

HARDWARE ACCESSORIES





Reliable

Competitive

Professional

Qingdao Powerful Machinery Co., Ltd. is located in Qingdao, one of the largest port cities in China. As China's leading manufacturer of rigging, lifting, and material handling applications, Powerful Machinery delivers a diverse portfolio of products engineered to exceed the toughest demands of any industry, construction, cargo handling, towing, marine, and transportation.

Our products include welded chains, G80 and G100 lifting chains & accessories, hooks, shackles, hoist rings, master links, chain slings, turnbuckles, snatch blocks, wire rope & fittings and a host of other custom-engineered solutions: the most comprehensive portfolio in the industry.

Powerful Machinery has 20 years of export experience, with customers in dozens of countries around the world. Our products are exported to Europe, America, Southeast Asia, the Middle East, Australia, and many other regions.

At Powerful Machinery, We have a team of professionals working together to provide our customers with the best products and services. When you choose Powerful Machinery, you are guaranteed more than superior products—you are guaranteed the quality assurance that comes with a customer service team committed to exceeding end-user expectations.

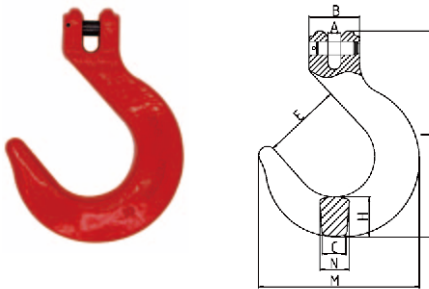
At Powerful Machinery, it's not just about lifting products; it's about working with a trusted partner who is invested in your success.

POWERFUL
MACHINERY 普丰机械

COMPANY PROFILE

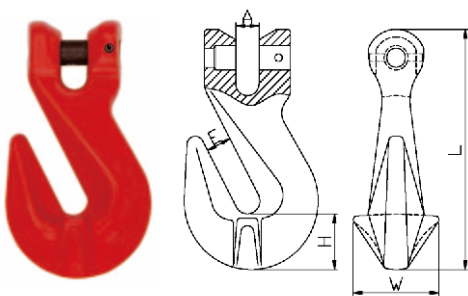


G80 CLEVIS FOUNDRY HOOK



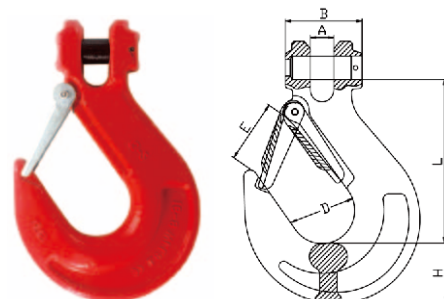
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)							
MM	KG/PC	TON	TON	A	B	M	E	C	N	H	L
7/8	1.1	2.0	8.0	9.5	37	128	63.4	18	18	31.5	161
10	2.5	3.15	12.6	13.0	49	156	76.9	23	32	38.0	199

G80 CLEVIS GRAB HOOK WITH WINGS



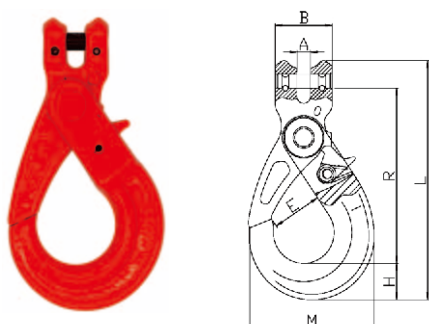
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)				
MM	KG/PC	TON	TON	E	A	H	W	L
6	0.25	1.12	4.48	8	8	18	22	77
7/8	0.32	2.00	8.00	11	10	19	34	89
10	0.73	3.15	12.60	13	13	29	46	126
13	1.60	5.30	21.20	17	15	43	58	164
16	2.80	8.00	32.00	19	19	45	74	184
20	5.00	12.50	50.00	24	23	56	74	219
22	6.30	15.00	60.00	27	27	69	90	254
26	14.50	21.20	84.80	30	30	77	102	309

G80 CLEVIS SLING HOOK WITH LATCH



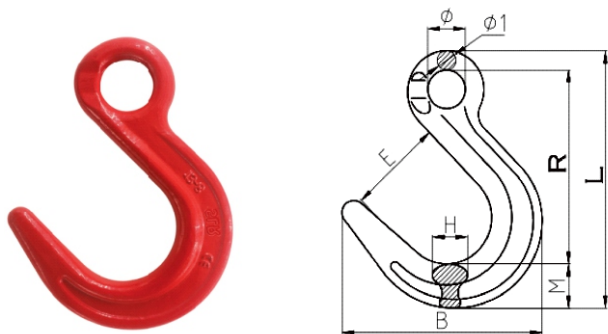
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)					
MM	KG/PC	TON	TON	A	B	D	H	L	E
6	0.32	1.12	4.48	8	32	35	23	76	26
7/8	0.48	2.00	8.00	10	37	37	25	86	29
10	0.95	3.15	12.60	13	49	46	31	104	39
13	1.80	5.30	21.20	17	56.5	56	43	128	48
16	3.40	8.00	32.00	22	71	60	54	150	56
20	6.00	12.50	50.00	24	77	79	58	180	59
22	10.40	15.00	60.00	26	91	101	62	213	72
26	14.50	21.20	84.80	30	117	115	75	250	101
32	27.00	31.50	126.00	35	150	140	88	317	124

G80 CLEVIS SELF-LOCKING HOOK



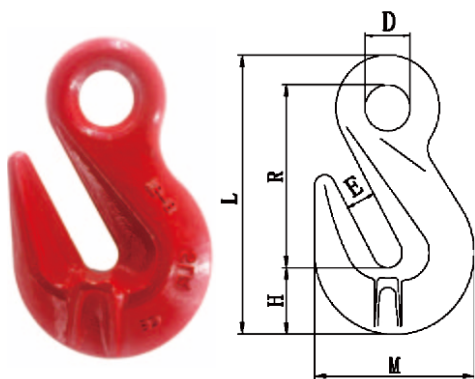
SIZE	WEIGHT	WLL	B.L	DIMENSIONS					
MM	KG/PC	TON	TON	A	B	K	H	L	Φ
6	0.5	1.12	4.48	7.5	28	96	20	131	34
7/8	0.8	2	8	9.5	35	118.5	24	160	46
10	1.42	3.15	12.6	12	45	144	28	194	58
13	3	5.3	21.2	15	54	181.5	41	251	69
16	5.8	8	32	17.5	60.5	216	50	302	86
18/20	8.75	12.5	50	25	74.5	239	62	342	92
22	12.3	15	60	25.5	80	276	65	391	98
26	20.6	21.2	84.8	30	99	312	74	448	110

G80 EYE FOUNDRY HOOK



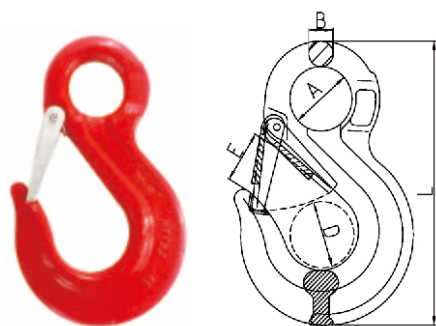
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)							
TON	KG/PC	TON	TON	Φ	L	B	R	E	Φ1	H	M
6	0.382	1.12	4.48	20	133	100	102.7	49	10	17	19
7/8	0.69	2	8	24	158.5	130	120.5	62	12	19	26
10	1.3	3.2	12.8	31.5	199	152.5	153	73	15	25	31
13	2.32	5.3	21.2	44	241.5	186	184	90	19	33	39
16	4	8	32	49	279	218	216	105	22	37	42
20	7.3	12.5	50	60	330	252	247	114	26	46	57
22	11.4	15	60	64	376	274	275	123	31	60	70

G80 EYE SHORTENING GRAB HOOK WITH WINGS



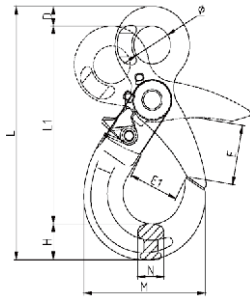
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)				
MM	KG/PC	TON	TON	E	D	H	R	L
6	0.140	1.12	4.48	8.0	13.5	17.9	51.4	75.3
7/8	0.245	2.00	8.00	10.8	18.0	20.0	61.5	91.2
10	0.650	3.15	12.60	13.0	20.0	29.0	80.0	122.0
13	1.390	5.30	21.20	16.5	26.0	42.8	99.7	158.0
16	2.200	8.00	32.00	20.0	30.5	47.7	104.0	169.0
20	4.600	12.5	50.00	25.0	37.5	56.0	140.0	219.0
22	8.200	15.00	60.00	28.0	44.0	68.0	165.0	259.0
26	9.800	21.20	84.80	30.0	44.0	77.0	188.8	298.0
32	19.400	31.50	126.00	38.0	57.0	95.0	228.0	361.0

G80 EYE SLING HOOK WITH LATCH



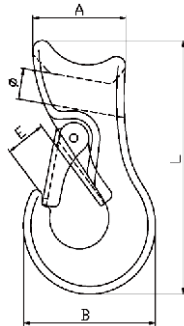
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)				
MM	KG/PC	TON	TON	B	E	D	A	L
6	0.3	1.12	4.48	9	21.5	20	20	108
7/8	0.4	2.00	8.00	11	27.5	24	25	133
10	0.9	3.15	12.60	15	27.2	38	38	167
13	2.2	5.30	21.20	19	38.5	51	43	213
16	3.2	8.00	32.00	23	42.0	62	50	255
20	5.8	12.50	50.00	24	44.6	75	63	305
22	9.2	15.00	60.00	32	70.0	68	62	348
26	13.0	21.20	84.80	35	84.0	84	64	394
32	18.5	31.50	126.00	37	102.0	100	88	480

G80 EYE TYPE SELF LOCKING SAFETY HOOK



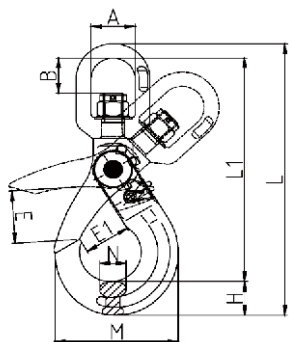
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)								
MM	KG/PC	TON	TON	Φ	E	E1	L1	L	H	D	N	M
6	0.50	1.12	4.48	21.0	32	28	110	140	20	11	15	73
7/8	0.85	2.00	8.00	25.0	40	35	136	175	26	13	20	91
10	1.42	3.15	12.60	34.5	48	45	168	213	30	15	26	108
13	2.86	5.30	21.20	39.5	27	53	207	267	40	21	33	142
16	5.90	8.00	32.00	50.0	65	63	254	332	51	27	38	169
20	8.50	12.50	50.00	64.5	82	82	278	360	55	27	50	185
22	11.60	15.00	60.00	70.0	80	76	319	415	67	32	52	202
26	18.00	21.20	84.80	80.0	109	96	362	472	75	34	60	239
32	46.00	31.50	126.00	105.0	131	131	470	614	97	45	80	329

G80 SLIDING EYE CHOKE HOOK



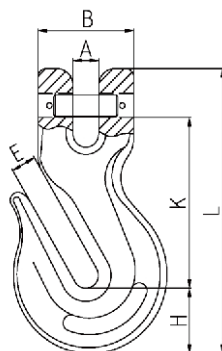
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)				
MM	KG/PC	TON	TON	D	A	B	E	L
3/8"-1/2"	0.68	1.6	8	17	50.0	71	18	132.0
5/8"	1.21	2.0	10	22	63.5	79	20	151.5
3/4"	1.99	3.0	15	28	69.0	103	26	170.0
1"	4.18	5.0	25	32.5	85.7	135	33	213.0

G80 SWIVEL TYPE SELF LOCKING SAFETY HOOK



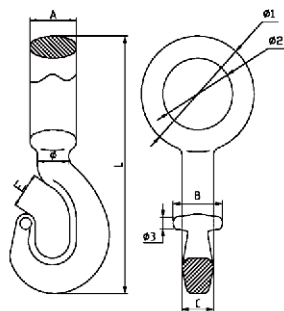
SIZE	WEIGHT	WLL	B.L	A	B	E	E1	L1	L	H	N	M
MM	KG/PC	TON	TON									
6	0.71	1.12	4.48	32	26	32	28	152	184	20	15	73
7/8	1.15	2.00	8.00	36	30	40	35	189	228	26	20	91
10	1.86	3.15	12.60	42	35	48	45	223	268	30	26	108
13	3.51	5.30	21.20	50	41	57	53	267	323	40	33	142
16	7.33	8.00	32.00	61	58	65	63	339	413	50	38	169
18/20	10.30	12.50	50.00	72	63	82	82	370	452	55	50	185
22	17.50	15.00	60.00	97	98	80	76	466	564	67	52	202
26	23.00	21.20	84.80	123	115	109	96	544	661	75	60	239
32	81.00	31.50	126.00	140	147	131	131	679	830	97	80	329

G80 U.S. TYPE CLEVIS GRAB HOOK



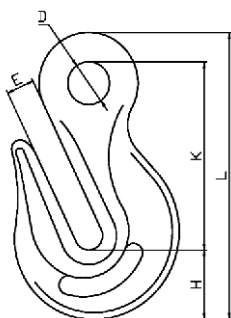
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)					
MM	KG/PC	TON	TON	A	B	E	H	K	L
1/4"	0.22	1.2	4.8	8	34	8	19.5	57	90.5
9/32"	0.31	2	8	9.5	41	9.5	23	65.3	106.5
3/8"	0.7	3.2	12.8	12.7	46	12.5	31	82	137
1/2"	1.8	5.4	21.6	16	61	16.7	43	113	184.5
5/8"	3.1	8.2	32.8	19.5	68.5	20	49	129.5	215
3/4"	4.1	12.8	51.2	24	88	24	58	152	254
7/8"	6.2	15.5	62	27	101	26	64.8	178	295

G80 TWIST EYE CHOKE HOOK



SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)								
MM	KG/PC	TON	TON	A	B	C	Ø	Ø1	Ø2	Ø3	E	L
7/8	0.36	2.0	8.0	19.0	28.0	16.5	17.0	52	30.5	7.5	16	123
10	0.72	3.2	12.8	26.0	40.0	17.5	20.0	68	39.0	8.0	20	157
13	1.40	5.4	21.6	34.0	43.0	21.0	25.0	85	52.0	9.5	27	196
16	3.17	8.2	32.8	51.0	45.5	31.0	30.0	108	64.0	10.5	30	246
18	3.80	10.0	40.0	49.5	53.0	33.5	33.5	121	75.0	12.0	37	268
20/22	8.95	15.3	61.2	70.0	80.0	44.0	52.0	146	84.0	14.0	47	367
26	16.65	21.2	84.8	80.0	80.0	44.0	60.0	180	100.0	24.3	44	417

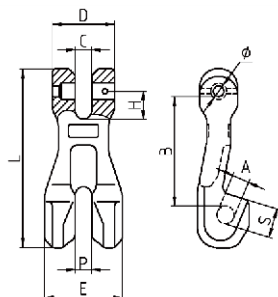
G80 U.S. TYPE EYE GRAB HOOK



SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)				
IN	KG/PC	TON	TON	E	D	H	K	L
1/4"	0.13	1.2	4.8	8.0	13.0	19.0	54	81.0
9/32"	0.27	2.0	8.0	9.5	15.0	23.0	64	98.0
3/8"	0.55	3.2	12.8	12.5	20.0	30.0	82	125.0
1/2"	1.3	5.4	21.6	17.0	25.0	42.0	106	165.0
5/8"	2.48	8.2	32.8	20.0	30.0	49.0	127	196.5
3/4"	3.80	12.8	51.2	23.0	34.5	56.0	152	231.6
7/8"	5.80	15.5	62.0	28.6	40.5	65.5	175	267.6

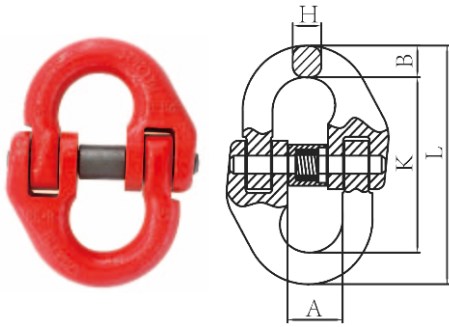
G80 LINKS

G80 CLEVIS CLUTCH



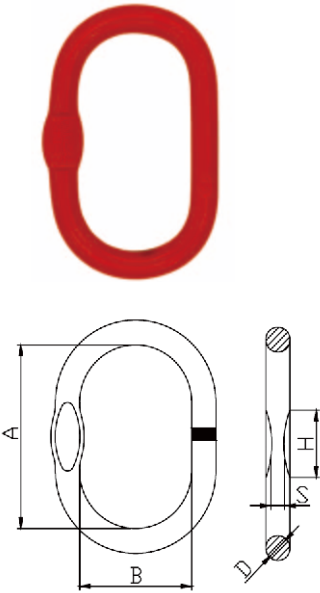
SIZE	WEIGHT	WLL	B.L	P	C	A	B	H	S	L	D
MM	KG/PC	TON	TON	MM	MM	MM	MM	MM	MM	MM	MM
6	0.18	1.12	4.48	7.5	7.5	8.0	44.0	11.8	12.0	73.5	7.8
7/8	0.45	2.00	8.00	9.5	9.5	10.5	61.7	15.7	17.0	101.0	9.2
10	0.93	3.15	12.60	13.0	13.0	12.4	92.0	20.0	28.0	138.0	13.2
13	1.88	5.30	21.20	16.5	16.5	16.0	115.0	24.5	34.5	177.0	16.2
16	3.50	8.00	32.00	21.0	21.0	19.5	143.0	30.5	40.0	220.0	20.0
18/20	4.43	12.5	50.00	23.5	23.5	23.0	152.0	36.0	46.0	238.0	24.3
22	8.05	15.0	60.00	25.5	25.5	26.0	195.0	42.0	57.5	295.0	28.1

G80 EUROPEAN TYPE CONNECTING LINK



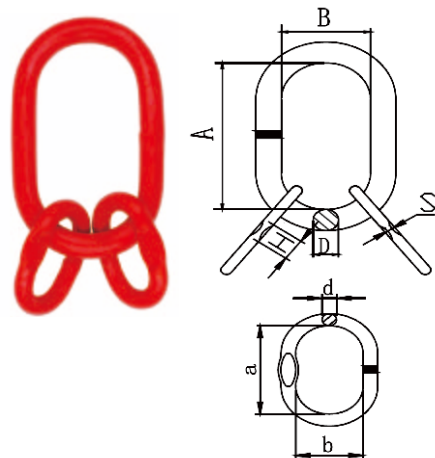
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)				
MM	KG/PC	TON	TON	A	B	L	K	H
6	0.080	1.12	4.48	15.0	7.5	58.0	42.0	7.0
7	0.145	1.50	6.00	20.0	8.5	73.0	54.8	8.5
7/8	0.146	2.00	8.00	20.5	9.5	79.5	60.5	8.5
8	0.160	2.00	8.00	20.5	9.5	79.5	60.5	8.5
10	0.300	3.15	12.60	26.0	12.0	90.5	68.0	11.5
13	0.650	5.30	21.20	30.0	15.0	117.0	87.0	15.0
16	1.150	8.00	32.00	35.0	19.8	148.0	108.4	19.8
18	1.840	10.00	40.00	38.0	21.0	154.0	112.0	21.0
20	2.100	12.50	50.00	41.0	24.0	169.5	121.5	24.0
22	2.870	15.00	60.00	49.5	26.0	193.5	141.5	26.0
26	4.500	21.20	84.80	57.5	31.0	220.0	158.0	30.0
32	8.210	31.50	126.00	67.5	38.0	281.0	205.0	37.0

G80 EUROPEAN TYPE MASTER LINK



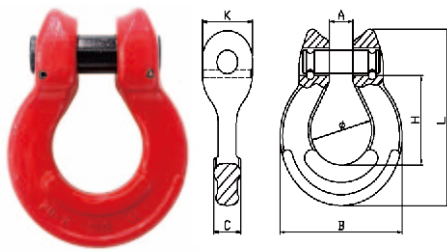
SIZE	WEIGHT	WLL	FOR G80 CHAIN		A	B	D
MM	KG/PC	TON	1 LEG	2 LEGS	MM	MM	MM
7-6	0.34	1.60	7	6	110	60	13
8-7	0.54	2.12	8	7	110	60	16
10-8	0.82	3.15	10	8	135	75	18
13-10	1.50	5.30	13	10	160	90	22
16-13	2.30	8.00	16	13	180	100	26
18-16	3.95	11.20	18	16	200	110	32
20-18	6.34	14.00	20	18	260	140	36
22-20	8.96	17.00	22	20	300	160	40
26-22	12.8	21.20	26	22	340	180	45
32-26	16.55	31.50	32	26	350	190	50
36-32	23.28	45.00	36	32	400	200	56
40-36	32.00	56.00	40	36	430	220	63
72	45.76	63.00	45	40	460	250	72
80	62.00	85.40	—	45	500	270	80

G80 EUROPEAN TYPE MASTER LINK ASSEMBLY



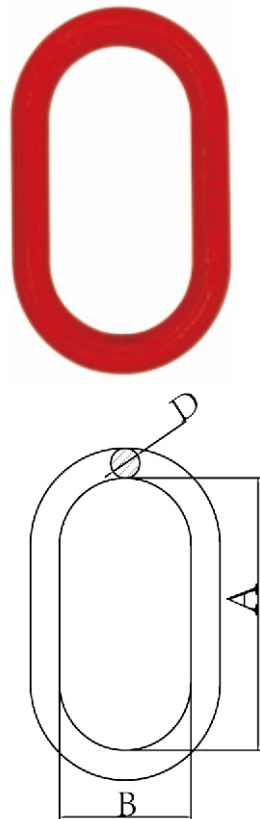
SIZE	WEIGHT	WLL	FOR 3 OR 4 LEG	A	B	D	a	b	d
MM	KG/PC	TON	MM	MM	MM	MM	MM	MM	MM
6	1.18	2.36	6	135	75	18	54	25	13
7	1.24	3.15	7	135	75	18	60	38	13
8	2.20	4.25	8	160	90	22	70	34	16
10	3.40	6.70	10	180	100	26	85	40	18
13	6.10	11.2	13	200	110	32	115	50	22
16	9.98	17.0	16	260	140	36	140	65	26
18	18.9	21.2	18	340	180	45	180	100	32
20	23.7	26.5	20	350	190	50	180	100	32
22	25.2	31.5	22	350	190	50	180	100	36
26	35.2	45.0	26	400	200	56	180	100	40
28	47.00	50.0	28	430	220	63	180	100	45
32	66.46	67.0	32	460	250	72	200	110	50

G80 OMEGA LINK



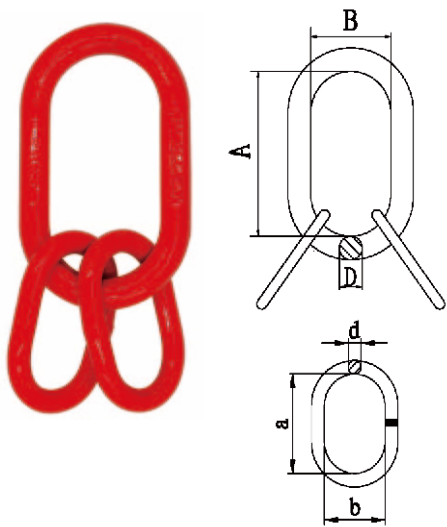
SIZE	WEIGHT	WLL	B.L	A	B	C	Φ	H	L	K
MM	KG/PC	TON	TON	MM	MM	MM	MM	MM	MM	MM
6	0.12	1.12	4.48	8	41	9	21.5	25	52	17
7/8	0.22	2	8	10	52	14	23.5	35	68.5	22
10	0.36	3.15	12.6	12.5	62	16	31	40.5	87	26
13	0.71	5.3	21.2	15	81	20	41	54	108	34
16	1.12	8	32	19	99	25.5	49.5	64	126	38.5
20	2.1	12.5	50	23	118	32	58	75.6	152	50

