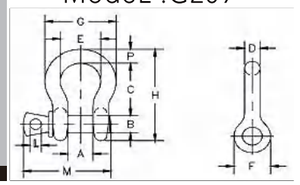
TOYO-INTL®

BOW SHACKLE

US TYPE SCREW PIN ANCHOR BOW SHACKLE G209 S209

Nominal Size (in.)	Working Load Limit(t)	Weight Each (lbs.)	Dimensions(in.)											Tolerance +/-	
			A	B	C	D	E	F	G	H	L	M	P	C	A
3/16	1/3	0.06	0.38	0.25	0.88	0.19	0.60	0.56	0.98	1.47	0.16	1.12	0.19	0.06	0.06
1/4	1/2	0.10	0.47	0.31	1.13	0.25	0.78	0.61	1.28	1.84	0.19	1.38	0.26	0.06	0.06
5/16	3/4	0.19	0.53	0.38	1.22	0.31	0.84	0.75	1.47	2.09	0.22	1.66	0.31	0.06	0.06
3/8	1	0.31	0.66	0.44	1.44	0.38	1.03	0.91	1.78	2.49	0.25	2.03	0.38	0.13	0.06
7/16	1-1/2	0.38	0.75	0.50	1.69	0.44	1.16	1.06	2.03	2.91	0.31	2.38	0.44	0.13	0.06
1/2	2	0.72	0.81	0.63	1.88	0.50	1.31	1.19	2.31	3.28	0.38	2.69	0.50	0.13	0.06
5/8	3-1/4	1.37	1.06	0.75	2.38	0.63	1.69	1.50	2.94	4.19	0.44	3.34	0.69	0.13	0.06
3/4	4-3/4	2.35	1.25	0.88	2.81	0.75	2.00	1.81	3.50	4.97	0.50	3.97	0.81	0.25	0.06
7/8	6-1/2	3.62	1.44	1.00	3.31	0.88	2.28	2.09	4.03	5.83	0.50	4.50	0.97	0.25	0.06
1	8-1/2	5.03	1.69	1.13	3.75	1.00	2.69	2.38	4.69	6.56	0.56	5.07	1.06	0.25	0.06
1-1/8	9-1/2	7.41	1.81	1.25	4.25	1.16	2.91	2.69	5.16	7.47	0.63	5.59	1.25	0.25	0.06
1-1/4	12	9.50	2.03	1.38	4.69	1.29	3.25	3.00	5.75	8.25	0.69	6.16	1.38	0.25	0.06
1-3/8	13-1/2	13.53	2.25	1.50	5.25	1.42	3.63	3.31	6.38	9.16	0.75	6.84	1.50	0.25	0.13
1-1/2	17	17.20	2.38	1.63	5.75	1.54	3.88	3.63	6.88	10.00	0.81	7.35	1.62	0.25	0.13
1-3/4	25	27.78	2.88	2.00	7.00	1.84	5.00	4.19	8.86	12.34	1.00	9.08	2.25	0.25	0.13
2	35	45.00	3.25	2.25	7.75	2.08	5.75	4.81	9.97	13.68	1.22	10.34	2.40	0.25	0.13
2-1/2	55	85.75	4.13	2.75	10.50	2.71	7.25	5.69	12.87	17.84	1.38	13.00	3.13	0.25	0.25

