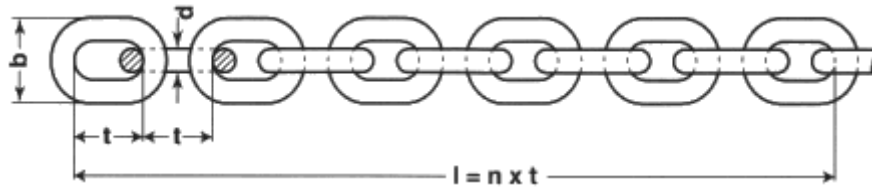


# Round Link Chain Ends acc Din 764 & 766

For Scraper Conveyors & Bucket Elevators



DIN 764					ESD64250		ESD64300	
Nominal diameter	Pitch	Outside width	N° of links	Weight per chain end	Proof load	Breaking load	Proof load	Breaking load
d [mm]	t [mm]	b [mm]	n (*)	Kg	kN <sup>2)</sup>	kN <sup>2)</sup>	kN <sup>2)</sup>	kN <sup>2)</sup>
10	35	34	9	0,66	20	40	24	58
13	45	44	9	1,5	32	64	40	98
16	56	54	9	2,7	50	100	60	148
18	63	60	9	3,8	63	126	76	188
20	70	67	7	4,2	80	160	96	232
23	80	77	7	6,2	100	200	120	307
26	91	87	7	9,0	126	252	151	392
30	105	101	7	14,5	170	340	204	523
36	126	122	7	24,0	250	500	300	753
39	136	132	7	29,5	280	560	336	884
42	147	142	7	38,0	340	680	408	1025

<sup>2)</sup> ± 10% Tolerance, depending on batches

DIN 766					ESD66250		ESD66300	
Nominal diameter	Pitch	Outside width	N° of links	Weight per chain end	Proof load	Breaking load	Proof load	Breaking load
d [mm]	t [mm]	b [mm]	n (*)	kg	kN <sup>2)</sup>	kN <sup>2)</sup>	kN <sup>2)</sup>	kN <sup>2)</sup>
10	28	34	11	0,72	20	40	24	58
13	36	44	11	1,5	32	64	40	98
16	45	54	11	2,9	50	100	60	148
18	50	60	9	3,3	63	126	76	188
20	56	67	9	4,6	80	160	96	232
23	64	77	9	7,0	100	200	120	307
26	73	87	7	7,7	126	252	151	392
30	84	101	7	12,0	170	340	204	523
36	101	122	7	21,0	250	500	300	753
39	109	132	7	26,0	280	560	336	884
42	118	142	7	33,0	340	680	408	1025

<sup>2)</sup> ± 10% Tolerance, depending on batches

(\*) other N° of links possible on request

# Round Link Chain Ends acc Din 764 & 766

## Technical Properties

ESD-Qualities	Chain ends	
	ESD6X250	ESD6X300
Proof strength [N/mm <sup>2</sup> ]	125	150
Breaking strength [N/mm <sup>2</sup> ]	250	300 <sup>3)</sup>
Surface hardness HB in the back of the bracket		
Surface hardness HV30 in the rounding	800 <sup>1)</sup>	800 <sup>1)</sup>
Carburizing depth HTÄ 0,1 d ± 0,01 d	0,1	0,1
Hardening dept EHT	0,06 <sup>2)</sup>	0,06 <sup>2)</sup>
Material	Manganese steel	Chrome-Nickel alloyed super-refined steel
<sup>1)</sup> ± 5%	<sup>2)</sup> ≥ 30 mm diam. 0,05d 550 HV	<sup>3)</sup> ≥ 30 mm diam. Tolerance 20%

### ESD6X250

Highly wear resistant elevator and conveyor chain, produced acc. DIN 764/766  
 Made of age resistant special manganese chain steel, calibrated and bundled in matched pairs  
 Surface hardness more than 800 HV measured 0,25 mm below the surface,  
 Carburizing depth HTÄ 0,1d ± 0,01d  
 Hardening depth EHT at 0,06d more than 550 HV up to diam.28 mm ,  
 from diam.30 mm and bigger hardening depth EHT at 0,05d more than 550 HV  
 Proof strength 125 N/mm<sup>2</sup>, breaking strength 250 N/mm<sup>2</sup>

### ESD6X300

Highly wear resistant elevator and conveyor chain, produced acc. DIN 764/766  
 Made of age and corrosion resistant chrome nickel-alloyed super-refined chain steel,  
 Calibrated and bundled in matched pairs  
 Surface hardness more than 800 HV measured 0,25 mm below the surface,  
 Carburizing depth HTÄ 0,1d ± 0,01d  
 Hardening depth EHT at 0,06d more than 550 HV up to diam.28 mm ,  
 from diam.30mm and bigger hardening depth at 0,05d more than 550 HV  
 Proof strength 150 N/mm<sup>2</sup>, breaking strength 300 N/mm<sup>2</sup>