G80 U.S. TYPE A-342 FORGED MASTER LINK



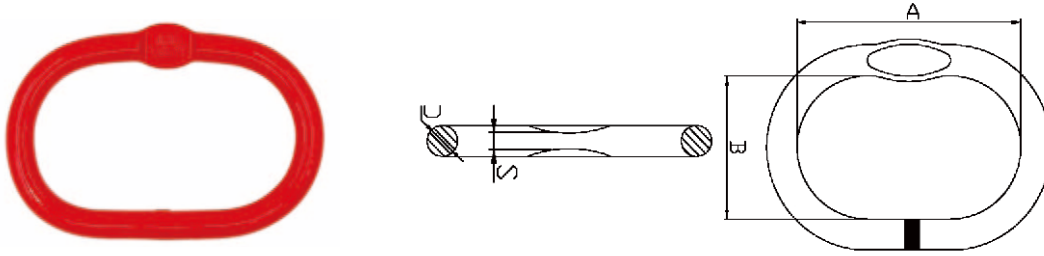
SIZE	CHAIN SIZE	1 LEG	2 LEG	FOR WOPE	A	B	D	WEIGHT
IN.	IN.	TON	TON	TON	MM	MM	MM	KG/PC
1/2"	1/4"	1.50	2.12	3.4	127	63.5	13.0	0.36
	5/16"	2.00	2.80					
5/8"	5/16"	2.00	2.80	4.0	152	76.0	16.0	0.70
	3/8"	3.15	—					
3/4"	3/8"	3.15	4.25	5.6	140	70.0	19.0	0.93
7/8"	3/8"	3.15	4.25	6.9	160	90.0	22.0	1.50
	1/2"	5.30	—					
1"	1/2"	5.30	7.50	11.8	178	89.0	25.0	2.10
	5/8"	8.00	11.20					
1-1/4"	5/8"	8.00	11.20	17.7	222	111	32.0	4.24
	3/4"	11.20	16.00					
1-1/2"	3/4"	11.20	16.00	27.7	267	135	38.0	7.17
	7/8"	15.00	21.20					
1-3/4"	7/8"	15.00	21.20	38.5	305	152	45.0	11.55
	1"	21.20	—					
2"	1"	21.20	30.00	46.5	355	178	51.0	17.20
	1-1/4"	31.50	—					
2-1/4"	1-1/4"	31.50	45.00	64.9	406	203	57.0	24.50
2-1/2"	—	—	—	72.6	406	203	63.5	30.90
2-3/4"	—	—	—	98.4	406	241	70.0	39.50
3"	—	—	—	103.0	457	228	76.0	50.34
3-1/4"	—	—	—	119.0	508	254	82.5	65.68
3-1/2"	—	—	—	126.0	508	254	89.0	90.24
3-3/4"	—	—	—	152.0	508	254	95.0	89.27
4"	—	—	—	169.0	508	254	102.0	103.43

G80 U.S. TYPE A-345 FORGED MASTER LINK ASSEMBLY



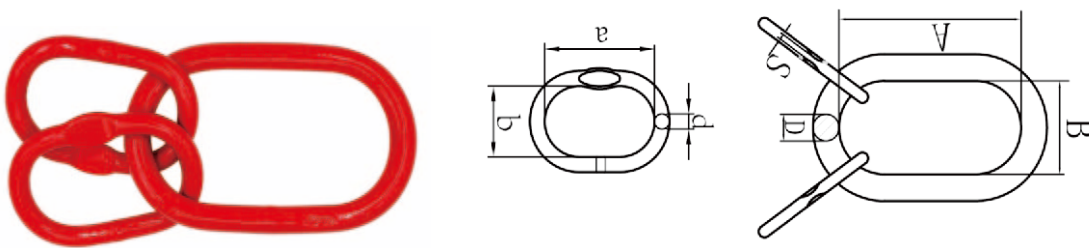
SIZE	WEIGHT	A	B	D	a	b	d	CHAIN SIZE	3 OR 4 LEG	FOR WOPE
MM	KG/PC	MM	MM	MM	MM	MM	MM	IN.	TON	TON
3/4"	1.55	140	70	20	85	40	14	1/4"	3.15	5.6
								5/16"	4.25	
7/8"	2.18	160	95	22	85	40	14	5/16"	4.25	6.9
								3/8"	6.7	
1"	3.29	178	89	25	100	60	18	3/8"	6.7	11.8
1-1/4"	7.18	220	110	32	100	60	22	1/2"	11.2	17.7
								5/8"	17.0	
1-1/2"	12.91	267	135	38	180	100	30	5/8"	17.0	27.7
								3/4"	23.6	
1-3/4"	21.25	305	152	45	180	100	32	3/4"	23.6	38.5
								7/8"	31.5	
2"	30.34	356	178	50	180	100	38	7/8"	31.5	46.5
2-1/2"	64.40	406	203	64	355	178	50	1"	45.0	72.6
2-3/4"	94.10	406	241	70	406	203	60	1-1/4"	67.0	98.4

G80 U.S. TYPE A-344 WELDED MASTER LINK



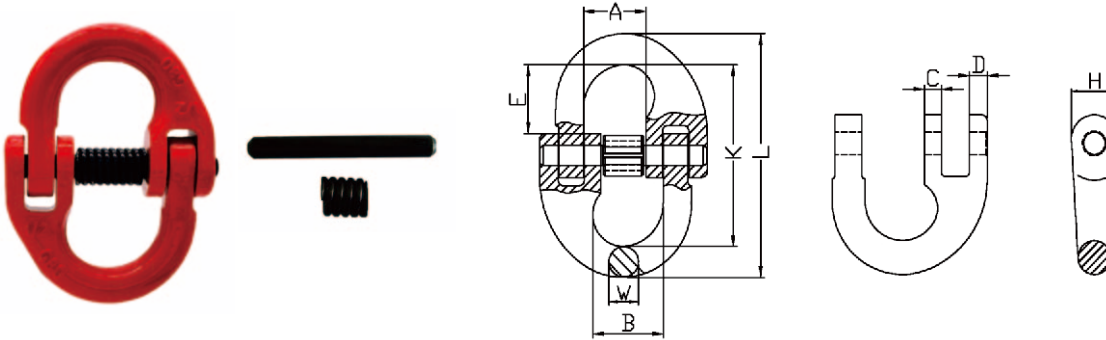
SIZE	WEIGHT	A	B	D	S	CHAIN SIZE	1 LEG	2 LEG (0°-45°)	FOR WOPE
IN.	KG/PC	MM	MM	MM	MM	IN.	WLL(TON)	WLL(TON)	WLL(TON)
7/16"	0.27	100	60	12	6.0	1/4"	1.12	1.60	1.6
1/2"	0.38	100	60	14	7.6	9/32"	1.5	—	2.5
						5/16"	2.0	—	
11/16"	0.85	160	90	18	8.4	5/16"	2.0	2.80	4.0
						3/8"	3.15	—	
3/4"	1.20	160	90	20	10.5	3/8"	3.15	4.25	6.5
						1/2"	5.30	—	
7/8"	1.63	180	100	22	13.5	1/2"	5.30	7.50	8.0
						5/8"	8.00	—	
1"	2.13	180	100	25	16.5	5/8"	8.00	11.20	11.5
						3/4"	11.20	—	
1-1/8"	3.81	270	140	28	19.0	3/4"	12.50	—	11.8
1-1/4"	5.05	270	140	32	19.0	3/4"	11.20	16.00	16.0
						7/8"	15.00	—	
1-3/8"	6.83	285	155	36	20.0	7/8"	15.00	21.20	24.0
						1"	21.20	—	
1-1/2"	8.90	300	160	40	26.0	1-1/8"	25.00	—	25.0
1-3/4"	12.80	340	180	45	26.0	1	21.20	30.00	31.5
						1-1/4"	31.50	—	
2"	17.30	390	215	51	32.0	1-1/4"	31.50	45.00	45.0

G80 U.S. TYPE A-347 WELDED MASTER LINK ASSEMBLY



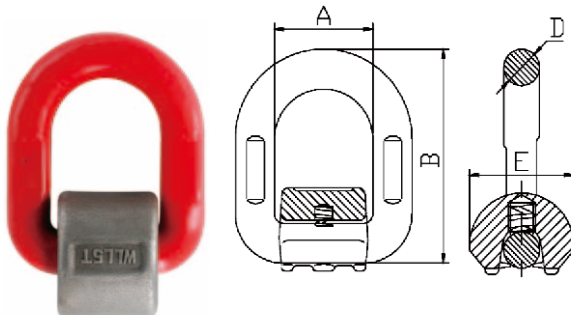
SIZE	WEIGHT	CHAIN SIZE	3 OR 4 LEG	FOR ROPE	A	B	D	a	b	d	S
MM	KG/PC	IN.	WLL(TON)	WLL(TON)	MM	MM	MM	MM	MM	MM	MM
1/2"	0.82	7/32"	2.36	2.4	100	60	14	85	40	12	6.0
11/16"	1.60	1/4"	3.15	3.2	160	90	18	100	60	14	7.6
5/8"	1.60	1/4"	3.15	3.2	160	90	18	100	60	14	7.6
3/4"	1.95	5/16"	4.25	4.2	160	90	20	100	60	14	7.6
7/8"	3.16	3/8"	6.70	8.0	180	100	22	150	70	18	8.4
1"	5.28	3/8"	10.00	10.0	270	140	25	155	80	20	11.0
1-1/8"	6.75	1/2"	11.20	12.0	270	140	28	160	90	22	13.5
1-1/4"	9.31	5/8"	17.00	17.0	270	140	32	180	100	25	16.5
1-1/2"	18.40	3/4"	23.60	25.0	300	160	40	270	140	31	19.0
1-3/4"	26.60	7/8"	31.50	31.5	340	180	45	285	155	36	22.0
2"	42.91	1"	45.00	45.0	350	190	51	340	180	45	25.0

G80 U.S. TYPE CONNECTING LINK



SIZE	WEIGHT	WLL	B.L	A	K	L	W	H	C	D
IN.	LBS/PC	LBS	LBS	MM	MM	MM	MM	MM	MM	MM
1/4"	0.286	3500	14000	16.5	51.0	67.0	8.0	13.0	4.0	4.0
5/16"	0.32	4500	18000	17.7	58.5	78.5	9.8	14.5	6.0	6.6
3/8"	0.73	7100	28400	22.0	63.6	87.6	12.0	17.0	6.2	8.1
1/2"	1.67	12000	48000	28.5	85.5	115.5	15.0	21.6	7.8	7.8
5/8"	2.86	18100	72400	33.0	106.0	143.0	18.5	26.0	9.5	10.0
3/4"	5.00	28300	113200	41.0	116.0	162.0	23.0	32.0	12.0	13.0
7/8"	7.50	34200	136800	50.5	136.5	188.5	26.0	38.0	13.0	15.5
1"	11.03	47700	190800	57.0	152.5	214.5	31.0	44.0	15.0	16.5
1-1/4"	20.38	72300	289200	65.0	188.7	265.0	38.0	54.0	20.0	20.0

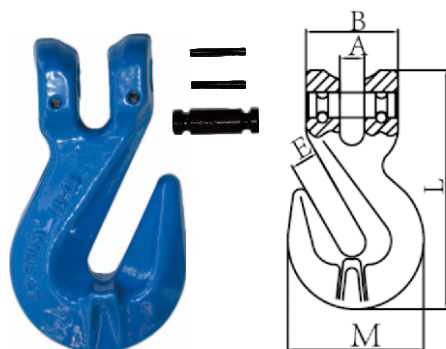
G80 WELD D RING



SIZE	WEIGHT	WLL	A	B	D	M	H
TON	KG/PC	TON	MM	MM	MM	MM	MM
1T	0.47	1.12	41	78.5	13.0	37.0	35
2T	0.51	2.00	42	88.0	14.0	40.0	37
3T	0.69	3.15	45	94.0	17.0	42.5	40
5T	1.46	5.30	55	118.0	22.0	61.0	52
8T	2.50	8.00	70	141.0	26.5	70.5	57
15T	5.79	15.00	97	188.0	34.0	90.0	77

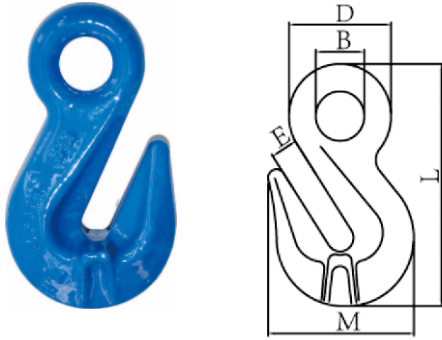
G100 HOOKS

G100 CLEVIS SHORTENING GRAB HOOK WITH WINGS



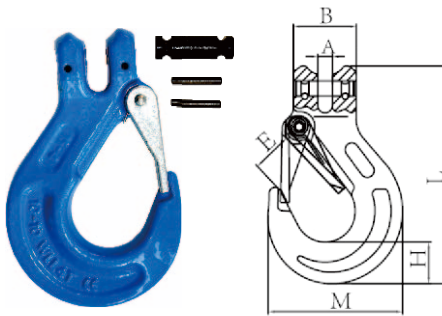
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)				
MM	KG/PC	TON	TON	A	B	E	M	L
6	0.22	1.4	5.6	7.5	32	8	43.5	75
8	0.34	2.5	10	9.5	36	10.8	53	91.5
10	0.82	4	16	12	46	13.5	72	126
13	1.75	6.7	26.8	15	59	16.5	96	163.5
16	2.88	10	40	17.5	70	19.2	112.5	183.5
20	4.84	16	64	24	85	24	143	224
22	8.3	19	76	27	100	27	160.5	262

G100 EYE SHORTENING GRAB HOOK WITH WINGS



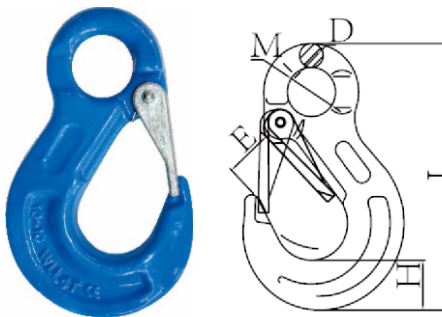
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)				
MM	KG/PC	TON	TON	E	B	D	M	L
6	0.15	1.4	5.6	8	14.5	30.5	43.5	71
8	0.3	2.5	10	10.8	18	37	53	91.5
10	0.79	4	16	13.5	22.5	48.5	72	127.5
13	1.67	6.7	26.8	16.5	28	59	96	163
16	2.74	10	40	19.2	36	74	112.5	183
20	4.72	16	64	24	43.5	89.5	143	227
22	8.2	19	76	27	48.5	100.5	160.5	260.5

G100 CLEVIS SLING HOOK WITH LATCH



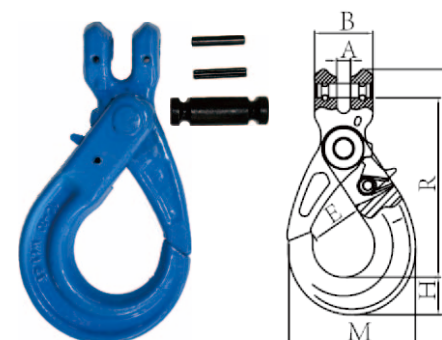
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)					
MM	KG/PC	TON	TON	A	B	E	H	M	L
6	0.33	1.4	5.6	7.5	32	18.5	21	68.5	109
8	0.7	2.5	10	9.5	37	25	27.5	88	134
10	1.3	4	16	12	48	28	33.5	105.5	161.5
13	2.3	6.7	26.8	15	59	38	42	134	203
16	3.6	10	40	18.5	70	44	50	160.5	248
20	7.3	16	64	25	85	52	56	190.5	297
22	12.1	19	76	27	100	66	62	214.5	326

G100 EYE SLING HOOK WITH LATCH



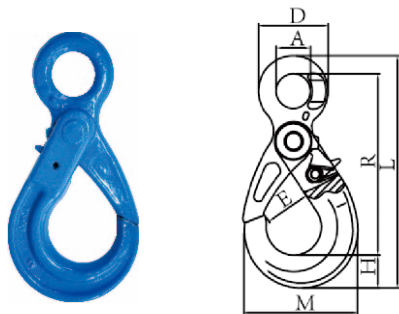
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)				
MM	KG/PC	TON	TON	D	E	H	M	L
6	0.32	1.4	5.6	10	18.5	21	20.5	111
8	0.6	2.5	10	11	25	27.5	25	137.5
10	1.2	4	16	16	29.5	32	35	171.5
13	2.2	6.7	26.8	19	38	43.5	43	219
16	3.5	10	40	24.5	46	50	51	260
20	6.2	16	64	27	52	56	55	298
22	11.5	19	76	29	66	62	60	330
26	12.2	26.5	106	35	73	75	70	376
32	17.5	39.3	157.2	39	87	89	81.5	458

G100 CLEVIS SELF LOCKING HOOK



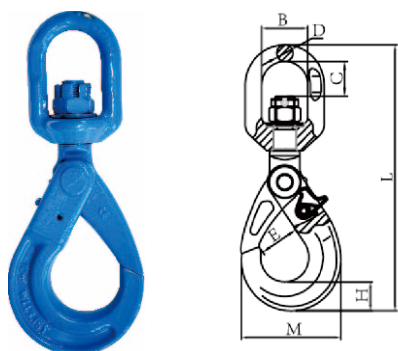
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)						
MM	KG/PC	TON	TON	A	B	E	H	R	M	L
6	0.5	1.4	5.6	8.0	32	28.0	20.0	96	70	131
8	0.9	2.5	10.0	9.5	36	35.5	26.0	123	90	166
10	1.6	4.0	16.0	12.0	46	45.0	30.0	144	109	196.5
13	2.9	6.7	26.8	15.0	59	53.5	40.5	182	138.5	251
16	5.8	10.0	40.0	18.5	70	62.0	50.5	217	170.5	303
20	8.6	16.0	64.0	25.0	85	76.5	62.0	235	192.5	337.5
22	12.1	19.0	76.0	25.5	98	80.0	66.0	276.5	205	391

G100 EYE SELF LOCKING HOOK



SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)					
MM	KG/PC	TON	TON	D	E	H	R	M	L
6	0.5	1.4	5.6	43	28	20	110	70	141
8	0.9	2.5	10	51	35.5	26	137	90	175
10	1.5	4	16	64.3	45	30	169	108	212.5
13	2.7	6.7	26.8	80	53.5	40.5	209	138.5	270
16	5.7	10	40	104	62	50.5	254	170.5	331
20	7.9	16	64	120	76.5	62	277	192.5	369
22	11.2	19	76	134	80	66	319.5	205	417

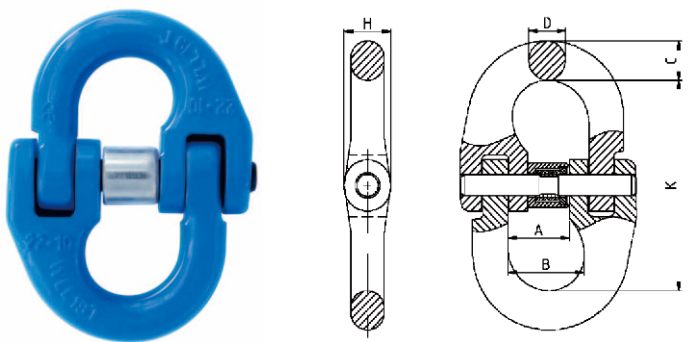
G100 SWIVEL SELF LOCKING HOOK



SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)						
MM	KG/PC	TON	TON	B	C	D	E	H	M	L
6	0.6	1.4	5.6	32.5	23	11.5	28	20	70	184
8	1.1	2.5	10	36	28	13	35.5	26	90	229
10	2	4	16	42	35	15.5	45	30	108	269
13	4	6.7	26.8	50	40	17	53.5	40.5	138.5	330
16	6.8	10	40	70	56	21.5	62	50.5	170.5	413
20	12.5	16	64	72	62	26	76.5	62	192.5	463
22	17.1	19	76	97	94	33	80	66	205	572

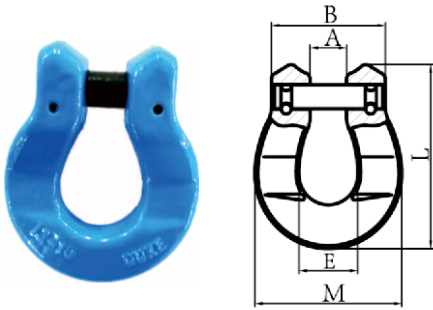
G100 LINKS

G100 EUROPEAN TYPE CONNECTING LINK



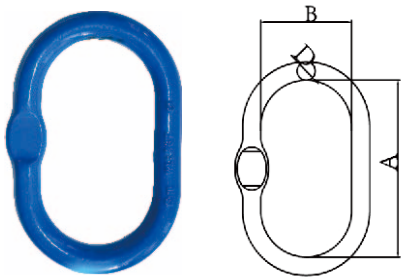
SIZE	WEIGHT	WLL	B.L	DIMENSIONS(MM)					
MM	KG/PC	TON	TON	A	B	C	D	K	H
6	0.08	1.4	5.6	14.0	16.9	8.5	7.0	44.5	11.0
7	0.16	1.9	7.6	18.5	22.5	10.0	8.2	59.0	12.5
7/8	0.17	2.5	10.0	18.5	22.0	11.0	8.5	59.0	13.0
8	0.18	2.5	10.0	18.5	22.7	10.5	10.0	63.0	14.0
10	0.34	4.0	16.0	23.0	27.7	12.6	12.6	71.0	18.0
13	0.68	6.7	26.8	28.0	33.2	16.5	16.5	92.5	23.0
16	1.22	10.0	40.0	33.5	39.0	21.0	20.0	106.5	29.5
20	2.13	16.0	64.0	42.0	47.3	25.0	25.0	123.0	35.5
22	3.00	19.0	76.0	48.0	55.0	27.0	27.0	137.5	39.0
26	5.22	26.5	106.0	61.0	68.0	32.0	32.0	163.0	45.0
32	9.55	39.3	157.2	80.0	87.0	40.0	40.0	197.0	54.0

G100 OMEGA LINK



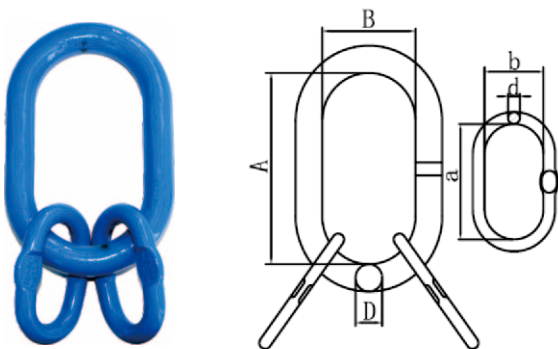
SIZE	WEIGHT	WLL	B.L	A	B	E	M	L
MM	KG/PC	TON	TON	MM	MM	MM	MM	MM
6	0.12	1.4	5.6	8.5	32.5	20	44	55
8	0.27	2.5	10	10.5	42	24	60	73.5
10	0.44	4	16	12.5	48.5	31	70	90
13	0.89	6.7	26.8	16	60	38.5	90	109
16	1.77	10	40	19	75.5	51	112	141.5

G100 FORGED MASTER LINK



ITEM NO.	WEIGHT	WLL	A	B	D	ø	
	KG	T	MM	MM	MM	1 LEG	2 LEGS
05	0.14	1.4	80	50	10	5	5
76	0.34	2.3	110	60	13	6-7	6
87	0.53	3.5	110	60	16	8	7
108	0.86	5	135	75	18	10	8
1310	1.60	7.6	160	90	23	13	10
1613	2.46	10	180	100	27	16	13
1916	4.14	14	200	110	33	19	16
2219	6.22	25.1	260	140	36	22	19
2622	12.85	30.8	340	180	45	26	22
3226	16.22	40	350	190	50	32	26
32	27.01	60	400	200	60	-	32
72MM	45	81.5	460	250	70	-	-

G100 MASTER LINK ASSEMBLY

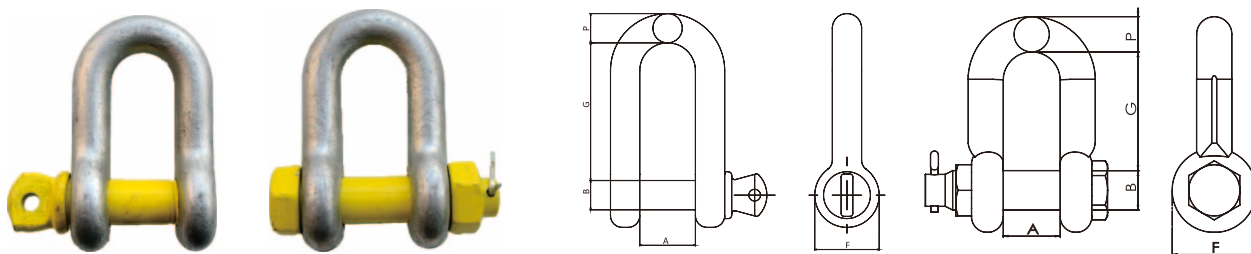


SIZE	WEIGHT	WLL	CHAIN SIZE(MM)	A	B	D	a	b	d
MM	KG/PC	TON	3 OR 4 LEG	MM	MM	MM	MM	MM	MM
6	1.3	3	6	135	75	19	54	25	13
8	2.33	5.3	8	160	90	23	70	35	16.5
10	3.7	8	10	180	100	27	85	40	19
13	6.5	14	13	200	110	33	115	50	23
16	10.1	21.2	16	260	140	36	140	65	27
20	22.8	33.6	20	350	190	50	180	90	33
22	26	39.9	22	350	190	50	180	100	36

