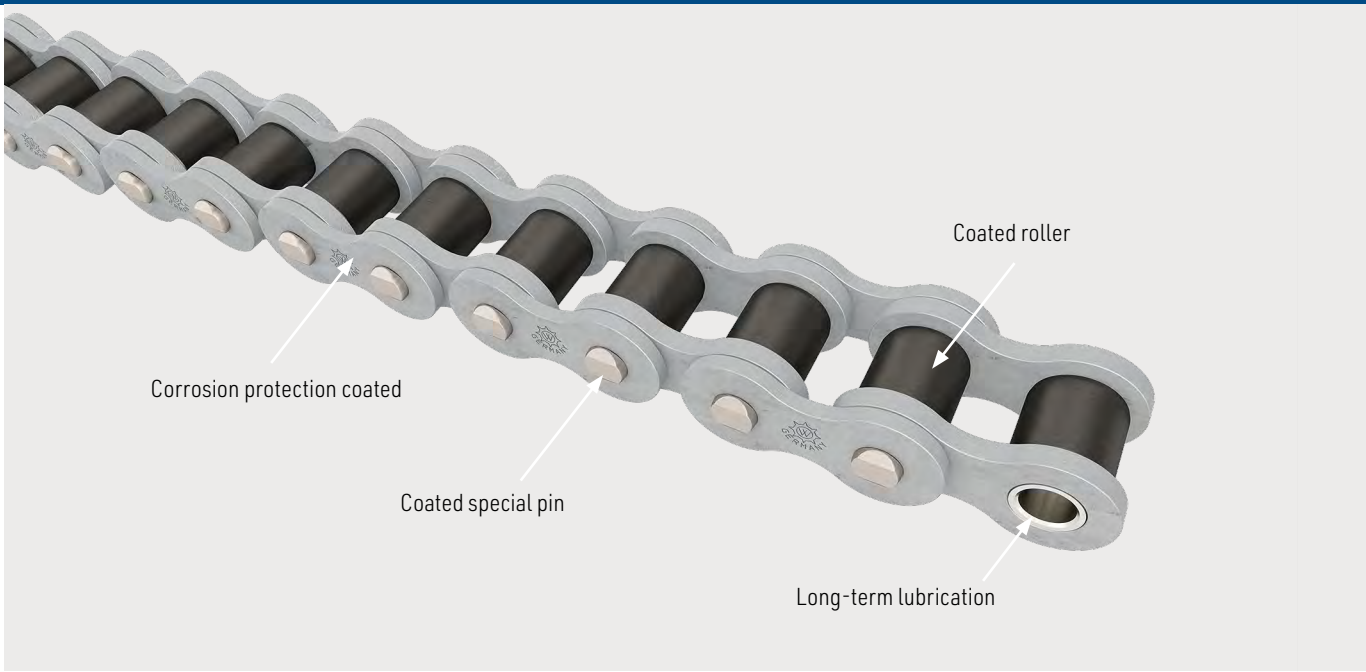


BIATHLON KS

Highest corrosion resistance in its class

Application areas

In a number of industrial sectors, e.g. in the food processing or in the packing industry, humid ambient conditions frequently impede relubrication of the chains. The annoying consequence is considerable chain wear resulting in too short change intervals and thus in unnecessarily high maintenance costs. In this case the combination of low maintenance requirements and high corrosion resistance with carbon steel chains makes double sense.

Proven quality

The KS type BIATHLON high performance chain has the highest corrosion resistance in its class. On the basis of the standard BIATHLON chain with its already excellent wear protection, environmentally-friendly corrosion protection material of the highest quality is additionally applied when manufacturing the KS type BIATHLON chain. In salt spray tests the BIATHLON KS proved to be corrosion resistant for a period of more than 1000 hours.

Under the same test conditions comparisons showed significant corrosion on competing chains after approx. 200 hours.

This long-life cycle has been achieved by combining different surface technologies that do not interact negatively with each other.