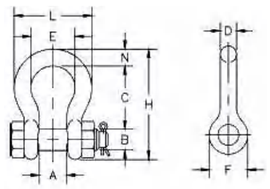
ModeL :G209



US BOLT TYPE ANCHOR BOW SHACKLE G2130 S2130

Nominal Size (in.)	Working Load Limit (t)	Weight Each (lbs.)	Dimensions(in.)									Tolerance +/-	
			A	B	C	D	E	F	H	I	N	C	A
3/16	1/3	0.06	0.38	0.25	0.88	0.19	0.60	0.56	1.47	0.98	0.19	0.06	0.06
1/4	1 /2	0.11	0.47	0.31	1.13	0.25	0.78	0.61	1.84	1.28	0.25	0.06	0.06
5/16	3 /4	0.22	0.53	0.38	1.22	0.31	0.84	0.75	2.09	1.47	0.31	0.06	0.06
3/8	1	0.33	0.66	0.44	1.44	0.38	1.03	0.91	2.49	1.78	0.38	0.13	0.06
7/16	1-1/2	0.49	0.75	0.50	1.69	0.44	1.16	1.06	2.91	2.03	0.44	0.13	0.06
1 /2	2	0.79	0.81	0.64	1.88	0.50	1.31	1.19	3.28	2.31	0.50	0.13	0.06
5/8	3-1/4	1.68	1.06	0.77	2.38	0.63	1.69	1.50	4.19	2.94	0.69	0.13	0.06
3 /4	4-3/4	2.72	1.25	0.89	2.81	0.75	2.00	1.81	4.97	3.50	0.81	0.25	0.06
7/8	6-1/2	3.95	1.44	1.02	3.31	0.88	2.28	2.09	5.83	4.03	0.97	0.25	0.06
1	8-1/2	5.66	1.69	1.15	3.75	1.00	2.69	2.38	6.56	4.69	1.06	0.25	0.06
1-1/8	9-1/2	8.27	1.81	1.25	4.25	1.13	2.91	2.69	7.47	5.16	1.25	0.25	0.06
1-1/4	12	11.71	2.03	1.40	4.69	1.29	3.25	3.00	8.25	5.75	1.38	0.25	0.06
1-3/8	13-1/2	15.83	2.25	1.53	5.25	1.42	3.63	3.31	9.16	6.38	1.50	0.25	0.13
1-1/2	17	20.80	2.38	1.66	5.75	1.53	3.88	3.63	10.00	6.88	1.62	0.25	0.13
1-3/4	26	33.91	2.88	2.04	7.00	1.84	5.00	4.19	12.34	8.80	2.25	0.25	0.13
2	35	52.25	3.25	2.30	7.75	2.08	5.75	4.81	13.68	10.15	2.40	0.25	0.13
2-1/2	55	98.25	4.13	2.80	10.50	2.71	7.25	5.69	17.90	12.75	3.13	0.25	0.25
3	85	154.00	5.00	3.30	13.00	3.12	7.88	6.50	21.50	14.62	3.62	0.25	0.25
3-1/2	120	265.00	5.25	3.76	14.63	3.62	9.00	8.00	24.88	17.02	4.38	0.25	0.25
4	150	338.00	5.50	4.26	14.50	4.00	10.00	9.00	25.68	18.00	4.56	0.25	0.25

ModeL :G2130

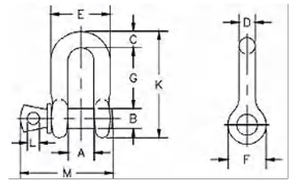


D SHACKLE

US TYPE SCREW PIN ANCHOR D SHACKLE G210 S210

Nominal Size (in.)	Working Load Limit(t)	Weight Each (lbs.)	Dimensions(in.)										Tolerance +/-	
			A	B	C	D	E	F	G	K	L	M	G	A
1/4	1/2	0.11	0.47	0.31	0.25	0.25	0.97	0.62	0.97	1.59	0.19	1.43	0.06	0.06
5/16	3/4	0.17	0.53	0.38	0.31	0.31	1.15	0.75	1.07	1.91	0.22	1.71	0.06	0.06
3/8	1	0.28	0.66	0.44	0.38	0.38	1.42	0.92	1.28	2.31	0.25	2.02	0.13	0.06
7/16	1-1/2	0.43	0.75	0.50	0.44	0.44	1.63	1.06	1.48	2.67	0.31	2.37	0.13	0.06
1/2	2	0.59	0.81	0.63	0.50	0.50	1.81	1.18	1.66	3.03	0.38	2.69	0.13	0.06
5/8	3-1/4	1.25	1.06	0.75	0.63	0.63	2.32	1.50	2.04	3.76	0.44	3.34	0.13	0.06
3/4	4-3/4	2.63	1.25	0.88	0.81	0.75	2.75	1.81	2.40	4.53	0.50	3.97	0.25	0.06
7/8	6-1/2	3.16	1.44	1.00	0.97	0.88	3.20	2.10	2.86	5.33	0.50	4.50	0.25	0.06
1	8-1/2	4.75	1.69	1.13	1.00	1.00	3.69	2.38	3.24	5.94	0.56	5.13	0.25	0.06
1-1/8	9-1/2	6.75	1.81	1.25	1.25	1.13	4.07	2.69	3.61	6.78	0.63	5.71	0.25	0.06
1-1/4	12	9.06	2.03	1.38	1.38	1.25	4.53	3.00	3.97	7.50	0.69	6.25	0.25	0.13
1-3/8	13-1/2	11.63	2.25	1.50	1.50	1.38	5.01	3.31	4.43	8.28	0.75	6.83	0.25	0.13
1-1/2	17	15.95	2.38	1.63	1.62	1.50	5.38	3.62	4.84	9.05	0.81	7.33	0.25	0.13
1-3/4	25	26.75	2.88	2.00	2.12	1.75	6.38	4.19	5.78	10.97	1.00	9.06	0.25	0.13
2	35	42.31	3.25	2.25	2.36	2.10	7.25	5.00	6.77	12.74	1.13	10.35	0.25	0.13
2-1/2	55	71.75	4.12	2.75	2.63	2.63	9.38	5.68	8.07	14.85	1.38	13.00	0.25	0.25