SHACKLES

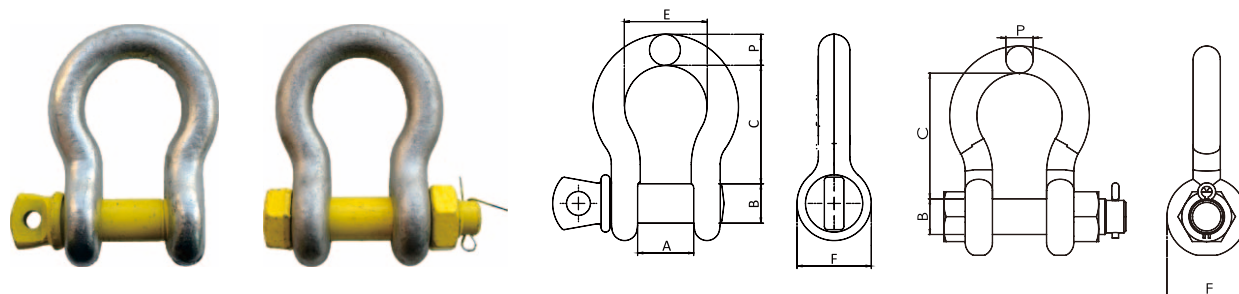


GRADE S DEE SHACKLES AS2741 STANDARD



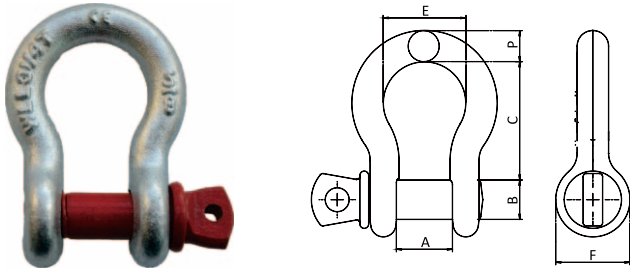
SIZE P (MM)	WLL(TON)	P(MM)	B(MM)	A(MM)
6.0	0.5	6.0	8	12
8.0	0.75	8.0	10	13
10.0	1	10.0	11	17
11.0	1.5	11.0	13	18
13.0	2	13.0	16	21
16.0	3.2	16.0	19	27
19.0	4.7	19.0	22	32
22.0	6.5	22.0	25	37
25.0	8.5	25.0	29.0	43.0
29.0	9.5	29.0	32.0	46.0
32.0	12	32.0	35.0	52.0
35.0	13.5	35.0	38.0	57.0
38.0	17	38.0	41.0	60.0
44.0	25	44.0	51.0	73.0
51.0	35	51.0	57.0	83.0

GRADE S BOW SHACKLES AS2741 STANDARD



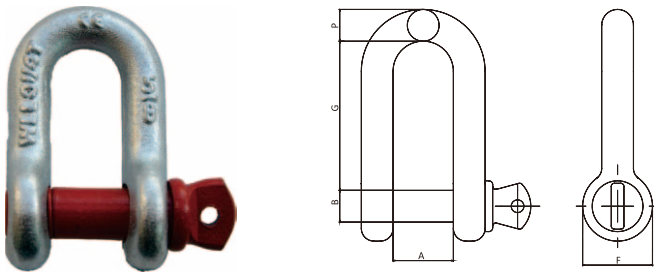
SIZE P (MM)	WLL(TON)	P(MM)	B(MM)	A(MM)
6.0	0.5	6.0	8	12
8.0	0.75	8.0	10	13
10.0	1	10.0	11	17
11.0	1.5	11.0	13	18
13.0	2	13.0	16	21
16.0	3.2	16.0	19	27
19.0	4.7	19.0	22	32
22.0	6.5	22.0	25	37
25.0	8.5	25.0	29.0	43.0
29.0	9.5	29.0	32.0	46.0
32.0	12	32.0	35.0	52.0
35.0	13.5	35.0	38.0	57.0
38.0	17	38.0	41.0	60.0
44.0	25	41.0	51.0	73.0
51.0	35	51.0	57.0	83.0
63.0	55	63.0	70.0	105.0

U.S. TYPE DROP FORGED G-209 SCREW PIN ANCHOR SHACKLE



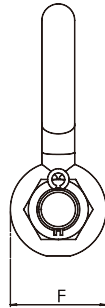
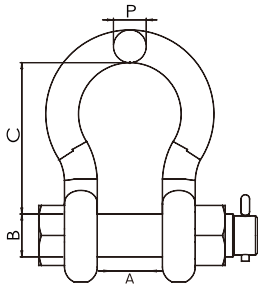
NOMINAL SIZE	WLL	WEIGHT	DIMENSIONS(IN.)					
IN.	TON	KG/PC	A	B	C	P	E	F
3/16"	1/3	0.02	3/8"	1/4"	7/8"	3/16"	11/16"	9/16"
1/4"	1/2	0.05	1/2"	5/16"	1-1/8"	1/4"	25/32"	11/16"
5/16"	3/4	0.09	17/32"	3/8"	1-7/32"	5/16"	27/32"	13/16"
3/8"	1	0.14	21/32"	7/16"	1-7/16"	3/8"	1-1/32"	31/32"
7/16"	1-1/2	0.17	23/32"	1/2"	1-11/16"	7/16"	1-5/32"	1-1/16"
1/2"	2	0.29	13/16"	5/8"	1-7/8"	1/2"	1-5/16"	1-3/16"
5/8"	3-1/4	0.63	1-1/16"	3/4"	2-3/8"	5/8"	1-11/16"	1-9/16"
3/4"	4-3/4	1.02	1-1/4"	7/8"	2-13/16"	3/4"	2"	1-7/8"
7/8"	6-1/2	1.53	1-7/16"	1"	3-5/16"	7/8"	2-9/32"	2-1/8"
1"	8-1/2	2.41	1-11/16"	1-1/8"	3-3/4"	1"	2-11/16"	2-3/8"
1-1/8"	9-1/2	3.09	1-13/16"	1-1/4"	4-1/4"	1-1/8"	2-29/32"	2-5/8"
1-1/4"	12	4.31	2-1/32"	1-3/8"	4-11/16"	1-1/4"	3-1/4"	3"
1-3/8"	13-1/2	6.01	2-1/4"	1-1/2"	5-3/16"	1-3/8"	3-1/2"	3-5/16"
1-1/2"	17	8.03	2-3/8"	1-5/8"	5-3/4"	1-1/2"	3-7/8"	3-5/8"
1-3/4"	25	13.78	2-7/8"	2"	7"	1-3/4"	5"	4-5/16"
2"	35	20.41	3-1/4"	2-1/4"	7-3/4"	2"	5-3/4"	5"
2-1/2"	55	38.90	4-1/8"	2-3/4"	10-1/2"	2-1/2"	7-1/4"	6"
3"	85	65	5"	3-1/4"	13"	3"	8"	7-7/8"

U.S. TYPE DROP FORGED G-210 SCREW PIN CHAIN SHACKLE



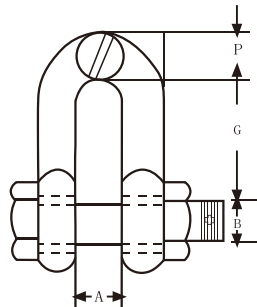
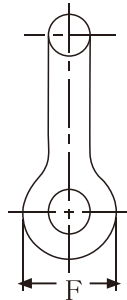
NOMINAL SIZE	WLL	WEIGHT	DIMENSIONS(IN.)				
IN.	TON	KG/PC	A	B	G	P	F
1/4	1/2	0.05	15/32"	5/16"	7/8"	1/4"	11/16"
5/16	3/4	0.08	17/32"	3/8"	1-1/32"	5/16"	13/16"
3/8	1	0.11	21/32"	7/16"	1-1/4"	3/8"	31/32"
7/16	1-1/2	0.17	23/32"	1/2"	1-7/16"	7/16"	1-1/16"
1/2	2	0.23	13/16"	5/8"	1-5/8"	1/2"	1-3/16"
5/8	3-1/4	0.55	1-1/16"	3/4"	2"	5/8"	1-9/16"
3/4	4-3/4	0.91	1-1/4"	7/8"	2-3/8"	3/4"	1-7/8"
7/8	6-1/2	1.49	1-7/16"	1"	2-13/16"	7/8"	2-1/8"
1	8-1/2	2.15	1-11/16"	1-1/8"	3-3/16"	1"	2-3/8"
1-1/8	9-1/2	2.86	1-13/16"	1-1/4"	3-9/16"	1-1/8"	2-5/8"
1-1/4	12	4.08	2-1/32"	1-3/8"	3-15/16"	1-1/4"	3"
1-3/8	13-1/2	5.44	2-1/4"	1-1/2"	4-3/8"	1-3/8"	3-5/16"
1-1/2	17	7.33	2-3/8"	1-5/8"	4-13/16"	1-1/2"	3-5/8"
1-3/4	25	13.59	2-7/8"	2"	5-3/4"	1-3/4"	4-1/8"
2	35	19.6	3-1/4"	2-1/4"	6-3/4"	2"	5"
2-1/2	55	33.2	4-1/8"	2-3/4"	8"	2-1/2"	6"
3	85	54	5"	3-1/4"	8-1/2"	3"	7-7/8"

U.S. TYPE DROP FORGED G-2130 SAFETY BOLT BOW SHACKLE



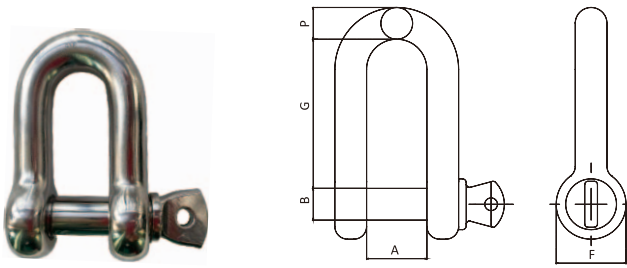
NOMINAL SIZE	WLL	WEIGHT	DIMENSIONS(IN.)				
IN.	TON	KG/PC	A	B	C	P	F
1/2"	2	0.36	13/16"	5/8"	1-7/8"	1/2"	1-3/16"
5/8"	3-1/4	0.76	1-1/16"	3/4"	2-3/8"	5/8"	1-9/16"
3/4"	4-3/4	1.23	1-1/4"	7/8"	2-13/16"	3/4"	1-7/8"
7/8"	6-1/2	1.79	1-7/16"	1"	3-5/16"	7/8"	2-1/8"
1"	8-1/2	2.78	1-11/16"	1-1/8"	3-3/4"	1"	2-3/8"
1-1/8"	9-1/2	3.75	1-13/16"	1-1/4"	4-1/4"	1-1/8"	2-5/8"
1-1/4"	12	5.31	2-1/32"	1-3/8"	4-11/16"	1-1/4"	3"
1-3/8"	13-1/2	6.98	2-1/4"	1-1/2"	5-3/16"	1-3/8"	3-5/16"
1-1/2"	17	9.43	2-3/8"	1-5/8"	5-3/4"	1-1/2"	3-5/8"
1-3/4"	25	15.38	2-7/8"	2"	7"	1-3/4"	4-1/8"
2"	35	23.7	3-1/4"	2-1/4"	7-3/4"	2"	5"
2-1/2"	55	44.57	4-1/8"	2-3/4"	10-1/2"	2-1/2"	6"
3"	85	69.85	5"	3-1/4"	13"	3"	6-1/2"
3-1/2"	120	120.20	5-1/4"	3-3/4"	14-5/8"	3-1/2"	8"
4"	150	153.32	5-1/2"	4-1/4"	15-1/2"	4"	9"

U.S. TYPE DROP FORGED G-2150 SAFETY BOLT DEE SHACKLE



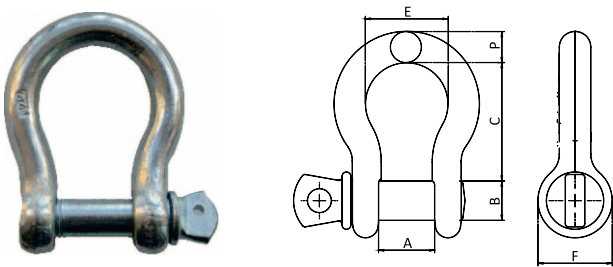
NOMINAL SIZE	WLL	WEIGHT	DIMENSIONS(IN.)				
IN.	TON	KG/PC	A	B	G	P	F
1/2"	2	0.34	13/16"	5/8"	1-5/8"	1/2"	1-3/16"
5/8"	3-1/4	0.67	1-1/16"	3/4"	2"	5/8"	1-9/16"
3/4"	4-3/4	1.14	1-1/4"	7/8"	2-3/8"	3/4"	1-7/8"
7/8"	6-1/2	1.75	1-7/16"	1"	2-13/16"	7/8"	2-1/8"
1"	8-1/2	2.52	1-11/16"	1-1/8"	3-3/16"	1"	2-3/8"
1-1/8"	9-1/2	3.45	1-13/16"	1-1/4"	3-9/16"	1-1/8"	2-5/8"
1-1/4"	12	4.90	2-1/32"	1-3/8"	3-15/16"	1-1/4"	3"
1-3/8"	13-1/2	6.24	2-1/4"	1-1/2"	4-3/8"	1-3/8"	3-5/16"
1-1/2"	17	8.39	2-3/8"	1-5/8"	4-13/16"	1-1/2"	3-5/8"
1-3/4"	25	14.24	2-7/8"	2"	5-3/4"	1-3/4"	4-1/8"
2"	35	21.21	3-1/4"	2-1/4"	6-3/4"	2"	5"
2-1/2"	55	38.56	4-1/8"	2-3/4"	8"	2-1/2"	6"
3"	85	56.36	5"	3-1/4"	8-1/2"	3"	6-1/2"
3-1/2"	120	—	5-1/4"	3-3/4"	—	3-1/2"	8"
4"	150	—	5-1/2"	4-1/4"	—	4"	9"

EUROPEAN TYPE LARGE DEE SHACKLE

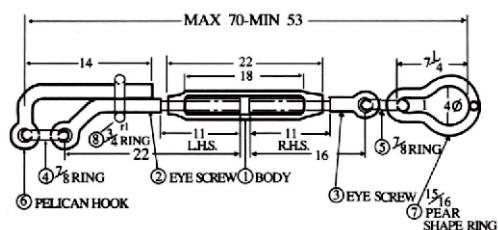


SIZE	A	G	B	P	WLL
MM	MM	MM	MM	MM	KG
5	10	20	5	5	80
6	12	24	6	6	100
8	16	32	8	8	200
10	20	40	10	10	320
12	24	48	12	12	520
16	32	64	16	16	800
20	40	80	20	20	1100
22	44	88	22	22	1500
25	50	100	25	25	2100
28	56	112	28	28	3000
32	64	118	32	32	3500
38	76	152	38	38	5000
45	90	180	45	45	7000
50	100	200	50	50	8000

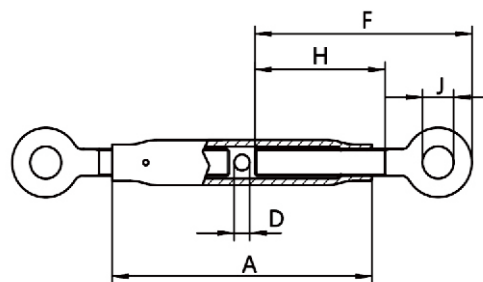
EUROPEAN TYPE LARGE BOW SHACKLE



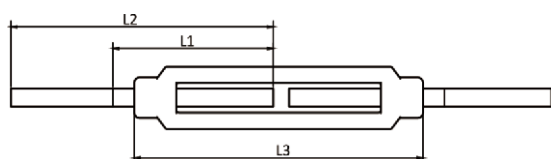
SIZE	A	C	B	P	E	WLL
MM	MM	MM	MM	MM	MM	KG
5	10	20	5	5	16	80
6	12	24	6	6	20	100
8	16	32	8	8	24	200
10	20	40	10	10	32	320
12	24	48	12	12	38	520
16	32	64	16	16	56	800
20	40	80	20	20	66	1100
22	44	88	22	22	74	1500
25	50	100	25	25	80	2100
28	56	112	28	28	94	3000
32	64	118	32	32	104	3500
38	76	152	38	38	126	5000
45	90	180	45	45	150	7000
50	100	200	50	50	156	8000



SIZE	W.L.L.	MAX.LENGTH	MIN.LENGTH	N.W.
INCH	TON	MM	MM	KG/PC
1-1/4X18	25.50	1775	1270	16.80

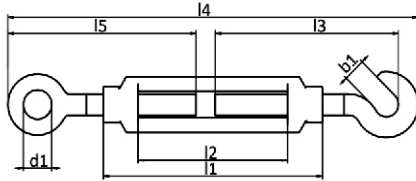


THREAD	A MM	D MM	F MM	H MM	J MM	WEIGHT/100 PCS KG
M6	110	6	74	50	10	16
M8	110	8	80	52	11	18
M10	125	8	95	59	15	28
M12	125	10	107	66	17	42
M16	170	10	146	85	22	91
M20	200	12	170	100	24	136
M24	255	12	213	134	33	260
M30	255	16	255	150	39	375
M36	295	16	260	150	37	635
M42	330	20	285	165	48	1050
M48	355	20	335	185	58	1550



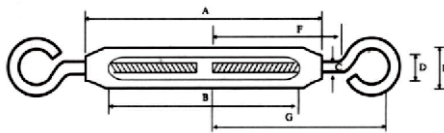
THREAD	L3	L2	L1	WEIGHT(KG)
(MM)	(MM)	(MM)	(MM)	PER100 PCS
M6	110	120	60	10
M8	110	120	65	16
M10	125	150	75	30
M12	125	150	75	40
M14	140	165	90	62
M16	170	200	100	96
M20	200	220	120	174
M22	220	220	120	213
M24	255	260	150	274
M27	255	265	160	388
M30	255	260	160	420
M36	295	300	180	720
M42	330	350	200	1070
M48	355	380	220	1790
M56	355	380	230	2000

DIN1480 DROP FORGED TURNBUCKLE, HOOK&EYE, EYE&EYE, HOOK&HOOK



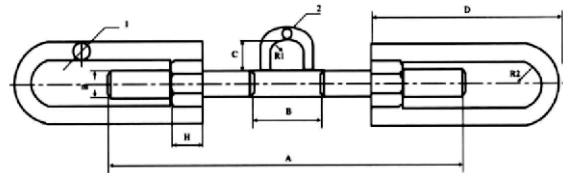
THREAD (MM)	L1 (MM)	L2 (MM)	L3 (MM)	B1 (MM)	L4 (MM)	D1 (MM)	L5 (MM)	WEIGHT (KG)PER 100 PCS.
M6	110	80	85	8.5	80	9	172	9.5
M8	110	75	85	11	84	10	182	16.5
M10	125	85	112	13.5	105	14	213	29
M12	125	80	117	15.5	115	16	238	43
M14	140	90	122	18.5	122	18	263	62
M16	170	110	138	19	165	22	320	92
M20	200	130	170	20.5	167	24	367	163
M22	220	145	185	26	167	27	398	220
M24	255	170	205	26	205	27	447	300
M30	255	160	225	33	255	31	512	460
M36	295	180	255	44	276	43	568	768
M42	330	200	340	48	260	49	683	1290
M48	355	195	360	58	300	58	755	2100

KOREAN TYPE MALLEABLE TURNBUCKLES



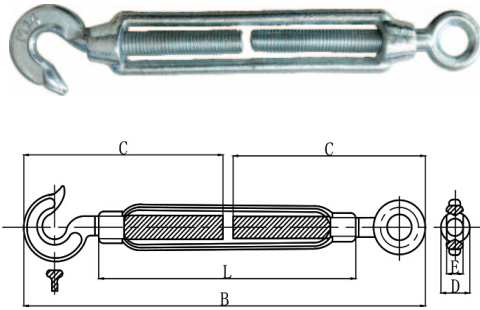
SIZE IN	A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	G (MM)	WEIGHT KG/100 PCS
3/16"	57.4	41.2	41.5	18.4	15	36	54.6	30
5/16"	90	70	8	11	22	65	95	145
3/8"	160	130	9	17	30	85	130	345
1/2"	190	155	10	20	30	95	150	560
1/2" (Long)	255	215	10	30	35	140	190	790
5/8"	250	200	15	25	45	130	190	1120
5/8" (Long)	350	300	15	30	45	180	240	1540
3/4"	250	200	20	35	45	140	210	1670
3/4" (Long)	300	245	20	40	55	170	240	2050

DEE-DEE TURNBUCKLES (HAMBURG)



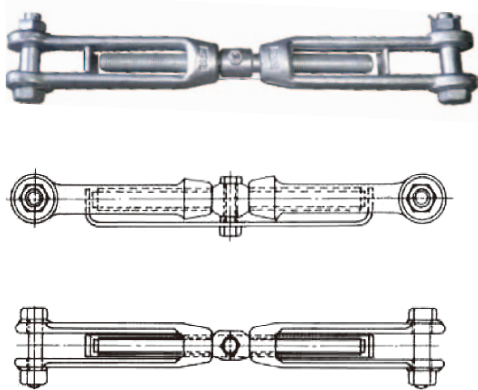
SIZE	A	B	C	D	H	1	2	R1	R2	BREAKING LOAD(T)	REMARK
24	400	75	35	210	22	16	12	15	20	13	THE FIGURES IN BRACKETS ARE ADJUSTABLE
		75	35	210	36	18	12	15	20	18	
24	500	75	35	260	22	16	12	15	20	13	
		75	35	260	36	18	12	15	20	18	
27	400	75	35	210	33	20	12	17.5	21.5	20	
		75	35	210	42	20	12	17.5	21.5	25	
27	500	75	35	260	33	20	12	17.5	21.5	20	
		75	35	260	42	20	12	17.5	21.5	25	
30	400	75	35	210	-	-	12	17.5	22.5	-	
		75	35	210	45	22	12	17.5	25.5	25	
30	500	75	35	260	-	-	12	17.5	25.5	-	
		75	35	260	45	22	12	17.5	25.5	25	
30	480	80	35	255	40	25	12	20	28	30	
		80	35	-	-	-	-	-	-	-	

MALLEABLE IRON COMMERCIAL TYPE TURNBUCKLE



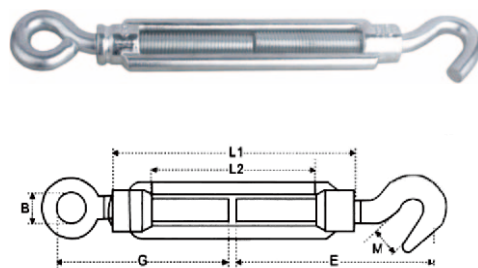
SIZE	WLL	L	C	WEIGHT EACH
MM	KG	MM	MM	KG
6X100	100	100	215	0.16
8X125	200	125	280	0.24
10X150	300	150	325	0.39
12X200	500	200	430	0.64
16X250	1000	250	540	1.44
20X300	1500	300	670	2.45
22X320	2200	325	740	3.60
24X350	3000	350	830	5.00
28X360	3500	360	790	3.66
30X385	3800	385	865	4.89
32X385	3800	385	865	4.89
38X490	5350	490	1125	11.26
40X490	5350	490	1125	11.26

JIS F-3403 RIGGING SCREW



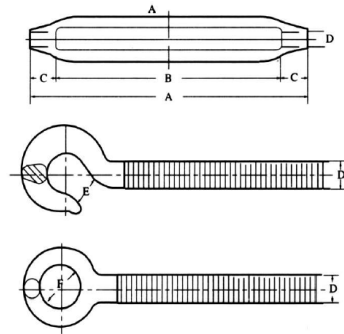
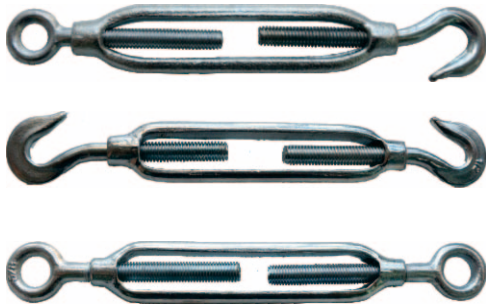
SIZE	DIA.OF WIRE	SWL	WEIGHT
MM	MM	TON	KG/PC
14	14	2.1	5.97
16	16	2.6	8.58
18	18	3.3	11.6
22	22/22.4	5.1	14.8
24	24	5.9	19.4
25	25	6.9	23.9
30	28/30	9.2	30.2
32	32	10.5	36.2
34	34	11.5	43.2
36	36	13	51.1
38	38	14.5	59.9
40	40	16.5	70.7
42	42.5	18.5	93.5
45	45	21	105
48	47.5	23	117
50	50	25.5	124

