



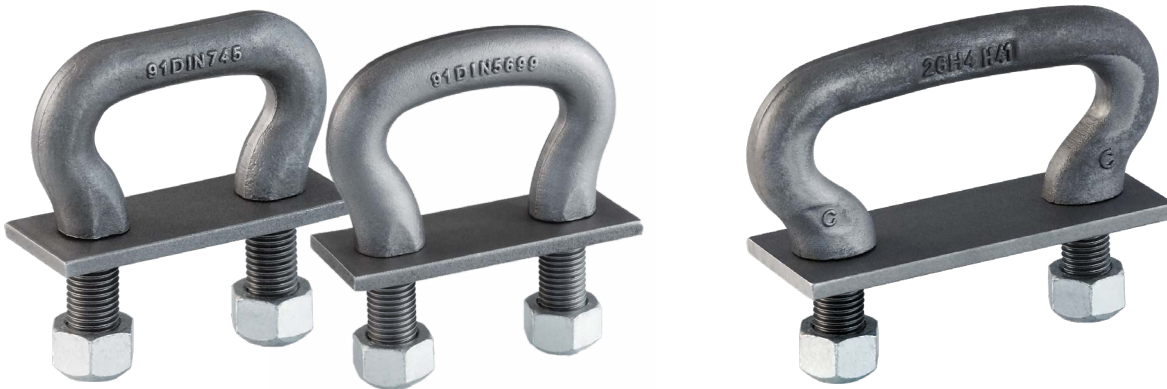
HEKO
GROUP
CONVEYOR SOLUTIONS



HEKO chain shackles DIN 745, DIN 5699 and S

Technological characteristics for chain shackles

HEKO chain shackles are exactly matched to the selected chain execution. This applies to the material quality and hardening depth. For high wear requirements, it is possible to choose between several inductive or case hardened chain executions.



Chain shackle type DIN 5699 and type DIN 745

- Simple to install
- For chains to DIN 764/766 and works standard
- Suitable for toothed wheels with equal chain pitch, otherwise use toothless wheels
- Shackles have to be used with distance plate and safety element

Chain shackle type S

- Simple to install
- For chains to DIN 764/766 and works standard
- Suitable only with toothless wheels
- Shackles have to be used with distance plate and safety element
- Less wear due to bigger pitch



HEKO chain shackles DIN 745, DIN 5699 and S

Tempered Steel, Chrome-Molybdenum or
Chrome-Nickel Steel Shackles

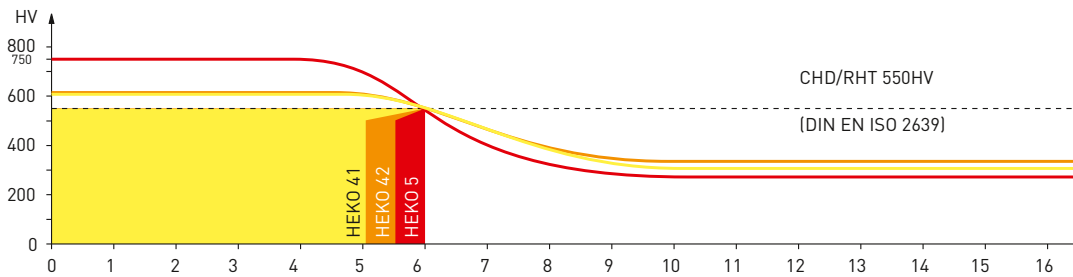
	Hardened contact area qualities		Case hardened qualities
	Heat treatable steel	CrMo-steel	CrNi-steel
	HEKO 41	HEKO 42	HEKO 5
Proof stress N/mm ²	125	240	150
Breaking stress N/mm ²	280	400	370 ₄₎
Contact surface hardness min. joint HV 1	600	600	750
Hardening depth d min. after etching	0.1 ₁₎	0.1 ₁₎	0.1 ₁₎
Hardening depth d min. CHD ₂₎ Rht ₃₎ 550 HV 1	0.06	0.06	0.06

