 80,0 | 2,70 | 11,12,15 |
| 12 B-3 BI | | 19,050 | 3/4 | 11,68 | 15,62 | 15,75 | 12,07 | 5,72 | 19,46 | 16,1 | 4,6 | 61,7 | 2,68 | 94,0 | 3,12 | 11,12,15 |
| 16 B-3 BI | | 25,400 | 1 | 17,02 | 25,40 | 25,60 | 15,88 | 8,28 | 31,88 | 21,0 | 5,4 | 99,9 | 6,31 | 211,0 | 7,50 | 11,111,12 |
| 20 B-3 BI | | 31,750 | 1 1/4 | 19,56 | 29,00 | 29,20 | 19,05 | 10,19 | 36,45 | 26,4 | 6,1 | 116,1 | 8,87 | 300,0 | 10,60 | 111,12 |
| 24 B-3 BI | | 38,100 | 1 1/2 | 25,40 | 37,90 | 38,10 | 25,40 | 14,63 | 48,36 | 33,4 | 6,6 | 150,2 | 16,63 | 523,0 | 20,00 | 111,12 |

Can also be supplied with attachments and straight plates (type series GL).
Chains 16-B GLs available with plate height $g = 21$ mm (max.) and as type series GL with $g = 24$ mm (max.).
Standard sprockets can be used for these chains.

Connecting links: According to ISO (...)