ZINC ALLOY DIECAST SERIES TURNBUCKLE



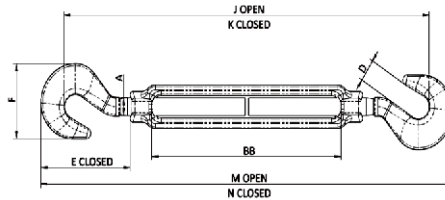
SIZE	L1	L2	B	G	E	M	N.W
	MM	MM	MM	MM	MM	MM	G/PC
M5X50	50	30	8	43	43	7	30
M5X70	70	50	9	50	50	7	37
M6X60	60	35	10	52	50	8	50
M6X100	100	70	10	70	70	10	67
M8X70	70	45	11	60	55	11	85
M8X110	110	80	11	80	75	11	125
M10X80	80	50	12	70	60	11	156
M10X120	120	80	15	100	95	16	195
M12X130	130	90	15	105	100	15	385

JIS FORGED STEEL FRAME TYPE TURNBUCKLES



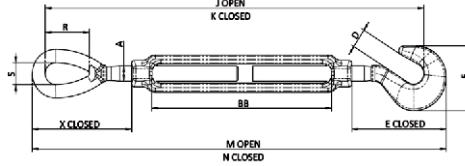
NOMINAL SIZE(D)		BODY ONLY						EYE&EYE			HOOK&EYE		HOOK & HOOK			WITH STUBS			
		A		B	C	T.L	W/PC	F	T.L	W/PC	T.L	W/PC	E	T.L	W/PC	H	I(A2)	G	W/PC
MM	IN	MM	IN	MM	MM	TON	KG	MM	TON	KG	TON	KG	MM	TON	KG	MM	MM	MM	KG
6	1/4	100	4	78	11	1	0.08	10	0.1	0.116	0.04	0.114	9	0.04	0.112	80	50	5.3	0.112
8	5/16	125	5	100	12.5	1.2	0.15	12	0.2	0.22	0.08	0.218	9	0.08	0.215	100	63	6.9	0.22
9	3/8	150	6	120	12.5	1.5	0.17	16	0.5	0.30	0.15	0.293	11	0.15	0.29	130	75	8.3	0.273
12	1/2	200	8	164	18	2	0.29	20	2	0.58	0.35	0.585	16	0.35	0.57	150	100	11.2	0.51
16	5/8	250	10	202	21.5	3	0.52	22	3	1.07	0.7	1.05	19	0.7	1.03	180	125	14.2	0.95
19	3/4	300	12	250	25	4	0.85	28	4	1.77	1.0	1.78	20	1.0	1.77	220	150	17.2	1.62
22	7/8	325	13	269	28	5	1.17	33	5	2.55	1.5	2.58	21	1.5	2.60	250	165	20.3	2.34
25	1	350	14	285	32.5	6	1.69	35	6	3.79	2.0	3.77	26	2.0	3.72	270	175	23.3	3.27
32	1-1/4	400	16	310	45	8	3.51	36X70	10	7.6	3.0	7.52	34	3.0	7.44	300	200	29	6.52
38	1-1/2	450	18	350	55	10	5.08	40X80	15	13.50	4.0	12.8	35	4.0	22	330	225	38	13
44	1-3/4	500	20	386	57	-	9.00	-	-	-	-	-	-	-	22	-	250	44	-
50	2	550	22	420	65	-	11.50	-	-	-	-	-	-	-	29	-	275	50	-

US TYPE DROP FORGED TURNBUCKLE HOOK & HOOK TYPE



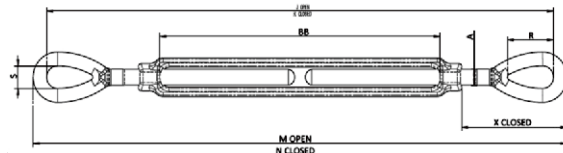
THREAD DIA & TAKE UP(IN)	WORKING LOAD LIMIT(LBS)	WEIGHT EACH (LBS)	DIMENSIONS (IN)								
			A	D	E CLOSED	F	J OPEN	K CLOSED	M OPEN	N CLOSED	BB
1/4X4	400	0.33	0.25	0.45	1.59	1.27	11.12	7.12	11.94	7.94	4.00
5/16X4-1/2	700	0.47	0.31	0.50	1.94	1.50	12.81	8.31	13.81	9.31	4.50
3/8X6	1000	0.78	0.38	0.56	2.30	1.77	16.50	10.50	17.72	11.72	6.00
1/2X6	1500	1.60	0.50	0.66	2.94	2.28	17.82	11.82	19.38	13.38	6.00
1/2X9	1500	1.83	0.50	0.66	2.94	2.28	23.82	14.82	25.35	16.38	9.00
1/2X12	1500	2.28	0.50	0.66	2.94	2.28	29.82	17.82	31.38	19.38	12.00
5/8X6	2250	2.75	0.63	0.84	3.69	2.81	19.25	13.25	21.25	15.25	6.00
5/8X9	2250	3.38	0.63	0.84	3.69	2.81	25.25	16.25	27.25	18.25	9.00
5/8X12	2250	3.50	0.75	0.84	3.69	2.81	31.25	19.25	33.25	21.25	12.00
3/4X6	3000	3.89	0.75	0.98	4.52	3.33	20.88	14.88	23.28	17.28	6.00
3/4X9	3000	5.28	0.75	0.98	4.52	3.33	26.88	17.88	29.28	20.28	9.00
3/4X12	3000	5.43	0.75	0.98	4.52	3.33	32.88	20.88	35.28	23.28	12.00
3/4X18	3000	6.33	0.88	0.98	4.52	3.33	44.88	26.88	47.28	29.28	18.00
7/8X12	4000	8.10	0.88	1.13	5.19	3.78	34.25	22.25	37.00	25.00	12.00
7/8X18	4000	9.95	1.00	1.13	5.19	3.78	46.25	28.25	49.00	31.00	18.00
1X6	5000	9.33	1.00	1.25	5.84	4.25	23.63	17.63	26.69	20.69	6.00
1X12	5000	11.93	1.00	1.25	5.84	4.25	35.63	23.63	38.69	26.69	12.00
1X18	5000	14.00	1.00	1.25	5.84	4.25	47.63	29.63	50.69	32.69	18.00
1X24	5000	17.25	1.25	1.25	5.84	4.25	59.63	35.63	62.69	38.69	24.00
1-1/4X12	6500	20.58	1.25	1.50	7.22	5.13	37.94	25.94	41.56	29.56	12.00
1-1/4X18	6500	23.00	1.25	1.50	7.22	5.13	49.94	31.94	53.56	35.56	18.00
1-1/4X24	6500	27.00	1.50	1.50	7.22	5.13	61.97	37.94	65.56	41.56	24.00
1-1/2X12	7500	27.50	1.50	1.88	8.34	5.75	40.94	28.94	44.44	32.44	12.00
1-1/2X18	7500	31.00	1.50	1.88	8.34	5.75	52.96	34.94	56.44	38.44	18.00
1-1/2X24	7500	37.50	1.50	1.88	8.34	5.75	64.94	40.94	68.44	44.44	24.00

US TYPE DROP FORGED TURNBUCKLE EYE & HOOK TYPE



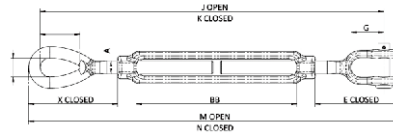
THREAD DIA & TAKE UP (IN)	WORKING LOAD LIMIT (LBS)	WEIGHT EACH (LBS)	DIMENSIONS (IN)											
			A	D	E CLOSED	F	J OPEN	K CLOSED	M OPEN	N CLOSED	R	S	X CLOSED	BB
1/4X4	400	0.29	0.25	0.45	1.59	1.27	11.46	7.46	12.09	8.09	0.78	0.34	1.75	4.00
5/16X4-1/2	700	0.49	0.31	0.50	1.94	1.50	13.19	8.69	13.47	9.47	0.94	0.44	2.09	4.50
3/8X6	1000	0.78	0.38	0.56	2.30	1.77	16.98	10.98	17.49	11.94	1.12	0.53	2.52	6.00
1/2X6	1500	1.61	0.50	0.66	2.94	2.28	18.45	12.45	19.67	13.67	1.44	0.72	3.23	6.00
1/2X9	1500	1.85	0.50	0.66	2.94	2.28	24.45	15.45	25.67	16.67	1.44	0.72	3.23	9.00
1/2X12	1500	2.26	0.50	0.66	2.94	2.28	30.45	18.45	31.67	19.67	1.44	0.72	3.23	12.00
5/8X6	2250	2.70	0.63	0.84	3.69	2.81	19.96	13.96	21.47	15.47	1.75	0.88	3.90	6.00
5/8X9	2250	3.13	0.63	0.84	3.69	2.81	25.96	16.96	27.47	18.47	1.75	0.88	3.90	9.00
5/8X12	2250	3.78	0.63	0.84	3.69	2.81	31.96	19.96	33.47	21.47	1.75	0.88	3.90	12.00
3/4X6	3000	3.89	0.75	0.98	4.52	3.33	21.63	15.63	23.45	17.45	2.09	1.00	4.69	6.00
3/4X9	3000	4.61	0.75	0.98	4.52	3.33	27.63	18.63	29.45	20.45	2.09	1.00	4.69	9.00
3/4X12	3000	5.83	0.75	0.98	4.52	3.33	33.63	21.63	35.45	23.45	2.09	1.00	4.69	12.00
3/4X18	3000	6.33	0.75	0.98	4.52	3.33	45.63	27.63	47.45	29.45	2.09	1.00	4.69	18.00
7/8X12	4000	8.10	0.88	1.13	5.19	3.78	34.78	22.78	36.91	24.91	2.38	1.25	5.10	12.00
7/8X18	4000	9.95	0.88	1.13	5.19	3.78	46.78	28.78	48.91	30.91	2.38	1.25	5.10	18.00
1X6	5000	9.33	1.00	1.25	5.84	4.25	24.80	18.80	27.20	21.20	3.00	1.44	6.36	6.00
1X12	5000	11.93	1.00	1.25	5.84	4.25	36.80	24.78	39.20	27.20	3.00	1.44	6.36	12.00
1X18	5000	14.00	1.00	1.25	5.84	4.25	48.80	30.80	51.20	33.20	3.00	1.44	6.36	18.00
1X24	5000	17.25	1.00	1.25	5.84	4.25	60.80	36.80	63.20	39.20	3.00	1.44	6.36	24.00
1-1/4X12	6500	19.00	1.25	1.50	7.22	5.13	39.13	27.13	42.06	30.06	3.56	1.81	7.72	12.00
1-1/4X18	6500	23.00	1.25	1.50	7.22	5.13	51.13	33.13	54.06	36.06	3.56	1.81	7.72	18.00
1-1/4X24	6500	24.00	1.25	1.50	7.22	5.13	63.13	39.13	66.06	42.06	3.56	1.81	7.72	24.00
1-1/2X12	7500	27.50	1.50	1.88	8.34	5.75	41.72	29.72	44.72	32.72	4.06	2.12	8.62	12.00
1-1/2X18	7500	31.00	1.50	1.88	8.34	5.75	53.72	35.72	56.72	38.72	4.06	2.12	8.62	18.00
1-1/2X24	7500	37.50	1.50	1.88	8.34	5.75	65.72	41.72	68.72	44.72	4.06	2.12	8.62	24.00

US TYPE DROP FORGED TURNBUCKLE EYE & EYE TYPE



THREAD DIA & TAKE UP (IN)	WORKING LOAD LIMIT (LBS)	WEIGHT EACH (LBS)	DIMENSIONS (IN)								
			A	J OPEN	K CLOSED	M OPEN	N CLOSED	R	S	X CLOSED	BB
1/4X4	500	0.29	0.25	11.94	7.94	12.38	8.38	0.81	0.34	1.76	4.07
5/16X4-1/2	800	0.48	0.31	13.92	9.42	14.48	9.98	0.95	0.44	2.20	4.58
3/8X6	1200	0.75	0.38	17.56	11.56	18.24	12.24	1.13	0.53	2.48	6.10
1/2X6	2200	1.72	0.50	19.94	13.94	20.82	14.82	1.41	0.71	3.56	6.03
1/2X12	2200	2.63	0.50	32.23	20.23	33.11	21.11	1.41	0.71	3.54	12.36
5/8X6	3500	2.75	0.63	21.72	15.72	22.72	16.72	1.80	0.88	4.35	6.03
5/8X12	3500	4.12	0.63	34.06	22.06	35.06	23.06	1.80	0.88	4.34	12.39
3/4X6	5200	4.22	0.75	23.24	17.24	24.50	18.50	2.09	1.00	5.12	6.13
3/4X12	5200	6.12	0.75	35.64	23.64	36.90	24.90	2.09	1.00	5.09	12.59
3/4X18	5200	7.83	0.75	47.64	29.64	48.90	30.90	2.09	1.00	5.12	18.53
7/8X12	7200	8.83	0.88	36.70	24.70	38.20	26.20	2.38	1.25	5.79	12.16
7/8X18	7200	11.50	0.88	49.17	31.17	50.67	32.67	2.38	1.25	5.79	18.63
1X6	10000	9.62	1.00	26.24	20.24	28.00	22.00	3.00	1.43	6.50	6.18
1X12	10000	13.00	1.00	38.24	26.24	40.00	28.00	3.00	1.43	6.50	12.18
1X18	10000	16.30	1.00	50.24	32.24	52.00	34.00	3.00	1.43	6.50	18.18
1X24	10000	20.20	1.00	62.84	38.84	64.60	40.60	3.00	1.43	6.47	24.84
1-1/4X12	15200	19.90	1.25	42.14	30.14	44.38	32.38	3.59	1.82	8.49	12.06
1-1/4X18	15200	23.80	1.25	54.14	36.14	56.38	38.38	3.59	1.82	8.49	18.06
1-1/4X24	15200	27.80	1.25	66.70	42.70	68.94	44.94	3.59	1.82	8.49	24.62
1-1/2X12	21400	28.70	1.50	44.24	32.24	46.74	34.74	4.09	2.12	9.46	12.32
1-1/2X18	21400	34.10	1.50	56.24	38.24	58.74	40.74	4.09	2.12	9.46	18.32
1-1/2X24	21400	39.60	1.50	68.86	44.86	71.36	47.36	4.09	2.12	9.46	24.94
1-3/4X18	28000	50.70	1.75	57.38	39.38	60.38	42.38	4.65	2.38	9.97	18.37
1-3/4X24	28000	58.20	1.75	69.38	45.38	72.38	48.38	4.65	2.38	9.97	24.37
2X24	37000	83.50	2.00	75.68	51.68	79.18	55.18	5.81	2.69	13.03	24.48
2-1/2X24	60000	149.00	2.50	79.18	55.18	83.18	59.18	6.49	3.12	13.76	24.60
2-3/4X24	75000	174.00	2.75	81.34	57.34	85.84	61.84	7.00	3.25	15.09	24.65

US TYPE DROP FORGED TURNBUCKLE EYE & JAW TYPE



THREAD DIA & TAKE UP (IN)	WORKING LOAD LIMIT (LBS)	WEIGHT EACH (LBS)	DIMENSIONS (IN)											
			A	B	E CLOSED	G	J OPEN	K CLOSED	M OPEN	N CLOSED	R	S	X CLOSED	BB
1/4X4	500	0.33	0.25	0.45	1.66	0.64	11.57	7.57	12.28	8.28	0.81	0.34	1.76	4.07
5/16X4-1/2	800	0.52	0.31	0.50	2.02	0.87	13.50	9.00	14.30	9.80	0.95	0.44	2.20	4.58
3/8X6	1200	0.80	0.38	0.53	2.11	0.85	16.91	10.91	17.87	11.87	1.13	0.53	2.48	6.10
1/2X6	2200	1.77	0.50	0.64	3.22	1.07	19.30	13.30	20.48	14.48	1.41	0.71	3.56	6.03
1/2X9	2200	2.25	0.50	0.64	3.20	1.07	25.59	16.59	26.77	17.77	1.41	0.71	3.54	9.36
1/2X12	2200	2.67	0.50	0.64	3.20	1.07	31.59	19.59	32.77	20.77	1.41	0.71	3.54	12.36
5/8X6	3500	2.98	0.63	0.79	3.90	1.32	20.73	14.73	22.27	16.27	1.80	0.88	4.35	6.03
5/8X9	3500	3.72	0.63	0.79	3.89	1.32	27.07	18.07	28.61	19.61	1.80	0.88	4.34	9.39
5/8X12	3500	4.35	0.63	0.79	3.89	1.32	33.07	21.07	34.61	22.61	1.80	0.88	4.34	12.39
3/4X6	5200	4.51	0.75	0.97	4.71	1.52	22.17	16.17	24.09	18.09	2.09	1.00	5.12	6.13
3/4X9	5200	5.56	0.75	0.97	4.68	1.52	28.57	19.57	30.49	21.49	2.09	1.00	5.09	9.59
3/4X12	5200	6.42	0.75	0.97	4.68	1.52	34.57	22.57	36.49	24.49	2.09	1.00	5.09	12.59
3/4X18	5200	8.14	0.75	0.97	4.71	1.52	46.57	28.57	48.49	30.49	2.09	1.00	5.12	18.53
7/8X12	7200	9.10	0.88	1.16	5.50	1.77	35.68	23.68	37.91	25.91	2.38	1.25	5.79	12.16
7/8X18	7200	11.6	0.88	1.16	5.50	1.77	48.15	30.15	50.38	32.38	2.38	1.25	5.79	18.63
1X6	10000	10.0	1.00	1.34	6.09	2.05	25.03	19.03	27.59	21.59	3.00	1.43	6.50	6.18
1X12	10000	13.4	1.00	1.34	6.09	2.05	37.03	25.03	39.59	27.59	3.00	1.43	6.50	12.18
1X18	10000	16.7	1.00	1.34	6.09	2.05	49.03	31.03	51.59	33.59	3.00	1.43	6.50	18.18
1X24	10000	20.6	1.00	1.34	6.06	2.05	61.63	37.63	64.19	40.19	3.00	1.43	6.47	24.84
1-1/4X12	15200	20.9	1.25	1.84	8.09	2.82	40.76	28.76	43.98	31.98	3.59	1.82	8.49	12.06
1-1/4X18	15200	24.8	1.25	1.84	8.09	2.82	52.76	34.76	55.98	37.98	3.59	1.82	8.49	18.06
1-1/4X24	15200	28.8	1.25	1.84	8.09	2.82	65.32	41.32	68.54	44.54	3.59	1.82	8.49	24.62
1-1/2X12	21400	30.6	1.50	2.06	8.93	2.81	42.50	30.50	46.21	34.21	4.09	2.12	9.46	12.32
1-1/2X18	21400	36.0	1.50	2.06	8.93	2.81	54.50	36.50	58.21	40.21	4.09	2.12	9.46	18.32
1-1/2X24	21400	41.5	1.50	2.06	8.93	2.81	67.12	43.12	70.83	46.83	4.09	2.12	9.46	24.94
1-3/4X18	28000	52.1	1.75	2.60	9.36	3.35	55.37	37.37	59.77	41.77	4.65	2.38	9.97	18.37
1-3/4X24	28000	59.7	1.75	2.60	9.36	3.35	67.37	43.37	71.77	47.77	4.65	2.38	9.97	24.37
2X24	37000	89.9	2.00	2.62	11.80	3.74	72.66	48.66	77.95	53.95	5.81	2.69	13.03	24.48
2-1/2X24	60000	158	2.50	3.06	13.26	4.44	76.08	52.08	82.68	58.68	6.49	3.12	13.76	24.60
2-3/4X24	75000	187	2.75	3.69	14.92	4.19	78.05	54.05	85.67	61.67	7.00	3.25	15.09	24.65

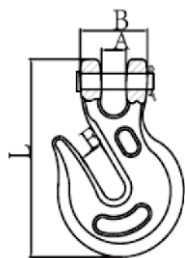
US TYPE DROP FORGED TURNBUCKLE JAW & JAW TYPE



THREAD DIA & TAKE UP (IN)	WORKING LOAD LIMIT (LBS)	WEIGHT EACH (LBS)	DIMENSIONS (IN)									
			A	B	E CLOSED	G	J OPEN	K CLOSED	M OPEN	N CLOSED	BB	
1/4X4	500	0.37	0.25	0.45	1.66	0.64	11.19	7.19	12.18	8.18	4.07	
5/16X4-1/2	800	0.56	0.31	0.50	2.02	0.87	13.07	8.57	14.12	9.62	4.58	
3/8X6	1200	0.85	0.38	0.53	2.11	0.85	16.25	10.25	17.50	11.50	6.10	
1/2X6	2200	1.82	0.50	0.64	3.22	1.07	18.65	12.65	20.14	14.14	6.03	
1/2X9	2200	2.29	0.50	0.64	3.20	1.07	24.94	15.94	26.43	17.43	9.36	
1/2X12	2200	2.71	0.50	0.64	3.20	1.07	30.94	18.94	32.43	20.43	12.36	
5/8X6	3500	3.21	0.63	0.79	3.90	1.32	19.74	13.74	21.82	15.82	6.03	
5/8X9	3500	3.95	0.63	0.79	3.89	1.32	26.08	17.08	28.16	19.16	9.39	
5/8X12	3500	4.58	0.63	0.79	3.89	1.32	32.08	20.08	34.16	22.16	12.39	
3/4X6	5200	4.80	0.75	0.97	4.71	1.52	21.09	15.09	23.68	17.68	6.13	
3/4X9	5200	5.85	0.75	0.97	4.68	1.52	27.49	18.49	30.08	21.08	9.59	
3/4X12	5200	6.72	0.75	0.97	4.68	1.52	33.49	21.49	36.08	24.08	12.59	
3/4X18	5200	8.45	0.75	0.97	4.71	1.52	45.49	27.49	48.08	30.08	18.53	
7/8X12	7200	9.37	0.88	1.16	5.50	1.77	34.65	22.65	37.62	25.62	12.16	
7/8X18	7200	11.8	0.88	1.16	5.50	1.77	47.12	29.12	50.09	32.09	18.63	
1X6	10000	10.4	1.00	1.34	6.09	2.05	23.82	17.82	27.18	21.18	6.18	
1X12	10000	13.8	1.00	1.34	6.09	2.05	35.82	23.82	39.18	27.18	12.18	
1X18	10000	17.1	1.00	1.34	6.09	2.05	47.82	29.82	51.18	33.18	18.18	
1X24	10000	21.0	1.00	1.34	6.06	2.05	60.42	36.42	63.78	39.78	24.84	
1-1/4X12	15200	21.9	1.25	1.84	8.09	2.82	39.37	27.37	43.58	31.58	12.06	
1-1/4X18	15200	25.9	1.25	1.84	8.09	2.82	51.37	33.37	55.58	37.58	18.06	
1-1/4X24	15200	29.8	1.25	1.84	8.09	2.82	63.93	39.93	68.14	44.14	24.62	
1-1/2X12	21400	32.6	1.50	2.06	8.93	2.81	40.76	28.76	45.68	33.68	12.32	
1-1/2X18	21400	38.0	1.50	2.06	8.93	2.81	52.76	34.76	57.68	39.68	18.32	
1-1/2X24	21400	43.5	1.50	2.06	8.93	2.81	65.38	41.38	70.30	46.30	24.94	
1-3/4X18	28000	53.5	1.75	2.60	9.36	3.35	53.35	35.35	59.16	41.16	18.37	
1-3/4X24	28000	61.1	1.75	2.60	9.36	3.35	65.35	41.35	71.16	47.16	24.37	
2X24	37000	96.3	2.00	2.62	11.80	3.74	69.64	45.64	76.72	52.72	24.48	
2-1/2X24	60000	167	2.50	3.06	13.26	4.44	72.97	48.97	82.18	58.18	24.60	
2-3/4X24	75000	199	2.75	3.69	14.92	4.19	74.75	50.75	85.50	61.50	24.65	

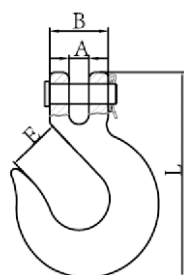


CLEVIS GRAB HOOK H330/A330



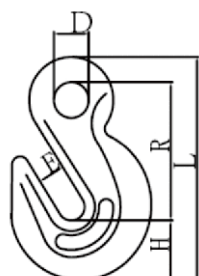
SIZE IN	WLL(LBS)		DIMENSIONS(MM)				WEIGHT LBS/PC
	CARBON	ALLOY	A	B	E	L	
1/4"	2600	3500	8.5	25	9.2	78.5	0.36
5/16"	3900	4700	10	30.5	11	93	0.62
3/8"	5400	7100	13	35	12.7	114.5	1
7/16"	7200	8750	17	42	14.5	126	1.31
1/2"	9200	12000	19	47	17	144	2.22
5/8"	13000	18100	23	56	20	177	4.41
3/4"	20200	24700	24	66.5	24	207.5	6.5

