



TRIATHLON HT

Maintenance-free and high load bearing up to 200°C

The TRIATHLON HT high-performance chain has a high load capacity for temperatures up to 200°C, even without additional lubricants, and is extremely wear-resistant.

Whether with minimal surface lubrication to protect the sprockets or completely free of lubrication for highly sensitive applications, the TRIATHLON HT sets new standards with perfectly coordinated materials, coated pins, special coated rollers and also through its innovative high-tech polymer bushings in numerous application areas.

Designed for difficult applications

In many production processes, the combination of high temperatures and sensitive components present specific requirements for the chains.

In the automotive industry, hoisting and conveyor chains thus reduce scrap in the coating process by avoiding unwanted paint wetting with lubricant residues, in contrast to conventionally lubricated chains. In the electrical industry, chains have to be complete dry without lubrication to avoid chemical reactions e.g. in casting resins.

Proven in practice

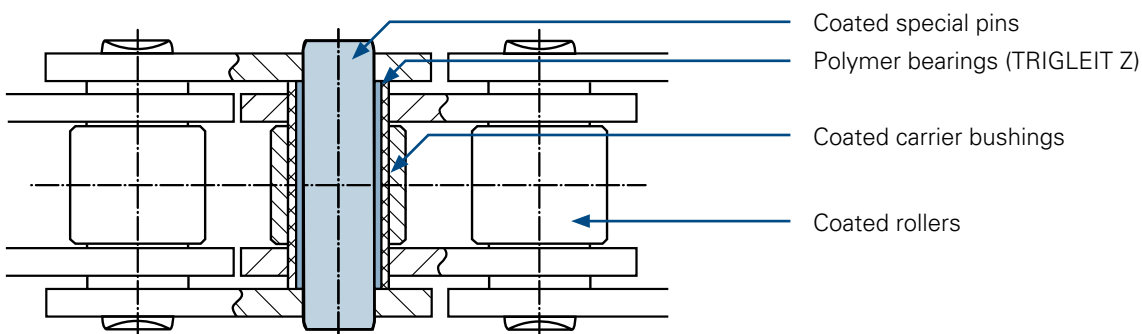
The durability of the TRIATHLON HT is achieved through unique material combinations with special coated pins and polymer bearings. Many renowned companies have recognised the benefits of the TRIATHLON HT and are already demonstrating the success of our high-performance chains under high loads and temperatures, which require uncompromised durability and wear resistance.

Technical features

- Coated bushings with high-tech polymer inserts
- Coated pin chains
- Coated rollers

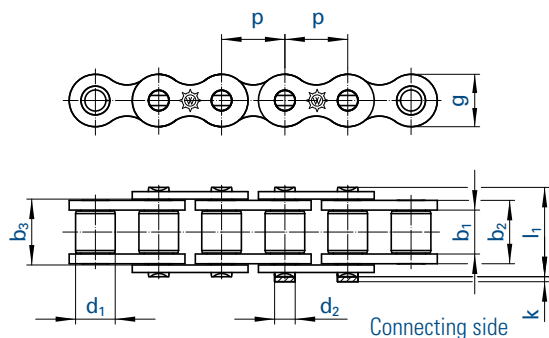
Benefits for application

- Highly resilient, low friction chain joints
- No relubrication required
- Lubricant-free for chain speeds up to 2.5 m/s
- Temperatures from -30°C to +200°C