# Round Link Brackets acc Din 745 & 5699

## Technical Properties

ESD-Qualities	Chain brackets	
	ESDXX280	ESDXX400
Proof strength [N/mm <sup>2</sup> ]	125	240 <sup>1)</sup>
Breaking strength [N/mm <sup>2</sup> ]	280	400 <sup>1)</sup>
Surface hardness HB in the back of the bracket	240-360	300-360
Surface hardness HV30 in the rounding	> 600	> 600
Hardening dept EHT	0,1	0,1
Material	Fine grained heat treatable steel	Chrome-Molybdenum alloyed super-refined steel

<sup>1)</sup> depending on production lot -10% possible

### ESDXX280

Highly wear resistant chain brackets, produced acc. DIN745/5699, material age resistant fine grained heat treatable steel, at the distance plate contact surface machined, pivots adjusted, heat treated to a tensile strength of 800 – 1.200 N/mm<sup>2</sup> measured at the back of the bracket, inductively hardened at the inside load bearing roundings, surface hardness more than 600 HV measured 0,25 mm below the surface, hardening depth Rht 0,1d min. 550 HV5 +0,03d related to dimension d<sup>1</sup>  
proof strength 125 N/mm<sup>2</sup>, breaking strength 280 N/mm<sup>2</sup>

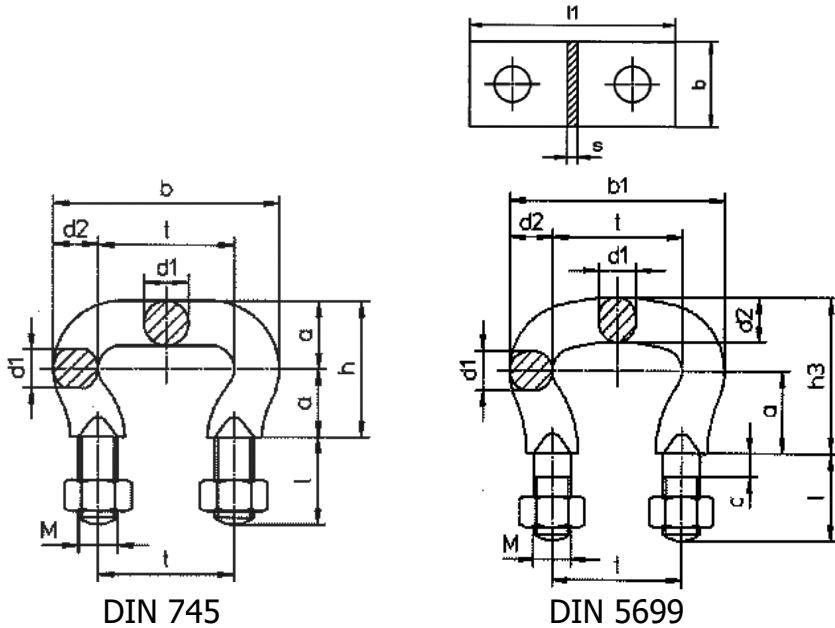
### ESDXX400

Highly wear resistant chain brackets, produced acc. DIN745/5699, material age and corrosion resistant chrome-molybdenum-alloyed super-refined steel, at the distance plate contact surface machined, pivots adjusted, heat treated to a tensile strength of 1.000 – 1.200 N/mm<sup>2</sup> measured at the back of the bracket, inductively hardened at the inside load bearing roundings, surface hardness more than 600 HV measured 0,25 mm below the surface, hardening depth Rht 0,1d min. 550 HV5 +0,03d related to dimension d<sup>1</sup>  
proof strength 240 N/mm<sup>2</sup>, breaking strength 400 N/mm<sup>2</sup>

# Round Link Chain Ends

## acc Din 764 & 766

Brackets & Distance Plates



**DISTANCE PLATE in material St 60-2**

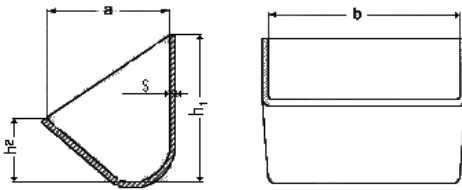
Pitch	Dimensions [mm]					Weight/100 DC.
	M	b	s	d	kg	
35	65	30	5	10,5	7	
45 <sup>1)</sup>	75	30	5	10,5	8	
45 <sup>2)</sup>	75	30	5	13	8	
56 <sup>1)</sup>	95	40	6	13	17	
56 <sup>2)</sup>	95	40	6	15	17	
63	110	40	6	17	20	
70	120	50	6	21	25	
80	130	50	6	21	28	
91	150	60	8	25	50	
105	165	60	8	25	56	
126	200	70	10	31	100	
136	220	80	12	37	146	
147 <sup>1)</sup>	230	80	12	31	155	
147 <sup>2)</sup>	230	80	12	37	153	