CLEVIS SLIP HOOK H331/A331



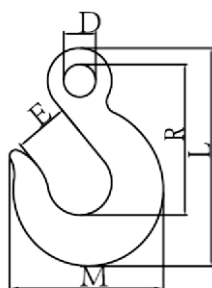
SIZE IN	WLL(LBS)		DIMENSIONS(MM)				WEIGHT LBS/PC
	CARBON	ALLOY	A	B	E	L	
1/4"	1950	2750	11	27	23.5	100	0.55
5/16"	2875	4300	12.5	33	25.5	114	0.79
3/8"	4000	5250	15	39	32	132	1.21
7/16"	5000	7000	17	44	40	147	2.06
1/2"	6500	9000	19	48	42.5	166	2.75
5/8"	9250	13500	18.5	58.7	51	200	4.75
3/4"	12500	19250	30	81	64.5	257	11.28

EYE GRAB HOOK H323/A323



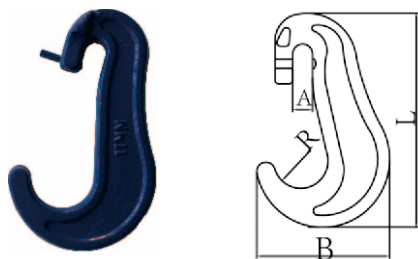
SIZE IN	WLL(LBS)		DIMENSIONS(MM)					WEIGHT LBS/PC
	CARBON	ALLOY	R	H	D	E	L	
1/4"	2600	3500	50.5	18.5	13	9	77	0.28
5/16"	3900	4700	56.8	22.7	14	11.5	89	0.45
3/8"	5400	7100	65.2	28.3	17	13	104	0.79
7/16"	7200	8750	77	33.5	20	15.5	122	1.26
1/2"	9200	12000	85.5	37.5	22	17	135	1.75
5/8"	13000	18100	116	45	30	21	180	3.25
3/4"	20200	24700	133.5	55	35	25	211	5.94

EYE SLIP HOOK H324/A324



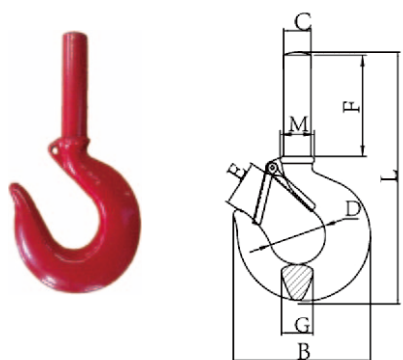
SIZE IN	WLL(LBS)		DIMENSIONS(MM)					WEIGHT LBS/PC
	CARBON	ALLOY	D	R	L	M	E	
1/4"	1950	2750	12.7	65	92	68.50	23	0.40
5/16"	2875	4300	16	72.5	106	76.00	26	0.64
3/8"	4000	5250	18	86.5	124	89.50	33	1.10
7/16"	5000	7000	20.5	98.5	142	108.00	40	1.56
1/2"	6500	9000	23	109.5	156	116.50	43	2.09
5/8"	9250	13500	28.8	132.5	195	143.00	52	3.90
3/4"	12500	19250	35	147.5	222	169.00	55	6.93

LASHING C HOOKS WITH PIN FOR CHAINS



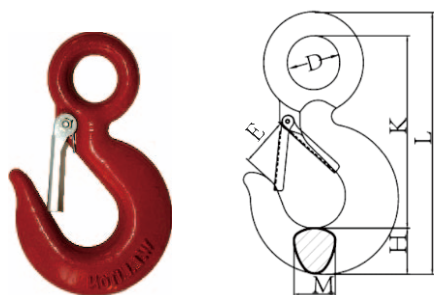
SIZE	WEIGHT	WLL	M.B.S.	DIMENSIONS(MM)			
MM	KG/PC	TON	TON	L	A	B	R
9	0.5	2.5	10	143	13.5	90.5	18.5
11	0.85	3.75	15	177	15.5	109.5	22
13	1.38	5.4	21.6	205	17.7	129	25.5

S-319 FORGED SHANK HOOKS



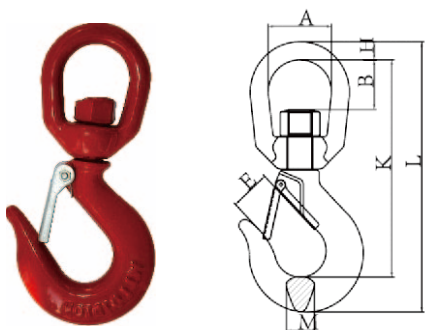
WLL(TON)		DIMENSIONS(MM)								WEIGHT
CARBON	ALLOY	B	E	C	M	G	F	D	L	KG/PC
3/4	1	73	25	15	18	16	51	32	127	0.23
1	1-1/2	80.3	25.5	16.7	20	18	58	35	147	0.34
1-1/2	2	92	30.4	18.4	23	22.5	67	38	165	0.45
2	3	105	32	22.4	26	24	69	41.4	177.5	0.84
3	5	126	38.5	29.5	32	29	82	51	216.5	1.75
5	7	167	47	35.8	40	36	95.5	64	262.5	3.29
7-1/2	11	192	61	46	51	47.7	111.2	76	323	6.1
10	15	214.6	66	50.8	55.6	55.5	114	82.5	342	8.2
15	22	262.5	89.5	65	68.8	68.5	141	108	426	16

S-320 LIFTING EYE HOOKS



WLL(TON)		DIMENSIONS(MM)							WEIGHT
CARBON	ALLOY	D	E	H	K	M	L		KG/PC
1/2	3/4	16.5	19	17	72	16	97		0.2
3/4	1	19	22	19	82	16	110		0.26
1	1-1/2	23	23	21	93.5	17.5	125		0.4
1-1/2	2	28	25	26	103	21	140.5		0.6
2	3	31	27.5	28	119	23	162		0.85
3	5	39	34.5	37	146	30	201		1.65
5	7	51	41	46	186.5	38	256		3.2
7-1/2	11	62	53	57	231.5	46	317		6.2
10	15	73	57	66	260	55	360		9.5
15	22	89	77	76	318	68.5	434		17.9
20	30	90	82	91	360	70	495.5		27.2

S-322 SWIVEL HOOK

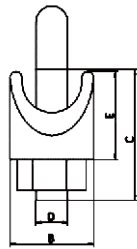
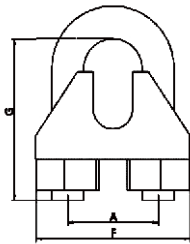


WLL(TON)		DIMENSIONS(MM)							WEIGHT
CARBON	ALLOY	A	E	B	H	K	L	M	KG/PC
1/2	3/4	31.5	17	22.5	9	110	137	15	0.3
3/4	1	32	17	22.5	9	108.3	137	16	0.4
1	1-1/2	37.5	22.5	29.5	12	133.5	163	16	0.6
1-1/2	2	42.5	26	33	15.8	150.5	192	17.5	1.05
2	3	42.5	26	33	15.8	163	209	23	1.25
3	5	48	32.5	39	18	191	246	31	2.4
5	7	64	43	53	25	243.5	313	34	4.6
7-1/2	11	70	49.5	53	28.5	277	364	41.5	7.3
10	15	79	54.5	62	32	332	431	55.7	12.77
15	22	105	81	108	40	427	543	70	24.5
20	30	105	100	96	40	465	596	76.2	34.5

WIRE ROPE CLIPS

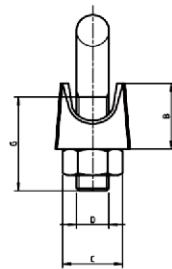
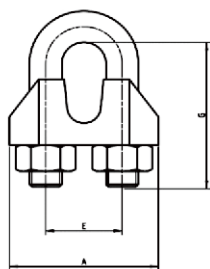


DIN 13411-5 TYPE MALLEABLE WIRE ROPE CLIP



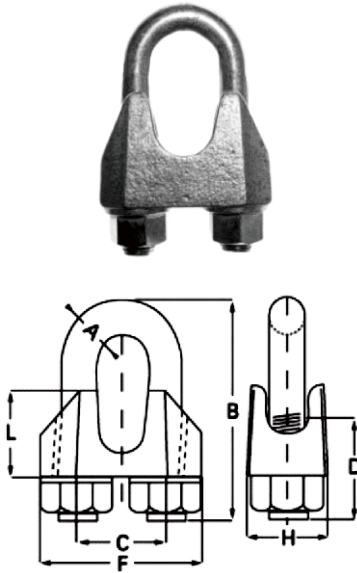
SIZE	A	B	C	D	E	F	G	W/100PCS
MM	MM	MM	MM	MM	MM	MM	MM	KGS
5	7	13	13	5	13	25	20	2.08
6.5	8	16	17	6	14	30	26	4
8	10	20	20	8	18	39	33	8.2
10	12	20	24	8	21	40	38	9.2
13	15	28	30	12	29	55	52	27.5
16	18	32	35	14	35	64	64	43
19	22	32	36	14	40	68	69	49
22	24	34	40	16	44	74	80	68
26	26	38	50	20	51	84	91	117
30	34	41	55	22	59	95	107	140
34	38	45	60	22	67	105	119	213
40	44	49	65	24	77	117	135	268

DIN741 TYPE MALLEABLE WIRE ROPE CLIP



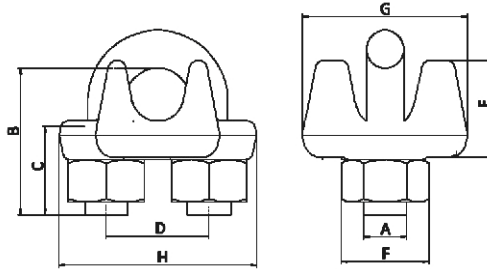
SIZE	A	B	C	D	E	F	G	W/100PCS
MM	MM	MM	MM	MM	MM	MM	MM	KGS
3	21	10	10	4	9	12	16.6	0.8
5	23	10	11	5	11	13	19.95	1.2
6	26	11	12	5	13	15	23.65	1.5
8	30	15	14	6	16	19	28.85	2.5
10	34	17	18	8	19	22	35	5.4
12	36	18	19	8	20	22	37	10.5
13	40	21	23	10	24	30	46.24	10.5
15	44	22	23	10	25	30	48.24	13.5
16	50	26	26	12	29	33	42.5	17
20	54	30	29	12	32	38	64.5	21.5
22	61	34	33	14	37	44	72.5	33
25	65	37	35	14	41	45	82.5	39
28	74	43	37	16	48	50	95.6	56
32	80	50	42	16	52	55	105.6	66
40	88	55	45	16	58	60	125.6	82

DIN1142 TYPE MALLEABLE WIRE ROPE CLIP



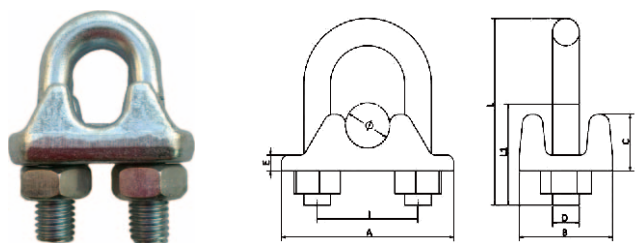
DIA.	A	B	C	D	F	H	L	WEIGHT
MM	MM	MM	MM	MM	MM	MM	MM	KGS/100PCS
5	5	25	12	13	25	13	13	2.1
6.5	6	32	14	17	30	16	14	4
8	8	41	18	20	39	20	18	8.2
10	8	46	20	24	40	20	21	9.2
12	10	56	24	28	50	24	25	25
13	12	64	27	30	55	28	29	27.5
14	12	66	28	31	59	28	30	35
16	14	76	32	35	64	32	35	43
19	14	83	36	36	68	32	40	49
22	16	96	40	40	74	34	44	68
26	20	111	46	50	84	38	51	117
30	20	127	54	55	95	41	59	140
34	22	141	60	60	105	45	67	213
40	24	159	68	65	117	49	77	268

U.S. TYPE G-450 DROP FORGED WIRE ROPE CLIP



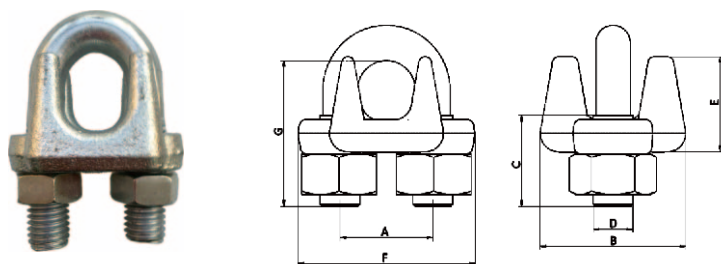
ROPE SIZE		WEIGHT PER 100PCS (LBS)	DIMENSIONS (IN.)							
(IN)	(MM)		A	B	C	D	E	F	G	H
1/8"	3-4	6	0.22	0.72	0.44	0.47	0.37	0.38	0.81	0.99
3/16"	5	10	0.25	0.97	0.56	0.59	0.50	0.44	0.94	1.18
1/4"	6-7	19	0.31	1.03	0.50	0.75	0.66	0.56	1.19	1.43
5/16"	8	28	0.38	1.38	0.75	0.88	0.73	0.69	1.31	1.66
3/8"	9-10	48	0.44	1.5	0.75	1.00	0.91	0.75	1.63	1.94
7/16"	11	78	0.50	1.88	1.00	1.19	1.13	0.88	1.91	2.28
1/2"	12-13	80	0.50	1.88	1.00	1.19	1.13	0.88	1.91	2.28
9/16"	14-15	109	0.56	2.25	1.25	1.31	1.34	0.94	2.06	2.50
5/8"	16	110	0.56	2.25	1.25	1.31	1.34	0.94	2.06	2.50
3/4"	18-20	142	0.62	2.75	1.44	1.50	1.39	1.06	2.25	2.84
7/8"	22	212	0.75	3.12	1.62	1.75	1.58	1.25	2.44	3.16
1"	24-26	252	0.75	3.50	1.81	1.88	1.77	1.25	2.63	3.47
1-1/8"	28-30	283	0.75	3.88	2.00	2	1.91	1.25	2.81	3.59
1-1/4"	32-34	438	0.88	4.44	2.22	2.34	2.17	1.44	3.13	4.13
1-3/8"	36	442	0.88	4.44	2.22	2.34	2.31	1.44	3.13	4.19
1-1/2"	38	544	0.88	4.94	2.38	2.59	2.44	1.44	3.41	4.44
1-5/8"	41-42	704	1.00	5.31	2.62	2.75	2.66	1.63	3.63	4.75
1-3/4"	44-46	934	1.13	5.75	2.75	3.06	2.92	1.81	3.81	5.24
2"	48-52	1300	1.25	6.44	3.00	3.38	3.03	2.00	4.44	5.88
2-1/4"	56-58	1600	1.25	7.13	3.19	3.88	3.19	2.00	4.56	6.38
2-1/2"	62-65	1900	1.25	7.69	3.44	4.13	3.69	2.00	4.69	6.63
2-3/4"	68-72	2300	1.25	8.31	3.56	4.38	4.88	2.00	5.00	6.88
3"	75-78	3100	1.50	9.19	3.88	4.75	4.44	2.38	5.31	7.61
3-1/2"	85-90	4000	1.50	10.75	4.50	5.50	6.00	2.38	6.19	8.38

ITALY TYPE FORGED WIRE ROPE CLIP



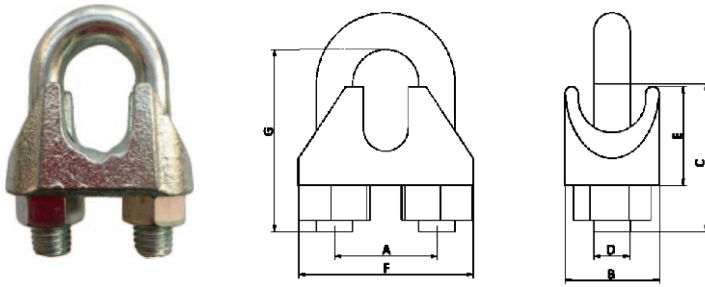
SIZE	A	B	C	D	E	I	L	L1
MM	MM	MM	MM	MM	MM	MM	MM	MM
3-4	21	14	9	4	4.5	9	20	11
5	25	17	10	5	4.5	11	24	13
6	30	19	11	6	5	14	33	18
8	34	20	12	6	5	16	35	18
10	38	22	14	8	6	18.5	44	22
11	41	24	14.3	8	7	22	44	22
12	45	25	16	10	7	24	55	33
14	46	27	17	10	7.5	24	55	33
16	53	31	18	10	8	30	65	33
18	59	33	20	12	8	30	78	38
20	60	34	22	12	8	34	78	38
22	66	35	23	12	8	36	81	45
24-25	70	40	24	12	9	39	86	45
26	72	40	26.5	14	12	42	95	50
28	80	43	30	14	12	43	110	55
30	80	44	33	14	10	47	110	50
32	92	45	34	16	14	49	115	60
34	90	48	37	16	11	53	120	55
38	95	51	39	16	16	57	130	63
40	100	55	40	16	14	59	140	60
45	116	60	47	16	17	70	158	83

TYPE A MALLEABLE WIRE ROPE CLIP



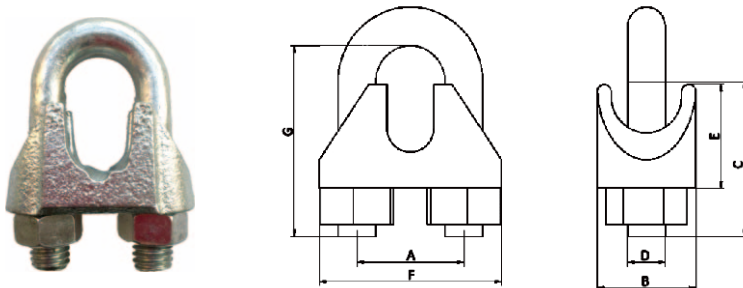
SIZE	A	B	C	D	E	F	G
MM	MM	MM	MM	MM	MM	MM	MM
6	12	17	14	5	14	23	24.8
8	15	21	16	6	17	28	30.66
10	19	28	20	8	21	38	37.95
12	24	34	25	10	27	45	47.15
15	20	40	30	12	32	52	57.73
20	36	47	36	14	38	62	71.73
22	40	52	39	16	43	69	78.23
25	43	56	44	18	50	76	90.4
28	48	62	48	20	57	85	96.9
32	55	67	51	22	61	93	110.4
40	64	81	62	24	73	111	122.5
45	72	88	70	27	86	123	139.5
50	80	95	80	30	95	135	156

TYPE B MALLEABLE WIRE ROPE CLIP



SIZE	A	B	C	D	E	F	G
IN	MM	MM	MM	MM	MM	MM	MM
1/8	9	12	12	4	9.5	19	20
3/16	11	13.5	14	5	10.8	22	26
1/4	12.5	15.5	14	6	11.5	25	26
5/16	15.5	18	16	6	16	31	31
3/8	21	22	20	8	20	40	37
1/2	25	25	24	10	26	47	46
5/8	30	28	28	12	31	55	57
11/16	33	28.5	30	12	35	58.5	64
3/4	36.5	31	34	16	36	65	71
7/8	40	36	38	16	43	72	77
1	45	40	44	20	48	80	88

U.S TYPE MALLEABLE WIRE ROPE CLIP

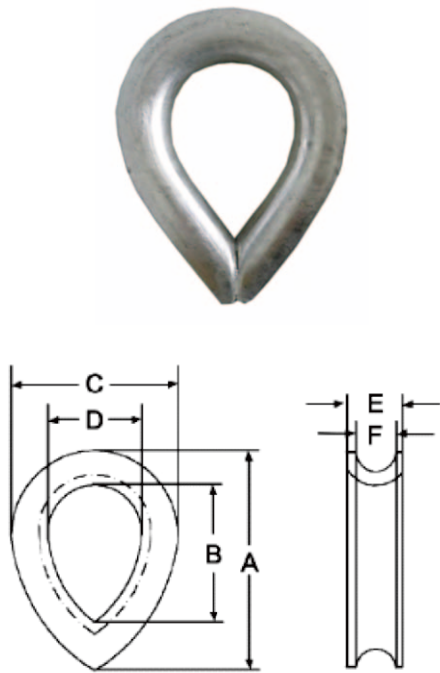


SIZE	A	B	C	D	E	F	G	W/100PCS KGS
IN	MM	MM	MM	IN	MM	MM	MM	MM
1/8	11	14	14	1/4	10.8	22	20	1.54
3/16	14.5	15	16	1/4	13	26	24	2.5
1/4	17	18.5	20	5/16	15	32	31	5.3
5/16	18.3	20	22	5/16	16	35	34	5.9
3/8	22.5	22	27	3/8	22	40.5	41	11
7/16	24	23	30	3/8	22	43	42	11
1/2	27	26	35	7/16	23.3	49	53	18.5
9/16	30	26.5	40	1/2	27	52.5	54	25
5/8	33	28	40	1/2	28	57.5	59	28
3/4	34.5	32	42	9/16	34	61	68	35
7/8	41	37	46	5/8	38	71	78	53
1	45.5	42	55	5/8	43	77.5	87	66.6

WIRE ROPE THIMBLES

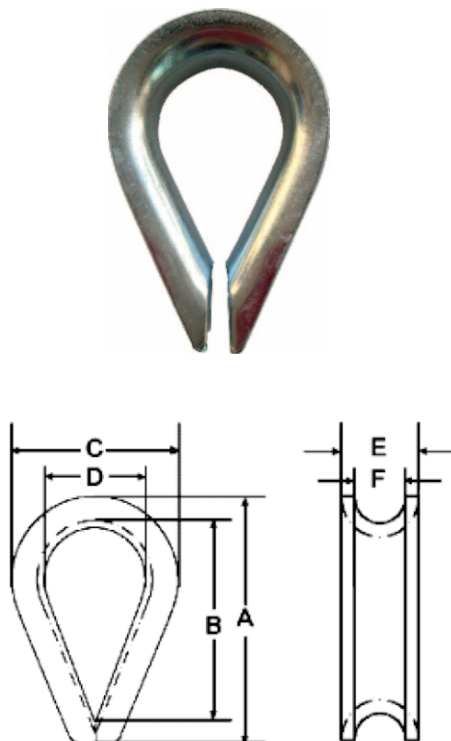


BS464 WIRE ROPE THIMBLE



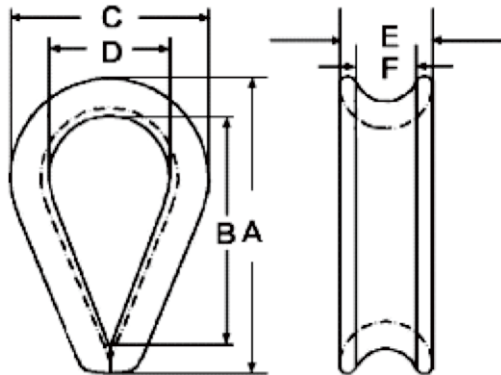
SIZE	DIMENSIONS IN						WT
IN.	A	B	C	D	E	F	KG/PC
5/16"	2-1/8"	1-5/16"	1-1/2"	7/8"	1/2"	5/16"	0.065
3/8"	2-1/2"	1-1/2"	1-7/8"	1"	9/16"	13/32"	0.091
7/16"	2-7/8"	1-1/2"	2-1/8"	1-1/8"	11/16"	1/2"	0.12
1/2"	3-1/8"	1-3/4"	2-5/16"	1-1/4"	13/16"	9/16"	0.16
9/16"	3-1/8"	1-3/4"	2-5/16"	1-1/4"	13/16"	9/16"	0.172
5/8"	3-7/8"	2-5/16"	2-15/16"	1-5/8"	7/8"	5/8"	0.26
11/16"	4-1/4"	2-5/8"	3-1/8"	1-3/4"	1-1/8"	3/4"	0.34
3/4"	4-7/8"	2-7/8"	3-5/8"	2"	1-1/8"	13/16"	0.45
7/8"	4-1/4"	3-1/4"	4"	2-1/4"	1-1/4"	7/8"	0.62
15/16"	5-3/4"	3-5/8"	4-11/16"	2-1/2"	1-5/16"	1"	0.8
1"	6-3/8"	4-1/4"	4-11/16"	2-3/4"	1-3/8"	1-1/16"	0.95
1 1/8"	7"	4-3/8"	5-1/4"	3"	1-1/8"	1-1/8"	1.27
1 1/4"	7-3/4"	5-1/4"	6"	3-3/4"	1-5/8"	1-5/16"	1.6
1 3/8"	9"	6"	6-7/8"	4-1/8"	1-7/8"	1-1/2"	2.35
1 1/2"	10"	6-1/2"	7-3/4"	4-1/2"	2-1/8"	1-5/8"	3.3
1 5/8"	10"	6-1/2"	7-3/4"	4-1/2"	2-3/16"	1-3/4"	3.35
1 3/4"	11-1/4"	7"	9"	5"	2-1/4"	2"	6.25
1 7/8"	12-1/4"	7-1/2"	9-3/4"	5-1/4"	2-5/8"	2-1/8"	7.7
2"	13"	8"	10-1/8"	5-1/2"	2-3/4"	2-3/8"	8.05
2 1/8"	13"	8"	10-1/8"	5-1/2"	2-3/4"	2-1/2"	8.3
2 1/4"	14"	8-1/2"	10-5/8"	5-3/4"	3"	2-5/8"	8.6
2 1/2"	16-1/4"	9-1/2"	12-1/4"	6-1/4"	3-3/4"	2-3/4"	17