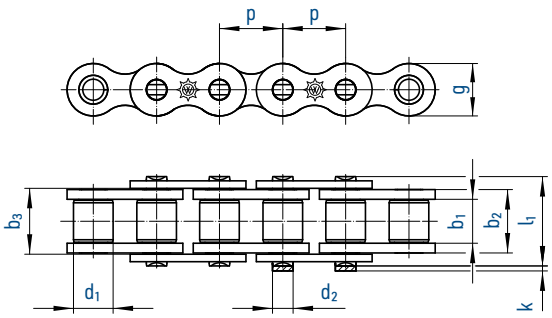
Technical features

- Highest corrosion protection thanks to zinc aluminum flake coating
- Pin with highest hardness thanks to chemical nickel plating
- Low-friction roller coating
- Special long-term lubricants

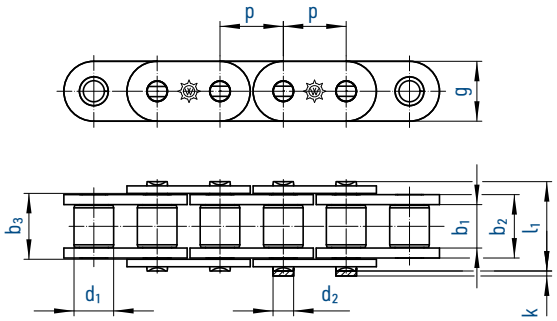
Benefits for application

- Particularly economical thanks to high corrosion and wear protection
- Dry-running operation characteristics in case of deficient lubrication
- High-tech corrosion protection
- RoHS compliance due to non-use of hexavalent chromium
- Temperature range from - 30 °C to +150 °C

Simplex chains



Simplex chains GL (straight plates)



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.	Ind.	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	cm²	kN	kg/m	No.
08 B-1 BI KS		12,700	½	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 KS		15,875	⅝	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 KS		19,050	¾	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 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 BI KS		31,750	1 ¼	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 KS		38,100	1 ½	25,40	37,90	38,20	25,40	14,63	-	33,4	6,6	53,4	5,54	180,0	6,80	111,12
28 B-1 BI KS		44,450	1 ¾	30,99	46,60	46,70	27,94	15,90	-	37,0	7,4	65,1	7,39	230,0	8,50	111, 12
32 B-1 BI KS		50,800	2	30,99	45,60	45,70	29,21	17,81	-	42,3	7,9	67,4	8,10	276,0	10,50	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.)

For details on orders and enquiries see page 148. Standard sprockets as of page 103.
Information on the selection of chain sizes and drives as of page 136.

Standard sprockets can be used for these chains.

Connecting links: According to ISO (...)

No. 4 (B)
Inner link

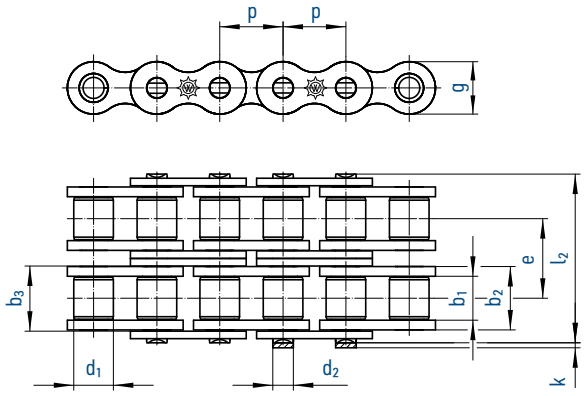
No. 7 (A)
Outer link
(to be riveted)

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



Connecting side

Chain according to ISO 606		Pitch p		Inner width b_1 min.	Inner link width b_2 max.	Outer plate width b_3 min.	Roller Ø d_1 max.	Pin Ø d_2 max.	Transverse pitch e	Plate height g max.	Projection over connecting link k max.	Width over pin l max.	Bearing area f	Breaking load F_B min.	Weight q ≈	Connecting links
No.	Ind.	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	cm²	kN	kg/m	No.
08 B-2 BI KS		12,700	½	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 KS		15,875	⅝	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 KS		19,050	¾	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 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 BI KS		31,750	1 ¼	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 KS		38,100	1 ½	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
28 B-2 BI KS		44,450	1 ¾	30,99	46,60	46,70	27,94	15,90	59,56	37,0	7,4	124,7	14,79	443,0	16,60	111, 12
32 B-2 BI KS		50,800	2	30,99	45,60	45,70	29,21	17,81	58,55	42,3	7,9	126,0	16,21	530,0	21,00	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.)

