



## 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

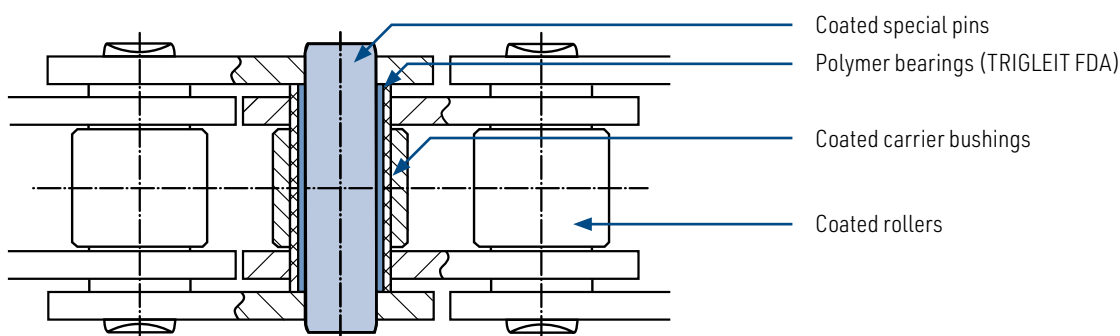
Just like BIATHLON KS, which has been providing excellent service in many years of practical use, the TRIATHLON KS features environmentally friendly corrosion protection which has proved to be highly resistant for a period of more than 1,000 hours in salt spray tests. Whether with minimal H1 surface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

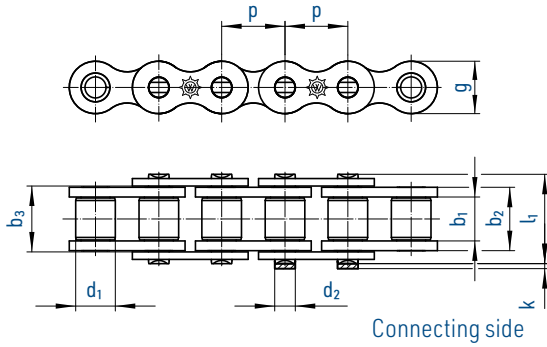
### Benefits for application

- 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)

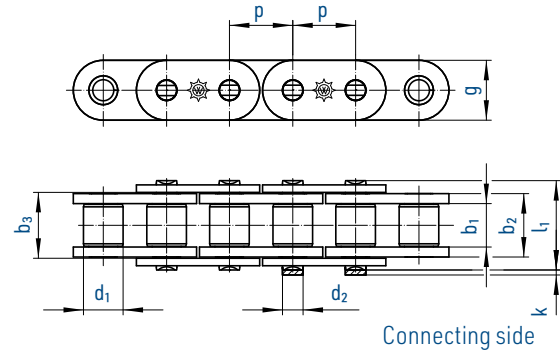




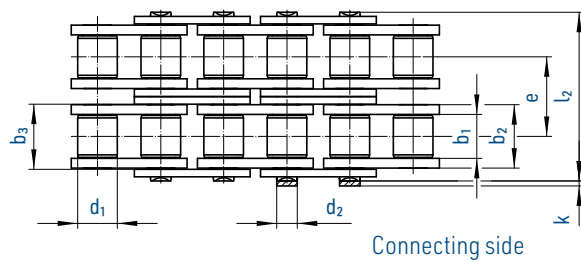
### Simplex chains



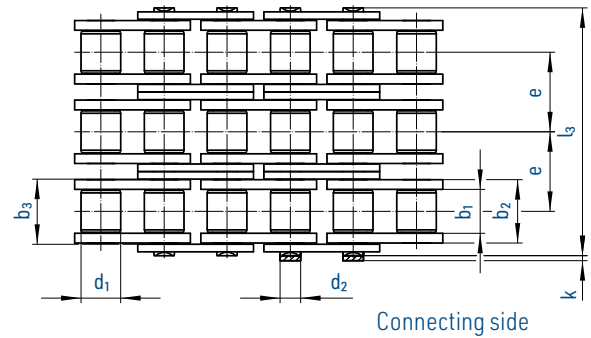
### Simplex chains GL (straight plates)



### 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	Weight	Connecting links
No.		p		b <sub>1</sub> min.	b <sub>2</sub> max.	b <sub>3</sub> min.	d <sub>1</sub> max.	d <sub>2</sub> max.	e	g max.	k max.	l max.	f cm <sup>2</sup>	F <sub>B</sub> min. kN	q ≈ kg/m	No.
No.	Ind.	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	cm <sup>2</sup>	kN	kg/m	No.
08 B-1 TR KS		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 KS		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 KS		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 KS		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 KS		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 KS	*	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 TR KS		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 KS		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 KS		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 KS		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 KS		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 TR KS	*	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 TR KS		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 KS		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 KS		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 KS		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 KS		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 TR KS	*	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

\* chemically nickel-plated rollers

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