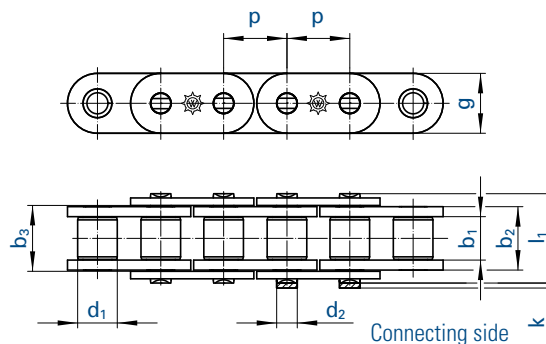




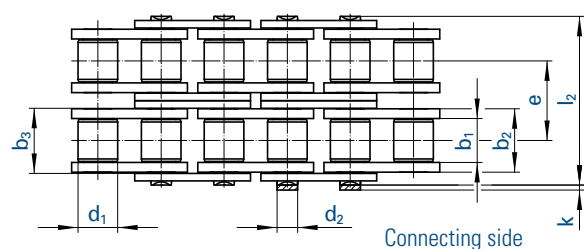
Simplex chains



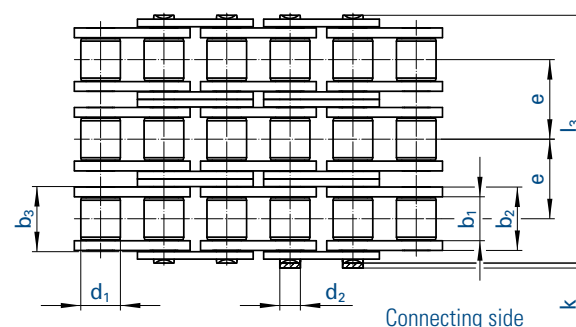
Simplex chains (type series GL)



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	Weight	Connecting links
⚙		p		b ₁ min.	b ₂ max.	b ₃ min.	d ₁ max.	d ₂ max.	e	g max.	k max.	l max.	f	F _B min.	q ≈	No.
No.	Ind.	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	cm ²	kN	kg/m	No.
08 B-1 TR HT		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 TR HT		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 TR HT		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 TR HT		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 TR HT		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 TR HT		38,100	1 1/2	25,40	37,90	38,20	25,40	14,63	-	33,4	6,6	53,4	5,54	180,0	6,80	111,12
08 B-2 TR HT		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 TR HT		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 TR HT		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 TR HT		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 TR HT		31,750	1 1/4	19,56	25,40	29,20	19,05	10,19	36,45	26,4	6,1	79,0	5,91	210,0	7,30	111,12
24 B-2 TR HT		38,100	1 1/2	25,40	37,90	38,20	25,40	14,63	48,36	33,4	6,6	101,0	11,09	360,0	13,40	111,12
08 B-3 TR HT		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 TR HT		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 TR HT		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 TR HT		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 TR HT		31,750	1 1/4	19,56	29,00	29,20	19,05	10,19	36,45	26,4	6,1	116,0	8,87	300,0	10,60	111,12
24 B-3 TR HT		38,100	1 1/2	25,40	37,90	38,20	25,40	14,63	48,36	33,4	6,6	150,0	16,63	523,0	20,00	111,12

Other chain sizes available on request. 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 (...)



No. 4 (B)
Inner link



No. 7 (A)
Outer link
(to be riveted)



No. 11 (E)
Spring clip
connecting link



No. 111 (S)
Connecting link
with cottered pin



No. 12 (L)
Single
cranked link



No. 15 (C)
Double
cranked link



TRIATHLON KS

Corrosion resistant and lubrication-free for highly sensitive production processes

With TRIATHLON KS, we expand our leadership role for maintenance-free chains that do not require lubrication. Especially in sensitive production processes, e.g. in the food, cosmetics and packaging industry, it proves to be a real all-rounder due to its high load bearing carbon steels, environmentally friendly corrosion protection and our tried and proved TRIGLEIT FDA polymer bushings.

Application areas

The TRIATHLON KS chain is ideally suited for application in large systems, intermittent operation and humid ambient conditions. Thanks to its high durability and wear resistance without the need for relubrication, its application is particularly economic in these areas.

Corrosion protection at its best

Just like BIATHLON KS, which has been providing excellent service in many years of practical use, the TRIATHLON KS features environmentally friendly corrosion protection which has proved to be highly resistant for a period of more than 1,000 hours in salt spray tests. Whether with minimal H1 surface lubrication to protect the sprockets or completely free of lubrication, the TRIATHLON KS sets new standards in terms of loa-