For details on orders and enquiries see page 148. Sprockets on request.
Information on the selection of chain sizes and drives as of page 136.

Standard sprockets can be used for these chains.

Connecting links: According to ISO (...)

No. 4 (B)
Inner link

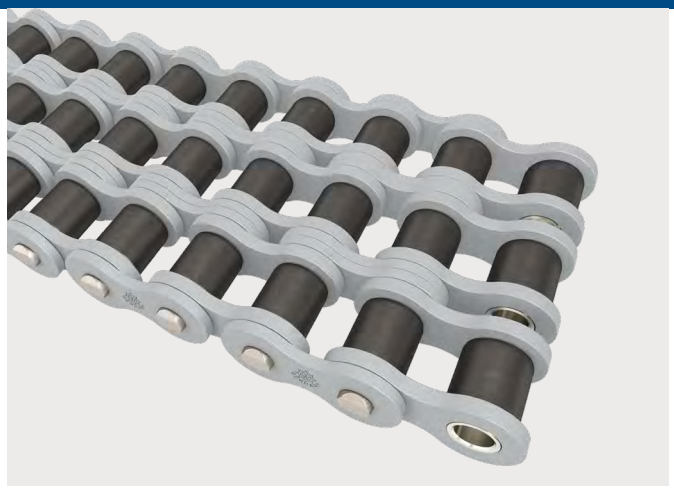
No. 7 (A)
Outer link
(to be riveted)

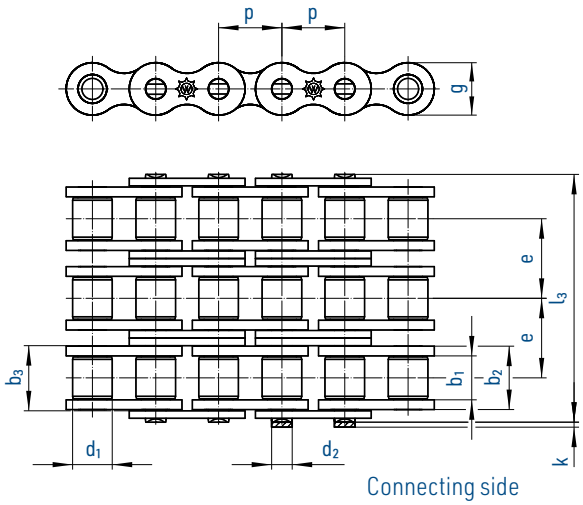
No. 11 (E)
Spring clip
connecting link

No. 111 (S)
Connecting link
with cottered pin

No. 12 (L)
Single
cranked link

No. 15 (C)
Double cranked link





Connecting side

Chain according to ISO 606		Pitch p		Inner width b_1 min.	Inner link width b_2 max.	Outer plate width b_3 min.	Roller Ø d_1 max.	Pin Ø d_2 max.	Transverse pitch e	Plate height g max.	Projection over connecting link k max.	Width over pin l max.	Bearing area f	Breaking load F_B min.	Weight q ≈	Connecting links
No.	Ind.	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	cm²	kN	kg/m	No.
08 B-3 BI 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 BI 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 BI 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 BI 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 BI 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 BI 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
28 B-3 BI KS		44,450	1 3/4	30,99	46,60	46,70	27,94	15,90	59,56	37,0	7,4	184,3	22,18	660,0	25,00	111, 12
32 B-3 BI KS		50,800	2	30,99	45,60	45,70	29,21	17,81	58,55	42,3	7,9	184,5	24,31	800,0	32,00	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.)

For details on orders and enquiries see page 148. Sprockets on request.
Information on the selection of chain sizes and drives as of page 136.

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