DIN6899 A TYPE WIRE ROPE THIMBLE



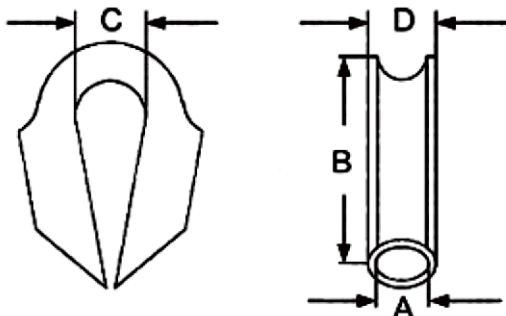
SIZE	DIMENSIONS MM						WT/ 100PCS
MM	A	B	C	D	E	F	
2.5	28	21.5	16	10	5	3	0.14
3	30	23.5	17	11	5.5	3.5	0.35
4	34	26.5	19	12	6	4	0.42
5	36	28	20	13	7	5	0.8
6	38	30	22	14	8	6	0.85
7	43	33	24	15	9	7	1.1
8	46	35	26	16	10	8	1.7
9	50	39	29	18	11	9	2.1
10	56	43	32	20	13	10	3.5
11	60	47.5	36	22	14	11	3.7
12	68	51.5	40	24	15	12	5.25
13	75	56.5	44	26	17	13	7.25
14	82	61	48	28	18	14	8.33
16	91	69.5	54	32	21	16.5	12.3
18	102	78	59	35	24	18	18.5
20	114	86.5	68	40	28	20	31.5
22	126	95	76	44	30	22	36.5
24	135	103.5	84	48	32	24	41.7
28	162	120.5	100	56	38	28	72.1

DIN6899 B TYPE WIRE ROPE THIMBLE



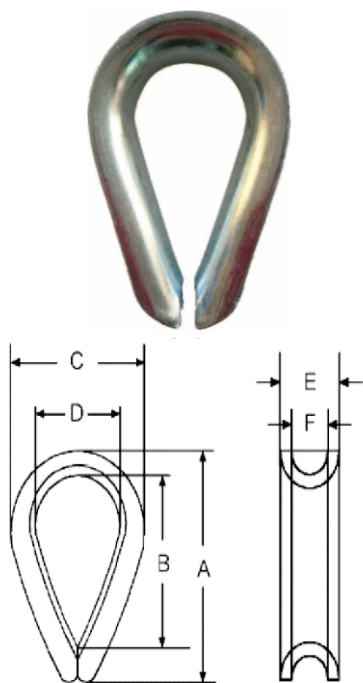
SIZE	DIMENSIONS MM						WT/ 100PCS
MM	A	B	C	D	E	F	KG/PC
3	28	19	18.5	12	6	3	0.6
4	30	21	20.5	13	7	4	0.7
5	33	23	22.5	14	8	5	1
6	39	26	27	16	10	6	1.6
7	43	30	30	18	11	7	2
8	48	32	33	20	12	8	2.4
10	58	38	39	24	14	10	3.5
12	69	45	47	28	17	12	6.3
13	73	48	50	30	18	13	7.8
14	77	51	53	32	19	14	8.6
16	88	58	60	36	22	16	12
17	95	61	65	38	25	17	18
18	100	64	68	40	26	18	20
20	113	72	75	45	28	20	25
22	123	80	82	50	30	22	29
24	135	90	92	56	34	24	35
26	145	99	100	62	36	26	56
28	162	112	110	70	38	28	68
30	175	120	120	75	42	30	90

TUBE ROPE THIMBLE



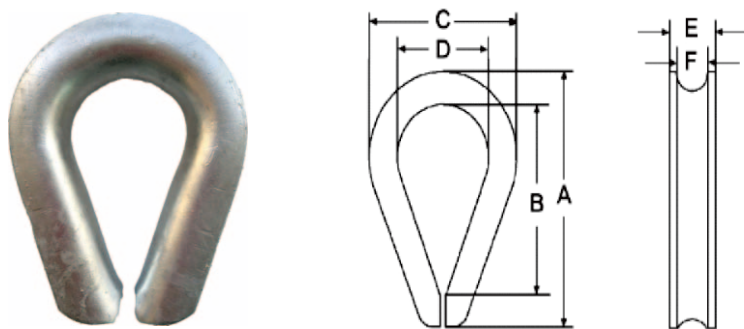
SIZE	DIMENSIONS MM				WEIGHT
MM	A	B	C	D	KG/PC
10	12	90	23	4	0.25
12	15	105	27	5	0.42
14	17	115	27	4	0.5
16	19	120	32	6	0.6
18	22	140	35	6	0.75
22	25	180	45	6.3	1.4
24	28	180	45	7	1.75
26	30	195	47	7	2
32	35	215	60	7	2.4
38	45	260	70	7	3.3
52	55	298	85	7	5.5

U.S. TYPE G-411 LIGHT DUTY WIRE ROPE THIMBLE



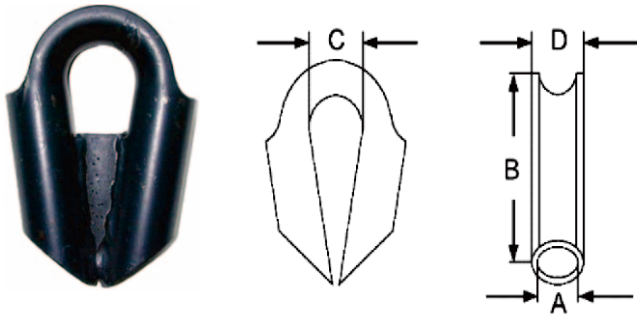
SIZE	DIMENSIONS MM						WEIGHT
IN	A	B	C	D	E	F	KG/PC
1/8"	49.28	33.27	27	17.5	6.35	4.1	0.016
3/16"	49.28	33.27	27	17.5	7.87	5.1	0.016
1/4"	49.28	33.27	27	17.5	9.65	7.1	0.016
5/16"	54	38	31.75	20.57	11.18	8.6	0.018
3/8"	60.5	41	37	23.88	13.46	10.4	0.023
1/2"	69.85	47.75	44.45	28.7	17.53	13.5	0.057
5/8"	89	57.15	60.45	35.05	23.11	16.8	0.156
3/4"	95.25	63.5	68.33	41.4	27.43	19.8	0.214
7/8"	127	88.9	81.03	47.75	32.26	23.88	0.38
1"	144.5	107.95	95.25	63.5	35.3	26.92	0.442
1-1/8"-1-1/4"	158.75	114.3	109.47	69.85	44.45	33.27	0.794
1-3/8"	207	191.5	145	90	48	36	1.36
1-1/2"	225	206	165	105	51.62	39.62	1.42
1-5/8"	248	230	176	110	59	43	1.64
1-3/4"	264	243.5	180	110	62	46	1.94
1-7/8"	283	264	186	114.3	68	52	2.14
2"	289	270	188	114.3	69	53	4.94
2-1/2"	316.3	295.3	252	152	84	64	7.4

U.S. TYPE G-414 HEAVY DUTY WIRE ROPE THIMBLE



SIZE	DIMENSIONS MM						WEIGHT
IN	A	B	C	D	E	F	KG/PC
1/8"	49.53	33.53	28.92	17.78	6.35	4	0.012
3/16"	49.53	33.53	28.92	17.78	6.35	4	0.012
1/4"	55.62	41.4	38.1	22.35	10.41	7.11	0.032
5/16"	63.5	47.75	45.97	26.92	12.7	8.64	0.064
3/8"	73.5	54.1	54.1	28.7	16	10.41	0.1
7/16"	82.55	60.45	60.45	31.75	18.29	11.94	0.167
1/2"	92.2	69.85	69.85	38.1	20.57	13.46	0.22
9/16"	92.2	69.85	68.33	38.1	22.35	15	0.22
5/8"	107.95	82.55	79.5	44.45	24.64	16.76	0.37
3/4"	127	92.25	99.77	50.8	31	19.81	0.71
7/8"	139.7	107.95	107.95	57.15	35.05	23.88	0.86
1"	155.7	114.3	125.48	63.5	39.62	26.92	1.27
1-1/8"-1-1/4"	177.8	130.3	149.35	73.15	45.97	33.27	1.54
1-3/8"	230.12	165.1	172.97	88.9	55.63	36.58	3.71
1-1/2"	228.6	158.75	181.1	88.9	65.02	39.62	4.2
1-5/8"	285.75	203.2	206.5	101.6	69.09	43.67	6.25
1-3/4"	309.63	228.6	215.9	114.3	72.14	46.74	8.43
2"	384.3	304.8	263.65	152.4	78.49	53.09	10.44
2-1/4"	435.1	355.6	301.75	177.8	92.2	60.45	18.44
2-1/2"	522	399.1	316.2	187.8	102.6	66.6	26.3

WIRE ROPE TUBULAR THIMBLE WITH GUSSET

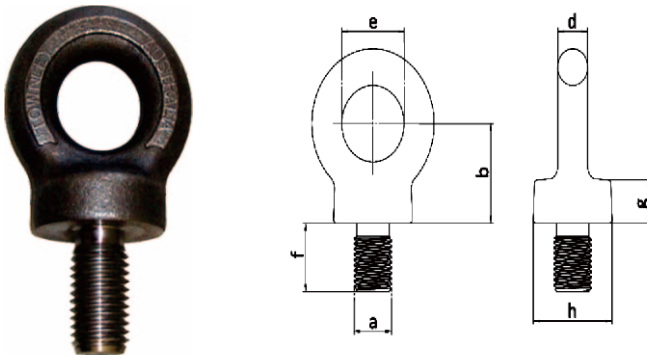


SIZE	DIMENSIONS MM				WEIGHT
MM	A	B	C	D	KG/PC
10	12	90	23	4	0.25
12	15	109	27	5	0.42
14	17	115	27	5	0.5
16	19	125	32	5	0.6
18	22	140	35	5	0.75
22	25	158	45	6.3	1.4
24	28	180	45	7	1.75
26	30	195	47	7	2
32	35	215	60	7	2.4
38	45	253	70	7	3.3
44	50	280	75	7	5.5

EYE BOLTS & EYE NUTS

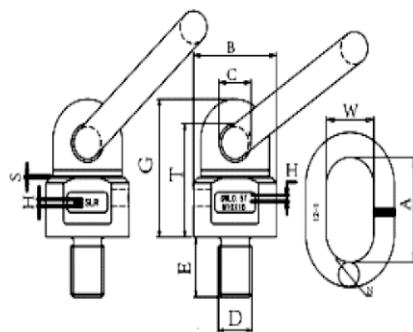


BS529 COLLARED EYE BOLTS



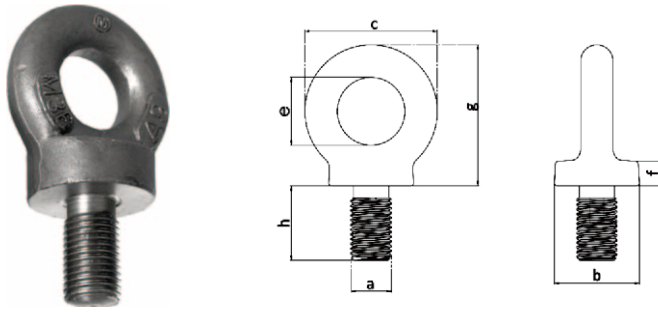
SIZE	b	d	e	f	g	h	SWL
IN	MM	MM	MM	MM	MM	MM	TON
3/8"	21	7	14	9	19	17	0.25
1/2"	28	10	19	11	25	22	0.5
5/8"	36	12	24	14	32	28	0.9
3/4"	43	14	28	17	38	33	1.4
7/8"	50	17	33	20	44	39	2
1"	57	19	38	22	51	44	2.75
1-1/8"	64	21	42	25	57	50	3.5
1-1/4"	71	24	48	28	64	55	4.5
1-1/2"	85	28	57	33	76	67	6.5
1-3/4"	101	33	67	39	89	77	9
2"	115	38	76	44	102	89	12
2-1/4"	128	42	85	50	115	101	15
2-1/2"	143	48	95	55	127	111	20
3"	172	57	115	67	152	133	30

G80 LIFTING SCREW POINT



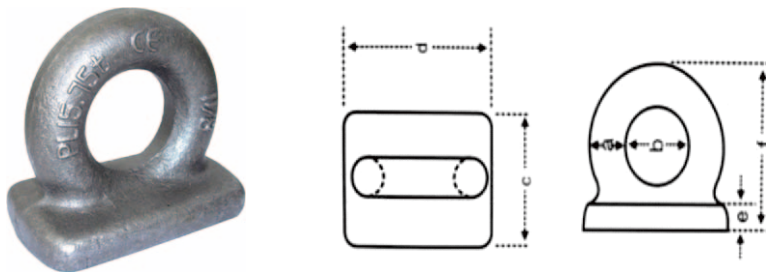
ITEM CODE	WEIGHT	WLL(T)(4:1)		DXE	B	C	G	T	A	W	N	H	S
	KG/PC	WLL 90°	WLL 0°	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
M8	0.41	0.3	0.6	M8X13	36	16.5	51	41	55	30	14	3	1
M10	0.43	0.5	0.9	M10X18	36	16.5	51	41	55	30	14	3	1
M10X90	0.38	0.5	1	M10X90	36	16.5	51	41	55	30	14	3	1
M12	0.44	0.5	1	M12X18	36	16.5	51	41	55	30	14	3	1
M12X40	0.52	0.5	1	M12X40	36	16.5	51	41	55	30	14	3	1
M12X45	0.47	0.5	1	M12X45	36	16.5	51	41	55	30	14	3	1
M12X110	0.53	0.5	1	M12X110	36	16.5	51	41	55	30	14	3	1
M14	0.45	1.12	2	M14X20	36	16.5	51	41	55	30	14	3	1
M16	0.46	1.12	2	M16X35	36	16.5	52	42	55	30	14	3	1
M16X40	0.48	1.12	2	M16X40	36	16.5	52	42	55	30	14	3	1
M16X100	0.54	1.12	2	M16X100	36	16.5	52	42	55	30	14	3	1
M16X120	0.6	1.12	2	M16X120	36	16.5	52	42	55	30	14	3.5	1
M20	0.96	2	4	M20X30	49.5	19	68	56	70	35	16	3.5	1
M20X120	1.17	2	4	M20X120	49.5	19	68	56	70	35	16	3.5	1
M24	1.45	3.15	6.3	M24X40	57	22	78	65.5	85	40	18	3.5	1.5
M24X40	1.42	3.15	6.3	M24X90	57	22	78	65.5	85	40	18	3.5	1.5
M24X90	1.66	3.15	6.3	M24X90	57	22	78	65.5	85	40	18	3.5	1.5
M24X120	1.74	3.15	6.3	M24X120	57	22	78	65.5	85	40	18	3.5	1.5
M27	1.47	3.15	6.3	M27X35	57	22	78	65.5	85	40	20	3.5	1.5
M30(5T)	2.17	5.3	10.6	M30X35	66	23.5	96.5	80.5	85	40	20	4	1.5
M30X38	2.18	5.3	10.6	M30X38	66	23.5	96.5	80.5	85	40	20	4	1.5
M30X120	2.65	5.3	10.6	M30X120	66	23.5	96.5	80.5	85	40	22	4	1.5
M30(8T)	3.57	8	11.8	M30X35	80	28	112	92	115	50	22	6	2
M30X38	3.58	8	11.8	M30X38	80	28	112	92	115	50	22	6	2
M30X120	4.01	8	11.8	M30X120	80	28	112	92	115	50	22	6	2
M36X90	4.17	8	11.8	M36X90	80	27	109	89.5	115	50	22	6	2
M36X400	6.41	8	11.8	M36X400	80	27	109	89.5	115	50	22	6	2
M39	3.65	8	11.8	M39X50	80	27	109	89.5	115	50	22	6	2
M39X90	3.71	8	11.8	M39X90	80	27	109	89.5	115	50	22	6	2
M42	3.62	10	15	M42X50	80	27	109	89.5	115	50	25	6	2.5
M42X60	6.72	10	15	M42X60	80	27	109	89.5	115	50	25	6	2.5
M42X130	4.46	10	15	M42X130	80	27	109	89.5	115	50	25	6	2.5
M42X180	5	10	15	M42X180	80	27	109	89.5	115	50	25	6	2.5
M45X60	4.17	10	15	M45X60	80	27	109	89.5	115	50	25	6	2.5
M48	4.02	10	15	M48X50	80	27	109	89.5	115	50	25	6	2.5
M48X110	4.8	10	15	M48X110	80	27	109	89.5	115	50	25	6	2.5
M56X84	11.6	15	25	M56X84	117	42	310	280	152	70	32	7	2.5
M64X95	12.4	15	25	M64X95	117	42	310	280	152	70	32	7	2.5

BS4278 COLLARED EYE BOLTS



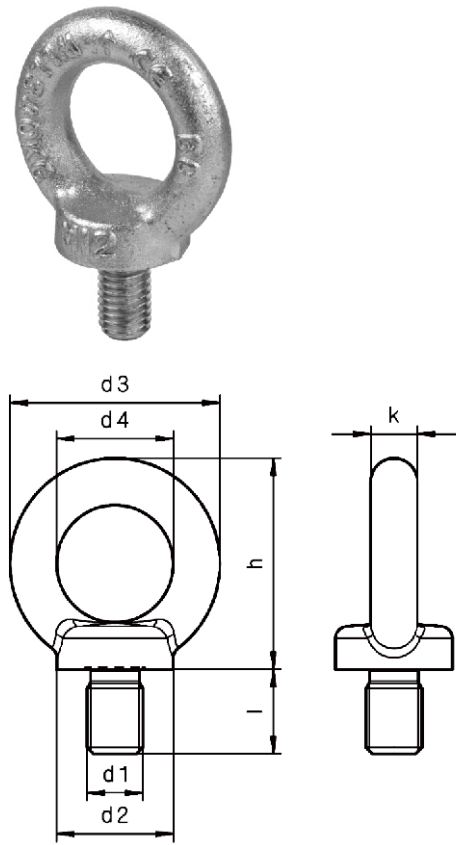
SIZE	b	c	e	f	g	h	SWL	WEIGHT
MM	MM	MM	MM	MM	MM	MM	TON	KG/PC
6	22	33	15	7	36	18	0.1	0.06
8	22	33	15	7	36	18	0.15	0.06
10	22	33	15	7	36	18	0.25	0.06
12	22	33	15	7	36	18	0.4	0.06
14	29	44	20	10	48	23	0.5	0.15
16	29	44	20	10	48	23	0.8	0.15
18	36	52	24	12	58	28	1	0.27
20	40	59	27	14	65	32	1.6	0.38
22	45	64	30	14	73	35	1.6	0.54
24	52	77	35	17	84	40	2.5	0.85
27	58	85	39	20	94	46	2.5	1.13
30	65	96	44	22	106	51	4	1.62
33	72	106	48	24	117	56	4	2.37
36	81	118	54	27	131	63	6.3	3.12
39	86	123	57	29	137	67	6.3	3.81
42	101	148	68	34	164	79	8	6.27
45	101	148	68	34	164	79	8	6.45
48	101	148	68	34	164	79	10	6.51
52	115	168	76	38	186	89	12.5	9.58
56	128	188	86	43	208	100	16	12.99
64	144	212	96	48	234	112	20	18.2

RECTANGULAR BASE EYE PLATES



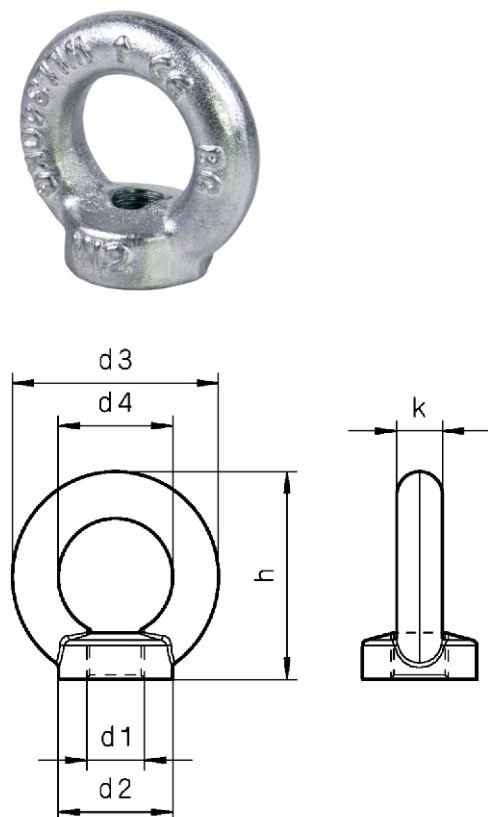
SIZE		b	c	d	e	f	PROOF LOAD	WEIGHT
IN	MM	MM	MM	MM	MM	MM	TON	KG/PC
3/8"	10	20	25	45	6	38	2	0.14
1/2"	12	25	35	60	8	50	3.5	0.33
5/8"	16	32	45	70	10	64	5.5	0.53
3/4"	19	38	50	85	12	76	7.5	0.77
7/8"	22	42	60	102	13	89	9.6	1.27
1"	25	50	70	115	16	100	13	2
1 1/8"	28	57	76	130	18	114	15.75	2.9
1 1/4"	32	64	85	145	19	128	20	3.44
1 3/8"	35	70	95	159	21	140	23.63	5.11
1 1/2"	38	76	100	170	22	152	29	6.58
1 3/4"	44	88	120	200	26	178	39	9.99
2"	50	100	140	230	30	203	50	14.98

DIN580 DROP FORGED EYE BOLTS



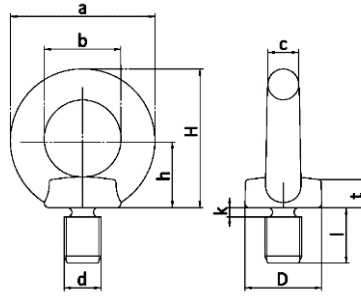
SIZE	d2 MM	d3 MM	d4 MM	h MM	k MM	l MM	UPRIGHT STRENGTH KG	DIAGONAL 45°STRENGTH KG	WEIGHT KG/100PC
M6	20	36	20	36	8	13	70	50	5
M8	20	36	20	36	8	13	140	100	6
M10	25	45	25	45	10	17	230	170	11
M12	30	54	30	53	12	20.5	340	240	18
M14	35	63	35	62	14	27	500	350	19
M16	35	63	35	62	14	27	700	500	28
M18	40	72	40	71	16	30	930	660	30
M20	40	72	40	71	16	30	1200	860	45
M22	50	90	50	90	20	36	1200	860	49
M24	50	90	50	90	20	36	1800	1290	74
M27	65	108	60	109	24	45	1800	1290	93
M30	65	108	60	109	24	45	3600	2500	166
M33	75	126	70	128	28	54	4200	3000	265
M36	75	126	70	128	28	54	4600	3300	265
M42	85	144	80	147	32	63	6300	4500	403
M48	100	166	90	168	38	68	8600	6100	638
M56	110	184	100	187	42	78	11500	8200	880
M64	120	206	110	208	48	90	16000	11000	1240
M72x6	150	260	140	260	60	100	20000	14000	2330
M80x6	170	296	160	298	68	112	28000	20000	3420
M100x6	190	330	180	330	75	130	40000	29000	4910