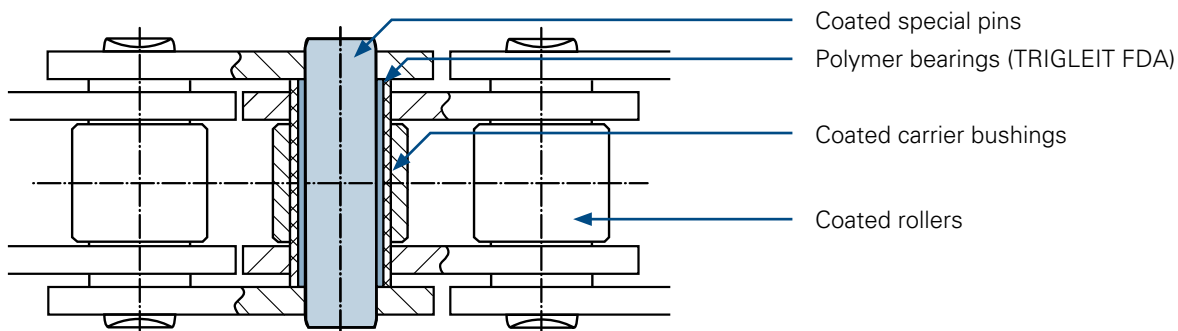
ding capacity, corrosion resistance, durability and wear resistance with perfectly coordinated materials, functional layers and innovative TRIGLEIT FDA polymer bushings.

Technical features

- Coated bushings with TRIGLEIT FDA inserts
- Coated pins and plates
- Rolls made of corrosion resistant steel with maximum ductility

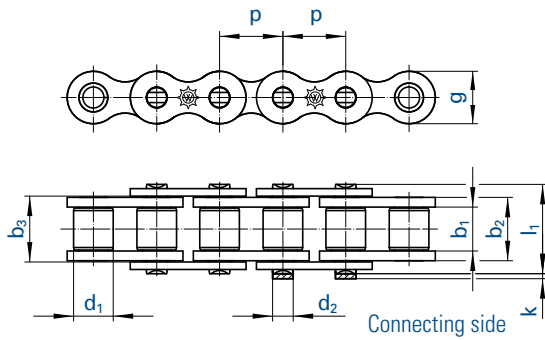
Benefits for application

- High-tech corrosion protection
- RoHS compliance due to non-use of hexavalent chromium
- Highly resilient, low friction chain joints
- No relubrication required
- Lubricant-free for chain speeds up to 2.5 m/s
- Temperatures from -30°C to + 150°C (up to + 200°C on request)

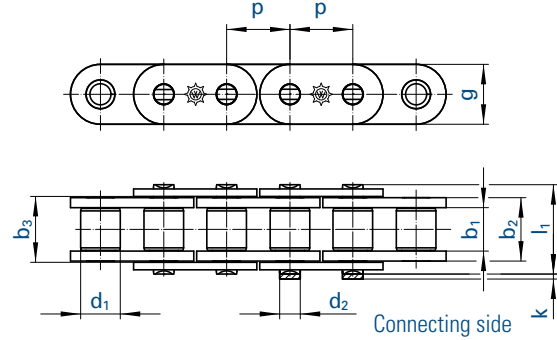




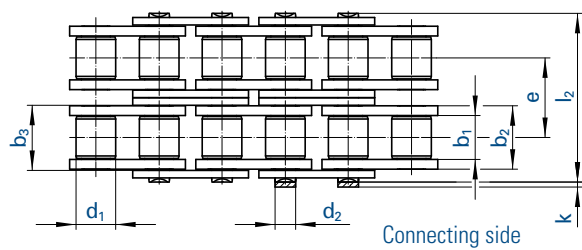
Simplex chains



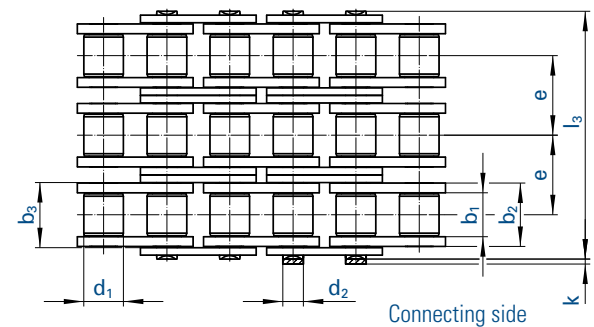
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Duplex chains



Triplex chains



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