1) tolerance d-0,01d

2) CHD = case hardened depth

3) Rht = hardening depth

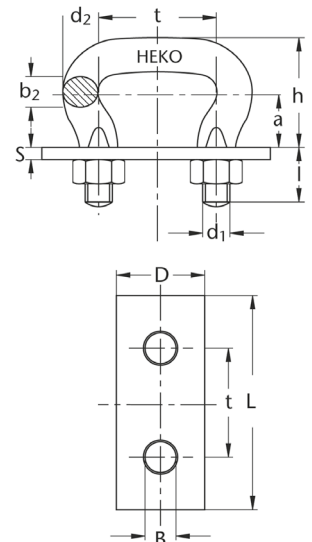
4) tolerance - 10% > T=105 = -20%



Hardening depth in % - diameter from surface

Technical data and qualities for HEKO chain shackles as per DIN 745

pitch (mm)	weight shackle with 2 nuts [kg/each]	weight plate [kg/each]	chain shackle dimensions (mm)						plate dimensions (mm)				HEKO qualities hardened contact areas		
			b ₂	d ₂	d ₁	h	a	l	L	D	S	B	HEKO 41	HEKO 42	HEKO 5
t	[kg/each]	[kg/each]	b ₂	d ₂	d ₁	h	a	l	L	D	S	B	MBK [kN]		
45	0.19	0.08	11.5	14	M10	40	20	25	75	30	5	10.5	76	106	98
56	0.39	0.17	15.0	18	M12	50	25	32	95	40	6	13.0	115	161	149
63	0.67	0.20	18.0	21	M16	60	30	40	110	40	6	17.0	145	203	188
70	1.03	0.25	20.0	23	M20	68	34	45	120	50	6	21.0	179	251	232
80	1.26	0.28	23.0	26	M20	74	37	45	130	50	6	21.0	237	331	307
91	2.03	0.50	26.0	29	M24	86	43	55	150	60	8	25.0	303	425	393
105	2.60	0.56	30.0	34	M24	100	50	55	165	60	8	25.0	403	565	523
126	4.42	1.00	36.0	40	M30	118	59	70	200	70	10	31.0	580	814	753
147	6.07	1.10	42.0	46	M30	136	68	70	220	70	10	31.0	790	1108	1025
147	7.33	1.53	42.0	46	M36	136	68	85	230	80	12	37.0	790	1108	1025



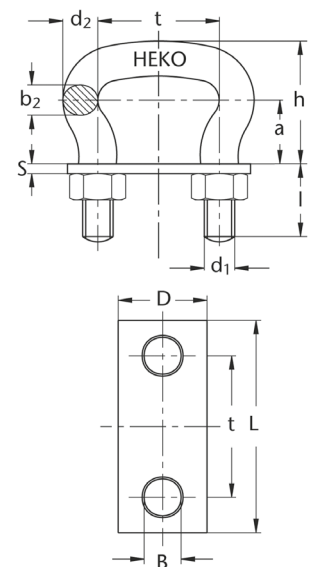
MBK = min. breaking load, t = pitch, d = diameter. When employing toothed chain wheels chain pitch and shackle pitch must be the same. When employing toothless chain wheels the pitch of shackles can be one size larger than chain pitch. Additional qualities available on request.



HEKO chain shackles DIN 745, DIN 5699 and S

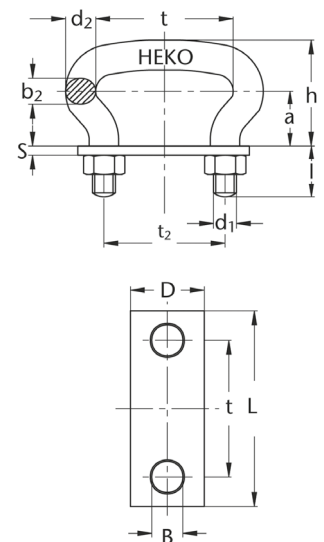
Technical data and qualities for HEKO chain shackles as per DIN 5699

pitch (mm)	weight shackle with 2 nuts (kg/piece)	weight plate (kg/each)	chain shackle dimensions (mm)						plate dimensions (mm)				HEKO qualities hardened contact areas		
			b_2	d_2	d_1	h	a	l	L	D	S	B	HEKO 41	HEKO 42	HEKO 5
35	0.14	0.07	10	12	M10	43	23	25	65	30	5	10.5	54	74	68
45	0.26	0.08	13	15	M12	53	28	30	75	30	5	13.0	88	119	110
56	0.43	0.17	16	18	M14	64	34	35	95	40	6	15.0	129	175	162
63	0.63	0.20	18	21	M16	71	37	40	110	40	6	17.0	170	230	213
70	0.97	0.25	20	23	M20	80	42	45	120	50	6	21.0	207	280	259
80	1.26	0.28	23	26	M20	89	47	45	130	50	6	21.0	269	364	337
91	1.85	0.50	26	29	M24	99	52	55	150	60	8	25.0	339	458	424
105	2.50	0.56	30	34	M24	114	60	55	165	60	8	25.0	458	620	574
126	4.25	1.00	36	40	M30	134	71	65	200	70	10	31.0	646	875	810
136	6.48	1.46	39	44	M36	146	76	75	220	80	12	37.0	771	1027	950
147	7.08	1.56	42	47	M36	157	81	75	230	80	12	37.0	887	1200	1110



Technical data and qualities for HEKO chain shackles type S

pitch (mm)	to suit chain (mm)		weight shackle with 2 nuts (kg/each)	chain shackle dimensions (mm)						plate dimensions (mm)				HEKO qualities hardened contact areas		
	DIN 764	DIN 766		t_2	b_2	d_2	d_1	h	a	l	L	D	S	B	HEKO 41	HEKO 5
75	13 x 45	13 x 36	0.49	65	15	15	M12	50	25	30	105	40	6	13	160	205
90	16 x 56	16 x 45	0.75	80	18	18	M16	60	30	35	120	40	6	17	170	220
120	20 x 70	20 x 56	1.54	100	22	25	M20	78	40	45	150	50	8	21	340	440
140	23 x 80	23 x 64	2.42	120	25	29	M24	88	45	50	180	60	8	25	380	490
150	26 x 91	26 x 73	2.98	130	28	31	M24	98	50	55	190	70	8	25	430	560
180	30 x 105	30 x 84	5.15	150	34	37	M30	119	60	70	220	80	10	31	600	780
220	36 x 126	36 x 101	8.25	180	40	45	M30	144	70	70	250	100	10	31	730	950
240	39 x 136	39 x 109	10.90	200	45	50	M36	165	80	75	280	100	12	37	840	1100
250	42 x 147	42 x 118	13.60	210	48	54	M36	176	85	80	310	120	12	37	930	1200



MBK = min. breaking load, t = pitch, d = diameter. When employing toothed chain wheels chain pitch and shackle pitch must be the same. When employing toothless chain wheels the pitch of shackles can be one size larger than chain pitch. Additional qualities available on request.