DIN582 DROP FORGED EYE NUT



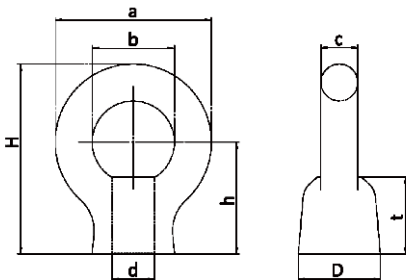
SIZE	d2 MM	d3 MM	d4 MM	h MM	k MM	UPRIGHT STRENGTH KG	DIAGONAL 45°STRENGTH KG	WEIGHT KG/100PC
M6	20	36	20	36	8	70	50	5
M8	20	36	20	36	8	140	100	5
M10	25	45	25	45	10	230	170	9
M12	30	54	30	53	12	340	240	16
M14	35	63	35	62	14	500	350	15
M16	35	63	35	62	14	700	500	24
M18	40	72	40	71	16	930	660	23
M20	40	72	40	71	16	1200	860	32.5
M22	50	90	50	90	20	1200	860	32
M24	50	90	50	90	20	1800	1290	72
M27	65	108	60	109	24	1800	1290	73
M30	65	108	60	109	24	3600	2500	132
M33	75	126	70	128	28	4200	3000	208
M36	75	126	70	128	28	4600	3300	208
M42	85	144	80	147	32	6300	4500	311
M48	100	166	90	168	38	8600	6100	502
M56	110	184	100	187	42	11500	8200	669
M64	120	206	110	208	48	16000	11000	930
M72x6	150	260	140	260	60	20000	14000	1850
M80x6	170	296	160	298	68	28000	20000	2730
M100x6	190	330	180	330	75	40000	29000	3640

JIS B 1168 TYPE EYE BOLTS



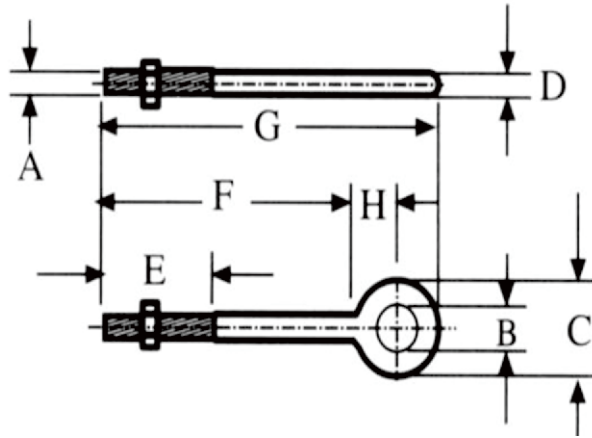
SIZE	a	b	c	D	t	h	H	l	k	SWL		WEIGHT
(d)	MM	MM	MM	MM	MM	MM	MM	MM	MM	KG	KN	KG/PC
M5	26	16	5	13	4.9	13.5	26.5	12.5	1	40	0.392	0.014
M6	26	16	5	13	4.9	13.5	26.5	12.5	1	60	0.588	0.015
M8	32.6	20	6.3	16	5	17	33.3	15	1.2	80	0.785	0.03
M10	41	25	8	20	7	21	41.5	18	1.5	150	1.47	0.06
M12	50	30	10	25	9	26	51	22	2	220	2.16	0.12
M14	60	35	12.5	30	11	30	60	27	2	330	3.23	0.2
M16	60	35	12.5	30	11	30	60	27	2	450	4.41	0.22
M18	72	40	16	35	13	35	71	30	2.5	540	5.29	0.37
M20	72	40	16	35	13	35	71	30	2.5	630	6.18	0.4
M22	81	45	18	40	15	40	80.5	35	2.5	790	7.74	0.57
M24	90	50	20	45	18	45	90	38	3	950	9.32	0.8
M27	110	60	25	60	22	55	110	45	3	1200	11.7	1.5
M30	110	60	25	60	22	55	110	45	3.5	1500	14.7	1.54
M33	110	60	25	60	22	55	110	45	4	1900	18.6	1.59
M36	133	70	31.5	70	26	65	131.5	55	4	2300	22.6	2.83
M39	133	70	31.5	70	26	65	131.5	55	4	2850	27.9	2.9
M42	151	80	35.5	80	30	75	150.5	65	4.5	3400	33.3	4.1
M45	151	80	35.5	80	30	75	150.5	65	4.5	3950	38.7	4.34
M48	170	90	40	90	35	85	170	70	5	4500	44.1	5.88
M52	170	90	40	90	35	85	170	70	5	5600	54.9	6.16
M56	210	110	50	110	42	105	210	80	5	6750	66.2	10.85
M64	210	110	50	110	42	105	210	90	6	9000	88.3	11.6
M80X6	266	140	63	130	50	130	263	105	6	15000	147	21.5
M90X6	340	180	80	170	60	165	335	130	6	18000	177	44
M100X6	340	180	80	170	60	165	335	130	6	20000	196	46.5

JIS B 1169 TYPE EYE NUT



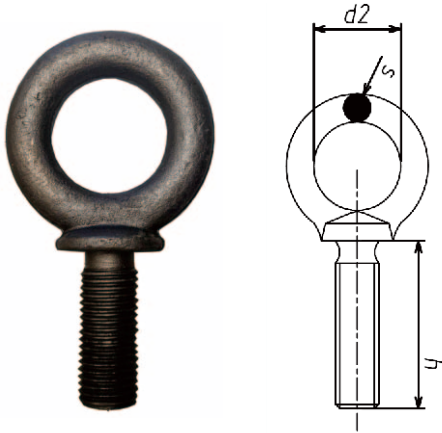
SIZE	a	b	c	D	t	h	H	SWL		WEIGHT
(d)	MM	MM	MM	MM	MM	MM	MM	KG	KN	KG/PC
M6	26	16	5	13	10	19	32.5	60	0.588	0.015
M8	32.6	20	6.3	16	12	23	39.3	80	0.785	0.03
M10	41	25	8	20	15	28	48.5	150	1.47	0.06
M12	50	30	10	25	19	36	61	220	2.16	0.125
M14	60	35	12.5	30	23	42	72	330	3.23	0.23
M16	60	35	12.5	30	23	42	72	450	4.41	0.22
M18	72	40	16	35	28	50	86	540	5.29	0.39
M20	72	40	16	35	28	50	86	630	6.18	0.38
M22	81	45	18	40	33	58	98.5	790	7.74	0.56
M24	90	50	20	45	38	66	111	950	9.32	0.8
M27	110	60	25	60	46	80	135	1200	11.7	1.62
M30	110	60	25	60	46	80	135	1500	14.7	1.58
M33	110	60	25	60	46	80	135	1900	18.6	1.51
M36	133	70	31.5	70	55	95	161.5	2300	22.6	2.75
M42	151	80	35.5	80	64	109	184.5	3400	33.3	4.1
M48	170	90	40	90	73	123	208	4500	44.1	5.9
M64	210	110	50	110	90	151	256	9000	88.3	10.5

G291 EYE BOLTS



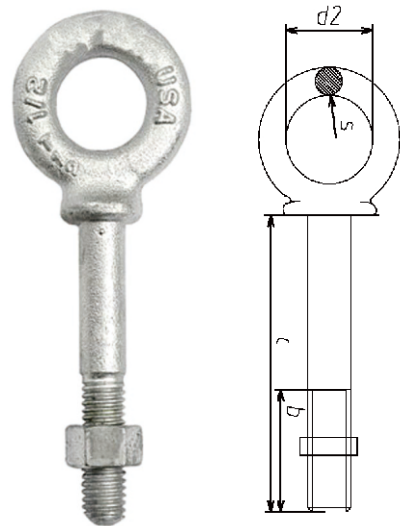
SIZE	WLL	WEIGHT	DIMENSIONS(IN.)							
IN.	LBS	LBS/100PCS	A	B	C	D	E	F	G	H
1/4" X 2"	650	8.2	0.25	0.5	1	0.25	1.5	2	3.06	0.56
1/4" X 4"	650	11.7	0.25	0.5	1	0.25	2.5	4	5.06	0.56
5/16" X 2 1/4"	1200	13.3	0.31	0.62	1.25	0.31	1.5	2.25	3.56	0.69
5/16" X 4 1/4"	1200	25	0.31	0.62	1.25	0.31	2.5	4.25	5.56	0.69
3/8" X 2 1/2"	1550	23.3	0.38	0.75	1.5	0.38	1.5	2.5	4.12	0.88
3/8" X 4 1/2"	1550	29.5	0.38	0.75	1.5	0.38	2.5	4.5	6.12	0.88
3/8" X 6"	1550	35.2	0.38	0.75	1.5	0.38	2.5	6	7.62	0.88
1/2" X 3 1/4"	2600	50.3	0.5	1	2	0.5	1.5	3.25	5.38	1.12
1/2" X 6"	2600	66.1	0.5	1	2	0.5	3	6	8.12	1.12
1/2" X 8"	2600	82	0.5	1	2	0.5	3	8	10.12	1.12
1/2" X 10"	2600	88	0.5	1	2	0.5	3	10	12.12	1.12
1/2" X 12"	2600	114.2	0.5	1	2	0.5	3	12	14.12	1.12
5/8" X 4"	5200	103.1	0.62	1.25	2.5	0.62	2	4	6.69	1.44
5/8" X 6"	5200	118.2	0.62	1.25	2.5	0.62	3	6	8.69	1.44
5/8" X 8"	5200	135.1	0.62	1.25	2.5	0.62	3	8	10.69	1.44
5/8" X 10"	5200	153.6	0.62	1.25	2.5	0.62	3	10	12.69	1.44
5/8" X 12"	5200	167.1	0.62	1.25	2.5	0.62	4	12	14.69	1.44
3/4" X 4 1/2"	7200	168.6	0.75	1.5	3	0.75	2	4.5	7.69	1.69
3/4" X 6"	7200	184.5	0.75	1.5	3	0.75	3	6	9.19	1.69
3/4" X 8"	7200	207.9	0.75	1.5	3	0.75	3	8	11.19	1.69
3/4" X 10"	7200	235	0.75	1.5	3	0.75	3	10	13.19	1.69
3/4" X 12"	7200	257.5	0.75	1.5	3	0.75	4	12	15.19	1.69
3/4" X 15"	7200	298	0.75	1.5	3	0.75	5	15	18.19	1.69
7/8" X 5"	10600	270	0.88	1.75	3.5	0.88	2.5	5	8.75	2
7/8" X 8"	10600	308	0.88	1.75	3.5	0.88	4	8	11.75	2
7/8" X 12"	10600	400	0.88	1.75	3.5	0.88	4	12	15.75	2
1" X 6"	13300	421	1	2	4	1	3	6	10.31	2.31
1" X 9"	13300	468.5	1	2	4	1	4	9	13.31	2.31
1" X 12"	13300	540	1	2	4	1	4	12	16.31	2.31
1" X 18"	13300	650	1	2	4	1	7	18	22.31	2.31
1 1/4" X 8"	21000	750	1.25	2.5	5	1.25	4	8	13.38	2.88
1 1/4" X 12"	21000	900	1.25	2.5	5	1.25	4	12	17.38	2.88
1 1/4" X 20"	21000	1210	1.25	2.5	5	1.25	6	20	25.38	2.88

SHOULDER TYPE MACHINERY EYE BOLT



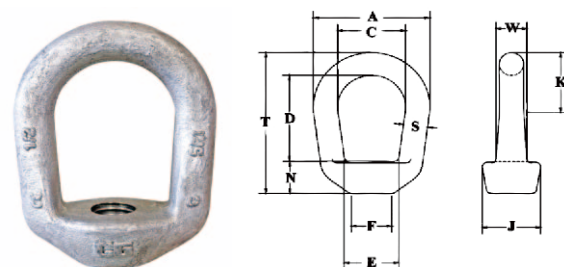
SIZE	WLL	WEIGHT	DIMENSIONS(IN)		
IN	LBS	LBS	H	D2	S
1/4X1	650	0.044	1.020	0.752	2.283
5/16X1-1/8	1200	0.088	1.150	0.882	2.736
3/8X1-1/4	1550	0.132	1.272	1.000	3.071
1/2X1-1/2	2600	0.264	1.531	1.189	3.701
5/8X1-3/4	5200	0.528	1.791	1.382	4.449
3/4X2	7200	0.946	2.047	1.500	5.079
7/8X2-1/4	10600	1.540	2.303	1.752	5.866
1X2.5	13300	2.420	2.579	2.008	6.654
1-1/8X2-3/4	15000	3.300	2.748	2.248	7.205
1-1/4X3	21000	3.960	3.091	2.500	7.953
1-1/2X3.5	24000	7.040	3.602	2.992	9.488
1-3/4X3-3/4	34000	10.340	3.748	3.500	10.472
2X4	42000	18.920	4.016	3.976	12.323
2-1/2X5	65000	31.900	5.000	4.488	14.882

G277 SHOULDER NUT EYE BOLT



SIZE	WLL	WEIGHT	DIMENSIONS(IN)			
IN	LBS	LBS	d2	s	b	C
1/4X2	640	0.066	0.50	0.19	1.50	2.93
1/4X4	640	0.091	0.50	0.19	2.50	4.92
5/16X2-1/4	1200	0.125	0.62	0.25	1.50	3.50
5/16X4-1/4	1200	0.188	0.62	0.25	2.50	5.51
3/8X2-1/2	1550	0.213	0.75	0.31	1.50	3.98
3/8X4-1/2	1550	0.253	0.75	0.31	2.50	5.98
1/2X3-1/4	2600	0.425	1.00	0.38	1.50	5.12
1/2X6	2600	0.568	1.00	0.38	2.99	7.87
5/8X4	5200	0.684	1.25	0.50	2.01	6.46
5/8X6	5200	1.021	1.25	0.50	2.99	8.43
3/4X4-1/2	7200	1.452	1.50	0.62	2.01	7.44
3/4X6	7200	1.672	1.50	0.62	2.99	8.94
7/8X5	10600	2.244	1.75	0.75	2.50	8.46
1X6	13300	3.652	2.01	0.88	2.99	9.96
1X9	13300	4.224	2.01	0.88	4.02	12.95
1-1/4X8	21000	6.49	2.50	1.00	4.02	12.72
1-1/4X12	21000	7.942	2.50	1.00	4.02	16.73
1-1/2X15	24000	14.212	2.99	1.25	5.98	20.75

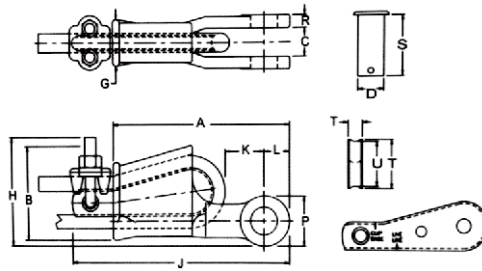
G-400 EYE NUTS



SIZE NO.	TAP SIZE	WLL	UNIT WEIGHT	DIMENSIONS (IN)									
	IN	LBS	LBS	A	C	D	E	F	J	K	N	T	W
1	1/4	520	0.09	1.25	0.75	1.00	0.75	0.50	0.69	0.63	0.38	1.72	0.31
2	3/8	1250	0.17	1.62	1.00	1.20	0.83	0.56	0.81	0.89	0.50	2.09	0.41
3A	1/2	2250	0.28	2.00	1.25	1.44	1.08	0.81	1.00	1.09	0.62	2.55	0.50
4	5/8	3600	0.60	2.50	1.50	1.92	1.35	1.00	1.31	1.31	0.69	3.25	0.69
5	3/4	5200	1.00	3.00	1.75	2.38	1.59	1.12	1.50	1.57	0.88	3.89	0.84
6	7/8	7200	1.65	3.50	2.00	2.63	1.96	1.38	1.88	1.77	0.94	4.32	1.00
7	1	10000	2.69	4.00	2.25	3.06	2.21	1.56	2.13	2.02	1.07	5.01	1.19
8	1-1/4	15500	4.38	4.50	2.50	3.50	2.46	1.88	2.38	2.27	1.25	5.78	1.38
9	1-3/8	18500	5.00	5.00	2.75	4.00	2.69	2.00	2.56	2.53	1.38	6.51	1.50
10	1-1/2	22500	6.78	5.62	3.12	4.31	3.09	2.25	3.00	2.82	1.50	7.06	1.66

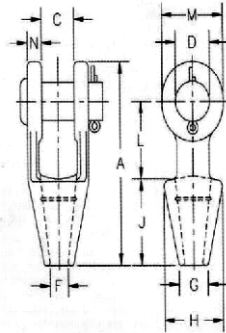
SOCKETS

US TYPE WEDGE SOCKET



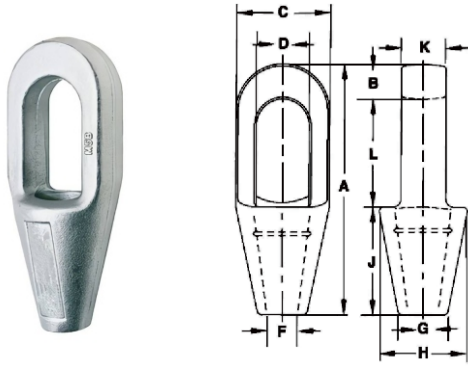
WIRE ROPE DIA.	DIMENSIONS(IN)														
IN.	A	B	C	D	G	H	J	K	L	P	R	S	T	U	V
3/8"	5.63	2.66	0.81	0.81	1.38	3.12	7.38	1.6	0.88	1.56	0.44	2.13	0.44	1.25	1.38
1/2"	6.61	3.53	1	1	1.62	3.85	8.75	1.21	1.05	1.94	0.5	2.56	0.53	1.75	1.88
5/8"	8.18	4.25	1.25	1.19	2.12	4.58	10.34	1.64	1.22	2.25	0.56	3.25	0.69	2	2.19
3/4"	9.78	4.96	1.5	1.38	2.44	5.37	12.03	2.17	1.4	2.62	0.66	3.63	0.78	2.34	2.56
7/8"	11.16	5.66	1.75	1.63	2.69	6.28	14	2.22	1.66	3.12	0.75	4.31	0.88	2.69	2.94
1"	12.75	6.31	2	2	2.94	7.02	15.86	2.71	2	3.75	0.88	4.7	1.03	2.88	3.28
1-1/8"	14.38	6.94	2.25	2.25	3.31	7.75	17.7	2.25	2.25	4.25	1	5.44	1.1	3.25	3.56
1-1/4"	16.34	8.73	2.5	2.5	3.56	9.39	20.48	2.5	2.34	4.5	1.06	6.13	1.19	4.62	4.94

G416 GROOVED OPEN SPELTER SOCKETS



SIZE	WEIGHT	DIMENSIONS(IN.)									
IN.	LBS/PC	A	C	D	F	G	H	J	L	M	N
1/4"	1.1	4.56	0.75	0.69	0.38	0.69	1.56	2.25	1.56	1.31	0.31
5/16"-3/8"	1.3	4.84	0.81	0.81	0.5	0.81	1.69	2.25	1.75	1.5	0.44
7/16"-1/2"	2.25	5.56	1	1	0.56	0.94	1.88	2.5	2	1.88	0.5
9/16"-5/8"	3.6	6.75	1.25	1.19	0.69	1.13	2.25	3	2.5	2.25	0.56
3/4"	5.83	7.94	1.5	1.38	0.81	1.25	2.62	3.5	3	2.62	0.62
7/8"	9.65	9.25	1.75	1.63	0.94	1.5	3.25	4	3.5	3.13	0.8
1"	15.5	10.56	2	2	1.13	1.75	3.75	4.5	4	3.75	0.88
1-1/8"	21.5	11.81	2.25	2.25	1.25	2	4.12	5	4.62	4.12	1
1-1/4"-1-3/8"	31	13.19	2.5	2.5	1.5	2.25	4.75	5.5	5	4.75	1.13
1-1/2"	47.25	15.12	3	2.75	1.63	2.75	5.25	6	6	5.38	1.19
1-5/8"	55	16.25	3	3	1.75	3	5.5	6.5	6.5	5.75	1.31
1-3/4"-1-7/8"	82	18.25	3.5	3.5	2	3.13	6.38	7.5	7	6.5	1.56
2"-2-1/8"	129	21.5	4	3.75	2.25	3.75	7.38	8.5	9	7	1.81
2-1/4"-2-3/8"	167	23.5	4.5	4.25	2.5	4	8.25	9	10	7.75	2.13
2-1/2"-2-5/8"	252	25.5	5	4.75	2.88	4.5	9.25	9.75	10.75	8.5	2.38
2-3/4"-2-7/8"	315	27.25	5.25	5	3.12	4.88	10.5	11	11	9	2.88
3"-3-1/8"	380	29	5.75	5.25	3.38	5.25	11.12	12	11.25	9.5	3
3-1/4"-3-3/8"	434	30.88	6.25	5.5	3.62	5.75	11.88	13	11.75	10	3.12
3-1/2"-3-5/8"	563	33.25	6.75	6	3.88	6.5	12.38	14	12.5	10.75	3.25
3-3/4"-4"	783	36.25	7.5	7	4.25	7.25	13.62	15	13.5	12.5	3.5

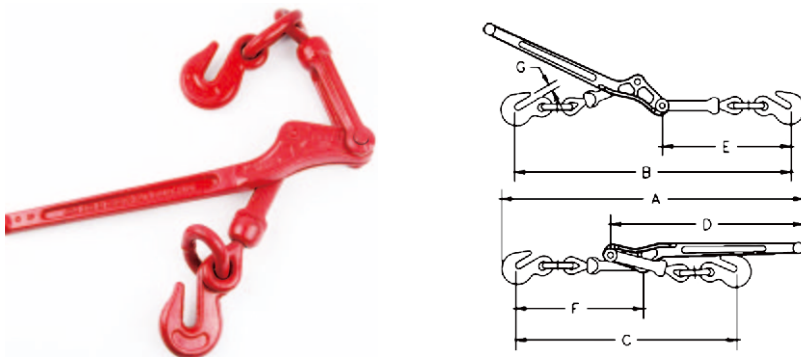
G417 GROOVED CLOSED SPELTER SOCKET



SIZE	WEIGHT	DIMENSIONS(IN)									
IN	LBS/PC	A	B	C	D	F	G	H	J	K	L
1/4"	0.5	4.5	0.5	1.5	0.88	0.38	0.69	1.56	2.25	0.5	1.75
5/16"-3/8"	0.75	4.94	0.62	1.69	0.97	0.5	0.81	1.69	2.5	0.69	2.06
7/16"-1/2"	1.5	5.5	0.69	2	1.16	0.56	0.94	2	2.5	0.88	2.31
9/16"-5/8"	2.5	6.31	0.81	2.63	1.41	0.69	1.12	22.38	3	1	2.5
3/4"	4.25	7.62	1.06	3	1.66	0.88	1.25	2.75	3.5	1.25	3.06
7/8"	7.25	8.75	1.25	3.63	1.94	1	1.5	3.25	4	1.5	3.5
1"	10.5	9.91	1.41	4.13	2.3	1.13	1.75	3.75	4.5	1.75	4
1-1/8"	14.25	11	1.5	4.5	2.56	1.25	2	4.13	5	2	4.5
1-1/4"-1-3/8"	19.75	12.12	1.63	5.5	2.81	1.5	2.25	4.75	5.5	2.25	5
1-1/2"	29.2	13.94	1.94	5.38	3.19	1.63	2.75	5.25	6	2.5	6
1-5/8"	36	15.13	2.13	5.75	3.25	1.75	3	5.5	6.5	2.75	6.5
1-3/4"-1-7/8"	57.25	17.25	2.19	6.75	3.75	2	3.13	6.38	7.5	3	7.56
2"-2-1/8"	79	19.87	2.44	7.63	4.38	2.25	3.75	7.38	8.5	3.25	8.81
2-1/4"-2-3/8"	105	21.5	2.75	8.5	5	2.63	4.13	8.25	9	3.63	9.75
2-1/2"-2-5/8"	140	23.5	3.12	9.5	5.5	2.88	4.5	9.25	9.75	4	10.62
2-3/4"-2-7/8"	220	25.38	3.12	10.75	6.25	3.12	4.88	10.19	11	4.88	11.25
3"-3-1/8"	276	27.12	3.37	11.5	6.75	3.38	5.25	11.5	12	5.25	11.75
3-1/4"-3-3/8"	313	29.25	4	12.25	7.25	3.62	5.75	12.25	13	5.75	12.25
3-1/2"-3-5/8"	400	31	4	13	7.75	3.88	6.31	13	14	6.25	13
3-3/4"-4"	542	33.25	4.25	14.25	8.5	4.25	7.25	14.25	15	7	14

