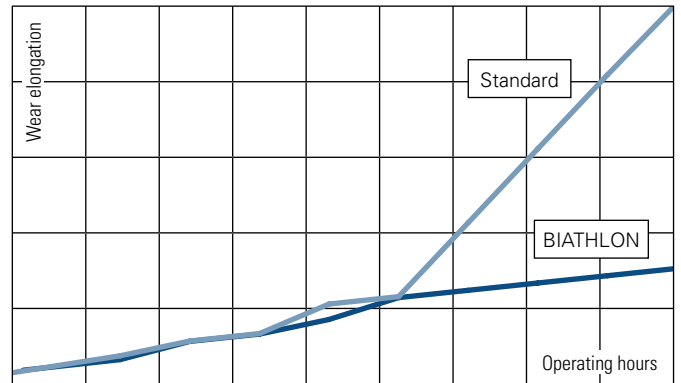


Cross-section polish of coated chain pin



Wear diagram

BIATHLON

Roller chain (type GL) with POM clip including TPU overlay

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 26).

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

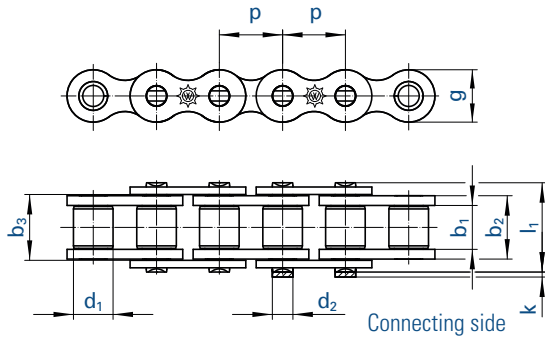
- Coated chain pins
- Coated rollers
- Special long-term lubricants

Benefits for application

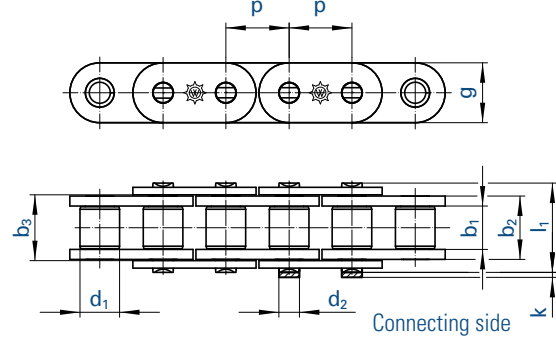
- Particularly efficient
- Dry-running operation characteristics in case of deficient lubrication
- Corrosion-protection on request



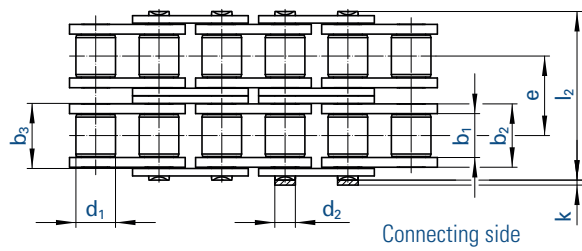
Simplex chains



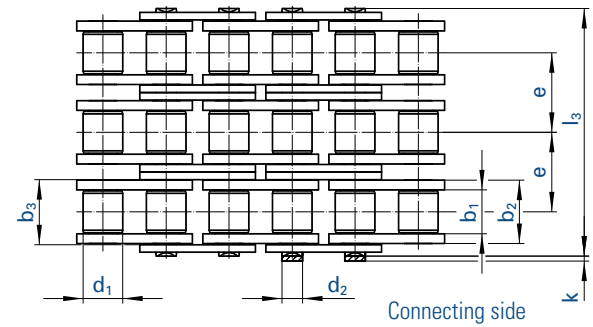
Simplex chains (type series GL)



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 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	38,20	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	79,0	5,91	210,0	7,30	111,12
24 B-2 BI		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 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	116,0	8,87	300,0	10,60	111,12
24 B-3 BI		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

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