<sup>1)</sup>only DIN 745 <sup>2)</sup>only DIN 5699

	BRACKET									ESD99280		ESD99400		Corresponding chain ends acc. to		
	Dimensions [mm]									Weight	Proof load	Breaking load	Proof load	Breaking load	DIN 764+766 for plain wheels	DIN 764 for toothed wheels
	t	a	b	c	d <sup>1</sup>	d <sup>2</sup>	M	h	l	[kg/pc]	kN	kN	kN	kN	d	d
DIN 5699	35	23	59	8	10	12	M10	43	25	0,14	20	53	36	62	-	10
	45	28	75	8	13	15	M12	53	30	0,26	32	86	60	106	10	13
	56	34	92	10	16	18	M14	64	35	0,42	50	127	96	160	13	16
	63	37	105	10	18	21	M16	71	40	0,65	64	167	120	200	16	18
	70	42	116	12	20	23	M20	80	45	1,00	80	203	150	250	18	20
	80	47	132	12	23	26	M20	89	45	1,22	100	264	196	330	20	23
	91	52	149	14	26	29	M24	99	55	1,86	126	332	252	420	23	26
	105	60	173	14	30	34	M24	114	55	2,50	170	450	332	560	26	30
	126	71	206	18	36	40	M30	134	65	4,40	250	635	480	810	30	36
	136	76	224	22	39	44	M36	146	75	6,35	280	757	560	950	33/36/39	39
147	81	241	22	42	47	M36	157	75	7,30	340	871	640	1100	36/39/42	42	
DIN 745	45	20	73		11,5	14	M10	40	25	0,17	32	76	60	102	10	13
	56	25	92		15	18	M12	50	32	0,36	50	112	96	155	13	16
	63	30	105		18	21	M16	60	40	0,60	64	142	120	194	16	18
	70	34	116		20	23	M20	68	45	0,90	80	176	150	242	18	20
	80	37	132		23	26	M20	74	45	1,13	100	230	196	320	20	23
	91	43	149		26	29	M24	86	55	1,83	126	300	252	406	23	26
	105	50	173		30	34	M24	100	55	2,40	170	395	332	542	26	30
	126	59	206		36	40	M30	118	70	4,00	250	570	480	782	30	36
	147	68	239		42	46	M30	136	70	5,65	340	775	640	1060	36/39/42	42

# Elevator Buckets acc Din

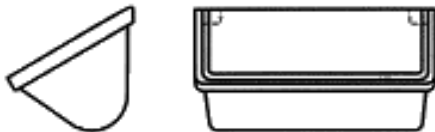
**A = without reinforcement**



**B = with front reinforcement**



**C = with three side reinforcement**

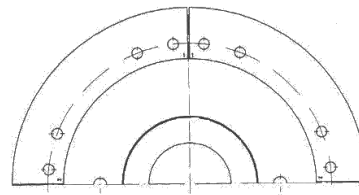
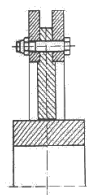
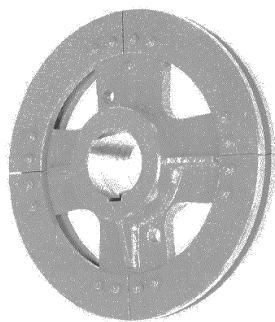


BUCKET DIM.			DIN 15233				DIN15234			
b	a	s	h <sub>1</sub>	h <sub>2</sub>	cont.	weight	h <sub>1</sub>	h <sub>2</sub>	cont.	weight
[mm]	[mm]	[mm]	[mm]	[mm]	liter	kg.	[mm]	[mm]	liter	kg.
160	160	3	180	71	1,2	2,6	200	106	1,9	2,83
200	160	3	180	71	1,5	3,3	200	106	2,4	3,55
250	200	4	224	90	3,0	6,4	250	132	4,6	7,0
315	200	4	224	90	3,75	7,5	250	132	5,8	8,3
400	224	4	250	100	5,9	9,8	280	150	9,4	11,2
500	250	5	280	112	9,3	17	315	170	14,9	18,8
630	280	5	315	125	14,6	23	355	190	23,5	25,8
800	315	6	355	140	23,3	38	400	212	37,3	42
1000	355	6	400	160	37,6	53	450	236	58,3	58
1250	400	6	450	180	59,4	73	500	265	92,0	78
1400	425	8					545	282	117,0	128
1600	450	8					575	300	150,0	145

Available in steel, aluminum and stainless steel

## Multiple Part Chain Wheels

with grey cast iron hub or steel hub



Chain wheels are available with replaceable segments made by special chilled cast iron or alternatively with hardened segments  
 Hubs made of grey cast iron or steel hub, without or with relief slots  
 Wheels for chain diameter 13 – 42 mm, for pitch circle diameter 500 – 1.600mm  
 Machined with bore and groove acc. to requirements  
 Sprocket wheels (teethed wheels) and pocket wheels available on request, in one piece or in segmental design