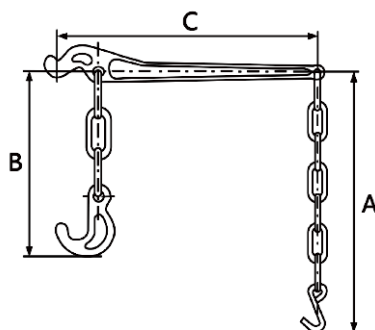
LOAD BINDERS

L-150 LEVER TYPE LOAD BINDER



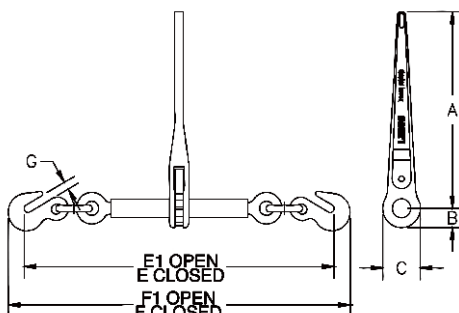
SIZE	WLL	PROOF LOAD	MIN ULTIMATE LOAD	WEIGHT	HANDLE LENGTH	DIMENSIONS (IN)						
IN	LBS	LBS	LBS	KG/PC	IN.	A	B	C	D	E	F	G
1/4"-5/16"	2200	4400	7800	1.60	11.42	18.5	17.3	14.17	11.42	8.27	8.07	0.35
5/16"-3/8"	5400	10800	19000	3.75	16	24.13	22.13	17.88	16	10.38	10.38	0.5
3/8"-1/2"	9200	18400	33000	5.60	18.69	28.75	25.75	21.25	18.69	12.31	12.38	0.63
1/2"-5/8"	13000	26000	46000	10.00	21	31.25	29.75	25	21	14.63	13.75	0.72

WITH C HOOK AND CHAIN LASHING LEVER BINDER



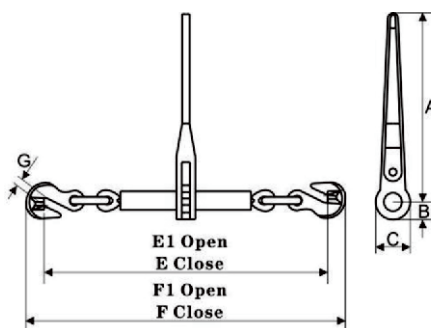
A(MM)	B(MM)	C(MM)	MBL(TON)	WEIGHT(KG)
610	388	512	16	5
610	388	515	20	5.8

STANDARD L-140 RATCHET TYPE LOAD BINDERS



MIN-MAX CHAIN SIZE	WORKING LOAD LIMIT	PROOF LOAD	BREAKING LOAD	WEIGHT EACH	HANDLE LENGTH	DIMENSIONS (IN)				
IN.	LBS	LBS	LBS	KG	IN.	A	C	E	E1	G
1/4"-5/16"	2600	4400	7800	1.60	7.16	7.16	1.77	16.22	21.62	0.35
5/16"-3/8"	5400	10800	19000	5.00	14.00	14.00	2.6	22.64	30.64	0.51
3/8"-1/2"	9200	18400	33000	5.50	14.00	14.00	2.6	24.13	32.13	0.59
1/2"-5/8"	13000	26000	46000	7.15	14.00	14.00	2.6	26.45	34.45	0.74

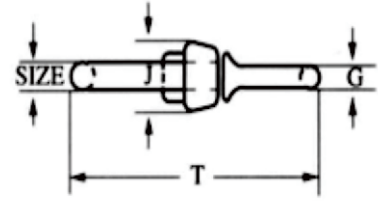
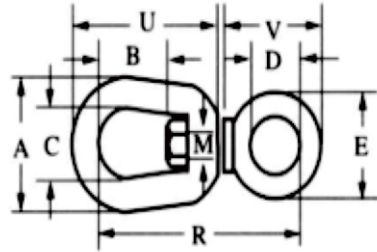
EUROPEAN EN12195-3 RATCHET TYPE LOAD BINDERS



SIZE	W.L.L.	BREAKING LOAD	WEIGHT	TAKE UP	DIMENSIONS MM					
MM	TON	TON	KG/PC	MM	A	B	C	E	E1	G
8	4.0	8.0	5.2	160	387	32	65	575	735	11
10	6.3	12.6	5.7	165	387	32	65	595	760	13
13	10.0	21.2	8.0	150	387	32	65	690	840	16
16	16.0	32.2	13.0	150	387	32	65	690	840	19

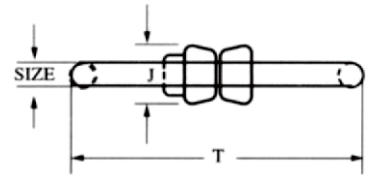
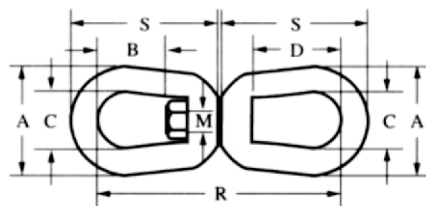


US TYPE DROP FORGED G-401 CHAIN SWIVELS



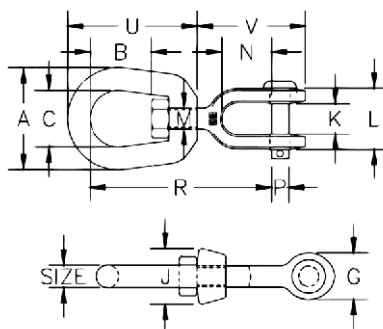
SIZE	WLL	WEIGHT	DIMENSIONS(IN.)											
IN.	LBS	LBS	A	B	C	D	E	G	J	M	R	T	U	V
1/4"	850	0.13	1.25	0.69	0.75	0.64	1.12	0.25	0.69	0.31	2.25	2.75	1.69	1.25
5/16"	1250	0.25	1.63	0.81	1	0.75	1.38	0.31	0.81	0.38	2.72	3.34	2.06	1.47
3/8"	2250	0.54	2	0.94	1.25	1	1.75	0.38	1	0.5	3.44	4.19	2.5	1.88
1/2"	3600	1.12	2.5	1.31	1.5	1.25	2.25	0.5	1.31	0.63	4.25	5.25	3.19	2.44
5/8"	5200	2.09	3	1.56	1.75	1.5	2.75	0.62	1.5	0.75	5.13	6.31	3.88	2.94
3/4"	7200	3.09	3.5	1.75	2	1.75	3.25	0.75	1.88	0.88	5.78	7.22	4.94	3.46

US TYPE DROP FORGED G-402 REGULAR SWIVELS



SIZE	WLL	WEIGHT	DIMENSIONS(IN.)									
IN.	LBS	LBS	A	B	C	D	J	M	R	S	T	
1/4"	850	0.21	1.25	0.69	0.75	1.06	0.69	0.31	2.94	1.69	3.44	
5/16"	1250	0.39	1.63	0.81	1	1.25	0.81	0.38	3.56	2.06	4.19	
3/8"	2250	0.71	2	0.94	1.25	1.5	1	0.5	4.31	2.5	5.06	
1/2"	3600	1.32	2.5	1.31	1.5	2	1.31	0.63	5.44	3.19	6.44	
5/8"	5200	2.49	3	1.56	1.75	2.38	1.5	0.75	6.56	3.88	7.81	
3/4"	7200	4.02	3.5	1.75	2	2.63	1.88	0.88	7.19	4.31	8.69	
7/8"	10000	6.25	4	2.06	2.25	3.06	2.13	1	8.38	5	10.13	
1"	12500	9.84	4.5	2.31	2.5	3.5	2.38	1.13	9.63	5.75	11.63	
1-1/4"	18000	16.37	5.63	2.69	3.13	3.69	3	1.50	11.14	6.75	13.36	
1-1/2"	45200	45.79	7.09	3.88	4.09	3.88	3.75	2.25	16.67	9.91	20.13	

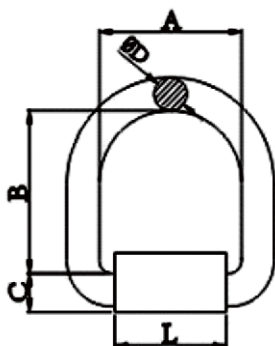
US TYPE DROP FORGED G403 JAW END SWIVELS



SIZE	WORKING LOAD LIMIT	WEIGHT EACH	DIMENSIONS(IN.)												
IN	LBS	LBS	A	B	C	G	J	K	L	M	N	P	R	U	V
1/4	850	0.21	1.25	0.69	0.75	0.69	0.69	0.47	1.03	0.31	0.88	0.25	2.63	1.69	1.69
5/16	1250	0.34	1.63	0.81	1.00	0.81	0.81	0.50	1.13	0.38	0.88	0.31	2.94	2.06	1.81
3/8	2250	0.66	2.00	0.94	1.25	1.00	1.00	0.63	1.41	0.50	1.06	0.38	3.63	2.50	2.25
1/2	3600	1.34	2.50	1.31	1.50	1.31	1.31	0.75	1.75	0.63	1.31	0.50	4.50	3.19	2.88
5/8	5200	2.48	3.00	1.56	1.75	1.63	1.50	0.94	2.06	0.75	1.50	0.63	5.31	3.88	3.44
3/4	7200	3.88	3.50	1.75	2.00	1.88	1.88	1.13	2.53	0.88	1.75	0.75	6.06	4.31	4.00
7/8	10000	5.87	4.00	2.06	2.25	2.13	2.13	1.34	2.79	1.00	2.06	0.88	7.00	5.00	4.53
1	12500	9.84	4.50	2.31	2.50	2.63	2.38	1.75	3.72	1.13	2.81	1.13	8.56	5.75	5.94
1-1/4	18000	15.75	5.69	2.69	3.13	3.13	3.00	2.06	4.31	1.63	2.81	1.38	9.75	7.06	6.38
1-1/2	45200	54.75	7.00	3.88	4.00	5.63	4.00	2.88	6.00	2.25	4.44	2.25	14.25	10.00	10.84

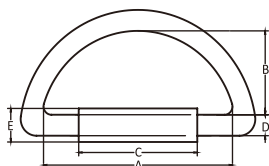
RINGS AND LINKS

D RINGS WITH WRAPS



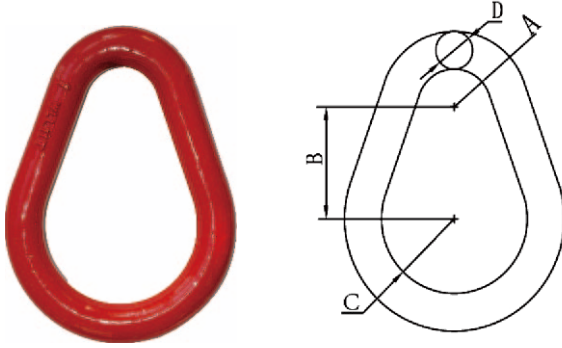
SIZE	WEIGHT	B.L	A	B	C	D	L
IN.	KG/PC	TON	MM	MM	MM	MM	MM
1/2"	0.43	5.4	57.2	63.5	16	13	45
5/8"	0.85	8.2	76.2	76.2	22	16	63
3/4"	1.25	12	76.2	76.2	25.4	19	63
1"	1.91	21.3	76.2	76.2	30.8	25.4	64
1"	2.15	21.3	76.2	101.6	30.8	25.4	64

FORGED D RING WITH STRAP



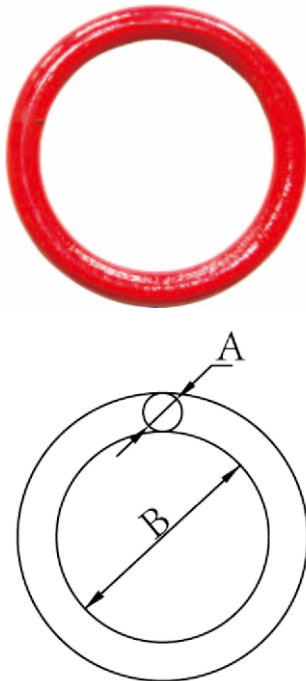
SIZE	A	B	C	D	E	WEIGHT	MBS
MM	MM	MM	MM	MM	MM	KG/PC	TON
19	104	55.5	75	19	23	1.21	20
21	136	80	120	21	25.5	2.46	36
25	144	88	125	25	30	3.7	41
27	151	90	130	27	50	4.41	50

DROP FORGED PEAR SHAPED LINK



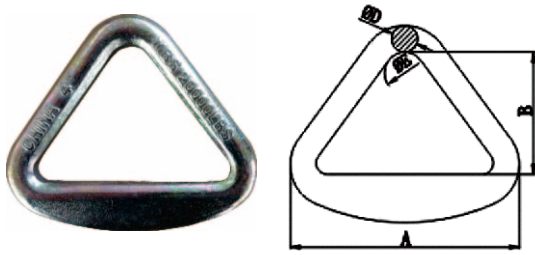
SIZE	WEIGHT	WLL	BL	A	B	C	D
IN.	KG/PC	TON	TON	MM	MM	MM	MM
3/8"	0.1	1.6	8	10	28.5	19	10
1/2"	0.25	3.2	16	12.5	38	25.5	12.5
5/8"	0.5	4.1	20.5	16	47.5	32	16
3/4"	0.8	5.6	28	19	57	38	19
7/8"	1.4	6.4	32	22	67	44.5	22.2
1"	1.9	11	55	25	76	51	25.4
1-1/8"	2.92	13.9	69.5	28	86	57	28.5
1-1/4"	3.75	16.3	81.5	32	95	63.5	32
1-3/8"	5.12	19.5	97.5	35	105	70	35
1-1/2"	6.5	24.6	123	38	114	76	38
1-5/8"	8.4	28.4	142	41.5	124	82.5	41.3
1-3/4"	10.21	38.5	192.5	44.5	133	89	44.5
1-7/8"	13.15	43.5	217.5	48	143	95.5	47.6
2"	15.42	46.5	232.5	51	152.5	102	51
2-1/4"	21.78	64.9	324.5	57.5	171.5	114.5	57
2-1/2"	29.94	66.8	334	63.5	190.5	127	63.5
2-3/4"	39.92	98.4	492	70	209.5	140	70
3"	51.71	103.4	517	76.5	229	152.5	76
3-1/4"	66.23	118.9	594.5	82.5	248	165	82.5
3-1/2"	82.1	126.6	633	89	257.5	178	89
4"	122.93	169.2	846	102	305	203.5	101.5

DROP FORGED WELDLESS ROUND RINGS



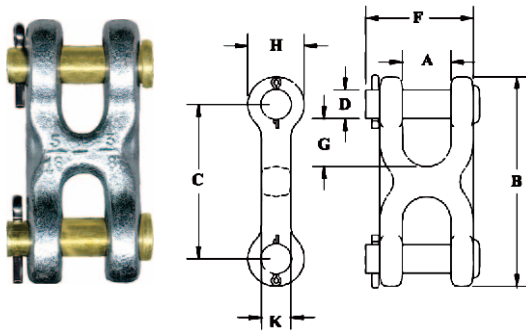
SIZE	WEIGHT	WLL	BL	A	B
IN.	KG/PC	TON	TON	MM	MM
3/8"×2"	0.11	0.5	3	10	50
1/2"×2"	0.21	1	6	13	50
5/8"×3"	0.46	1.5	9	16	76
5/8"×3-5/16"	0.5	1.5	9	16	84
3/4"×3"	0.67	2.3	13.8	19	76
3/4"×4"	0.84	2.5	15	19	102
7/8"×4"	1.2	3.3	19.8	22	102
7/8"×5-1/2"	1.55	2.5	15	22	140
1"×4"	1.59	4.9	29.4	25	102
1"×5-1/2"	2.1	4.9	29.4	25	140
1-1/8"×6"	2.87	4.7	28.2	28	152
1-1/4"×5"	3.1	7.7	46.2	32	127
1-1/4"×6"	3.6	7.7	46.2	32	152
1-1/4"×10"	5.6	7.7	46.2	32	254
1-3/8"×6"	4.5	8.6	51.6	35	152
1-1/2"×8"	6.8	11.3	67.8	38	203
1-1/2"×8-3/4"	7.32	11.3	67.8	38	222
1-1/2"×10"	8.22	11.3	67.8	38	254
1-1/2"×12"	17.8	15.9	95.4	38	305

FORGED DELTA RING



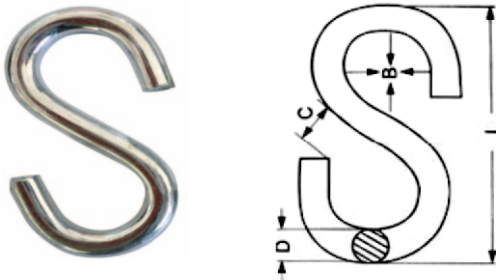
SIZE		DIMENSIONS(MM)				M.B.S	WEIGHT
IN	MM	A	B	D	E	TON	KG/PC
2	51.0	80.0	44.5	12.0	15.0	5.0	0.2
3	76.0	109.4	60.0	14.0	20.0	8.2	0.36
4	102.0	142.0	74.0	16.0	25.0	9.1	0.62

H TYPE TWIN CLEVIS LINK



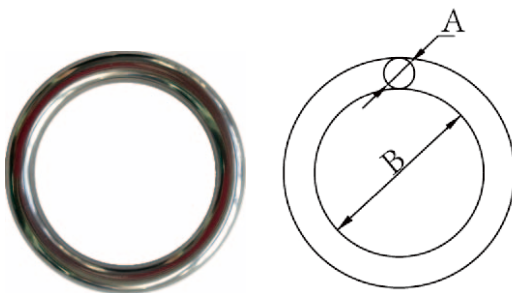
CHAIN SIZE	WORKING LOAD LIMIT	WEIGHT EACH	DIMENSIONS(IN)							
IN	LBS	LBS	A	B	C	D	F	G	H	K
1/4-5/16"	4700	0.31	0.47	2.50	1.56	0.38	1.31	0.43	0.94	0.50
3/8"	6600	0.44	0.53	2.81	1.81	0.44	1.53	0.50	1.00	0.56
7/16-1/2"	11300	0.98	0.65	3.62	2.31	0.56	1.91	0.63	1.31	0.81

S HOOK



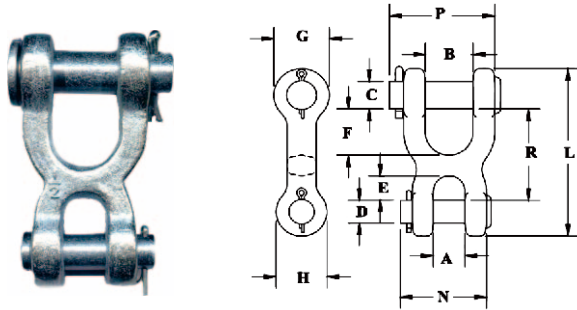
SIZE	B	C	D	L	WEIGHT
MM	MM	MM	MM	MM	KG/100PC
2.5	6	3	2.5	20	0.17
3	7	3.5	3	25	0.33
3.5	9	4	3.5	30	0.48
4	11	5	4	35	0.78
4.5	12	5.5	4.5	40	1.15
5	14	6	5	45	1.52
6	16	7	6	55	2.6
7	18	8	7	65	4.5
8	23	10	8	75	6.5
10	25	13	10	100	12.6
12	30	15	12	120	15

WELDED ROUND RING



SIZE	A	B	WEIGHT
MM	MM	MM	KG/100PC
3×25	3	25	0.5
4×25	4	25	0.91
4×30	4	30	1.07
4×40	4	40	1.39
5×30	5	30	1.73
5×40	5	40	2.23
5×50	5	50	2.58
6×30	6	30	2.72
6×40	6	40	3.27
6×50	6	50	3.99
6×60	6	60	4.69
7×35	7	35	4.2
8×40	8	40	6.06
8×50	8	50	7.32
10×50	10	50	11.85
10×70	10	70	15.8

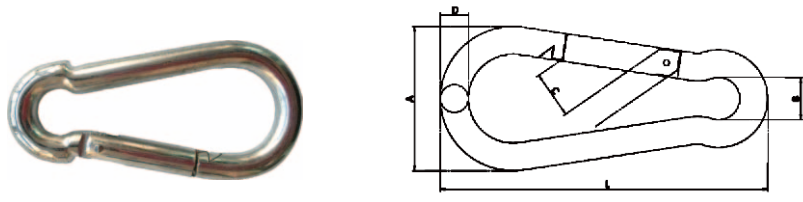
S-247 DOUBLE CLEVIS LINK



CHAIN SIZE	WORKING LOAD	WEIGHT EACH	DIMENSIONS(IN)											
IN	LBS	LBS	A	B	C	D	E	F	G	H	L	N	P	R
1/4	2600	0.38	0.50	0.75	0.50	0.31	0.38	0.75	1.00	0.81	2.81	1.38	1.66	1.50
5/16-3/8	5400	0.81	0.56	1.00	0.63	0.44	0.47	1.00	1.19	1.00	3.53	1.75	2.25	1.91
7/16	7200	1.25	0.69	1.13	0.69	0.56	0.59	1.09	1.31	1.19	4.06	2.00	2.50	2.19
1/2	9200	1.56	0.81	1.25	0.75	0.63	0.68	1.25	1.44	1.31	4.53	2.25	2.75	2.24

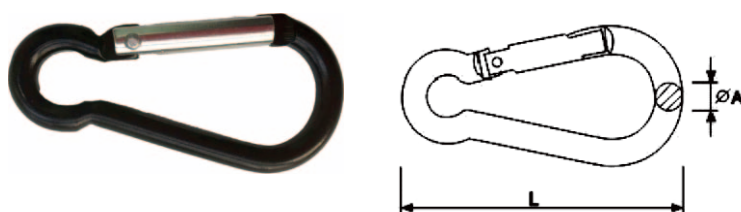
SNAP HOOKS & QUICK LINKS

DIN5299 SNAP HOOKS



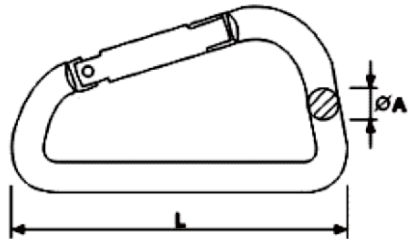
SIZE	A	B	C	D	L	WLL	WEIGHT(KG/100PCS)
MM	MM	MM	MM	MM	MM	LBS	
4×40	20	6	6	4	40	100	0.8
5×50	25	6	7	5	50	160	1.6
6×60	30	9	7	6	60	260	2.8
7×70	35	10	10	7	70	335	4.5
8×80	40	11	11	8	80	400	6.3
9×90	45	13	11	9	90	500	9.4
10×100	50	16	12	10	100	650	12.5
11×120	57	18	19	11	120	700	19.2
12×140	67	20	20	12	140	800	25.8
13×160	74	22	29	13	160	1300	35.1
14×180	86	22	42	14	180	1600	45.5
15×200	90	26	42	15	200	1800	61.8

ALUMINUM SNAP HOOK CARBINE TYPE



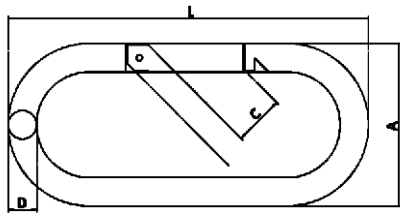
SIZE	øA	L
MM	MM	MM
5X50	5	50
6X60	6	60
7X70	7	70
8X80	8	80
10X100	10	100

ALUMINUM TYPE D CARBINE



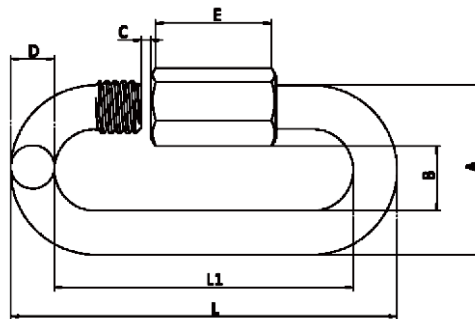
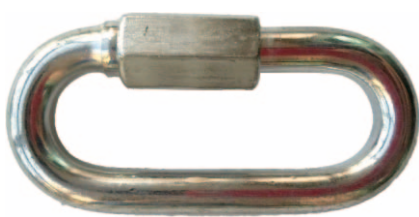
SIZE	ØA	L
MM	MM	MM
5X50	5	50
6X60	6	60
7X70	7	70
8X80	8	80
10X100	10	100

STRAIGHT SNAP HOOK



SIZE	A	C	D	L	SWL	N.W.
MM	MM	MM	MM	MM	LBS	KG/100PCS
5X50	25	9	5	50	160	1.75
6X60	30	11	6	60	260	2.55
8X80	40	13	8	80	400	5.7
10X100	50	16	10	100	650	13.6
11X120	58	21	11	120	700	18.5

STANDARD QUICK LINKS



SIZE	A	B	C	D	L	L1	E	WEIGHT
MM	MM	MM	MM	MM	MM	MM	MM	KG/100PCS
3.5	17	10	5	3.5	36	29	11	0.8
4	19.5	11.5	5.5	4	39.5	31.5	12.5	1.2
5	23	13	6.5	5	48.5	35.5	16	2.1
6	26.5	14.5	7.5	6	57	45	19	3.5
7	30	16	8.5	7	66	52	21.5	5.45
8	33.5	17.5	10.5	8	74	58	24	7.5
9	37	19	11	9	80	62	26	10.5
10	40.5	20.5	12	10	89	69	29	13.5
12	47.5	23.5	15	12	104.5	80.5	33	22.8
14	54.5	26.5	17	14	121	93	38.5	35
16	61.5	29.5	19	16	140	108	45	50



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