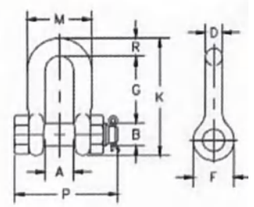
ModeL :G210



US BOLT TYPE ANCHOR D SHACKLE G2150 S2150

Nominal Size (in.)	Working Load Limit (t)	Weight Each (lbs.)	Dimensions(in.)									Tolerance +/-	
			A	B	D	F	G	K	M	P	R	G	A
1/4	1/2	0.13	0.47	0.31	0.25	0.62	0.91	1.59	0.97	1.56	0.25	0.06	0.06
5/16	3/4	0.23	0.53	0.38	0.31	0.75	1.07	1.91	1.15	1.82	0.31	0.06	0.06
3/8	1	0.33	0.66	0.44	0.38	0.92	1.28	2.31	1.42	2.17	0.38	0.13	0.06
7/16	1-1/2	0.49	0.75	0.50	0.44	1.06	1.48	2.67	1.63	2.51	0.44	0.13	0.06
1/2	2	0.75	0.81	0.64	0.50	1.18	1.66	3.03	1.81	2.80	0.50	0.13	0.06
5/8	3-1/4	1.47	1.06	0.77	0.63	1.50	2.04	3.76	2.32	3.56	0.63	0.13	0.06
3/4	4-3/4	2.52	1.25	0.89	0.75	1.81	2.40	4.53	2.75	4.15	0.81	0.25	0.06
7/8	6-1/2	3.85	1.44	1.02	0.88	2.10	2.86	5.33	3.20	4.82	0.97	0.25	0.06
1	8-1/2	5.55	1.69	1.15	1.00	2.38	3.24	5.94	3.69	5.39	1.00	0.25	0.06
1-1/8	9-1/2	7.60	1.81	1.25	1.13	2.68	3.61	6.78	4.07	5.90	1.25	0.25	0.06
1-1/4	12	10.81	2.03	1.40	1.25	3.00	3.97	7.50	4.53	6.69	1.38	0.25	0.06
1-3/8	13-1/2	13.75	2.25	1.53	1.38	3.31	4.43	8.28	5.01	7.21	1.50	0.25	0.13
1-1/2	17	18.50	2.38	1.66	1.50	3.62	4.87	9.05	5.38	7.73	1.62	0.25	0.13
1-3/4	25	31.40	2.88	2.04	1.75	4.19	5.82	10.97	6.38	9.33	2.12	0.25	0.13
2	35	46.75	3.25	2.30	2.10	5.00	6.82	12.74	7.25	10.41	2.36	0.25	0.13
2-1/2	55	85.00	4.12	2.80	2.63	5.68	8.07	14.85	9.38	13.58	2.63	0.25	0.25
3	85	124.25	5.00	3.25	3.00	6.50	8.56	16.87	11.00	15.13	3.50	0.25	0.25

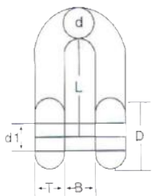
ModeL :G2150



TOYO-INTL®

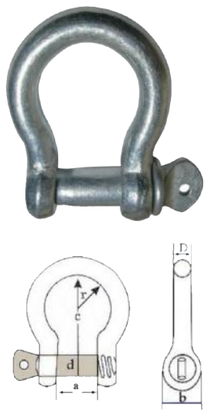
SHACKLE COMMERCIAL TYPE JIS STANDARFD

Material:Mild CARBON Steel & Stainless Steel ANSI 304/316



Model:JIS-D

Nominal Size		Dimensions(mm)				SWL	
mm	in	B	D	L	d1	Ton	Kg
4.8	3/16	10	10	18.5	5.0	0.09	0.014
6	1/4	12	11	25	6.5	0.15	0.028
8	5/16	14	15	31	8.5	0.25	0.049
9	3/8	18	17	36	10	0.4	0.049
12	1/2	24	23	46	13	0.6	0.18
16	5/8	30	32	59	17	0.8	0.42
19	1/3	36	37	74	20	1.0	0.72
22	7/8	43	43	86	23	1.5	1.18
25	1	47	50	95	27	2.0	1.8
28	1-1/8	55	56	110	30	2.5	2.5
32	1-1/4	64	64	130	34	3.2	3.7
38	1-1/2	76	76	145	40	4.2	6.1
44	1-3/4	80	90	160	47	6.5	-
50	2	100	100	185	53	8	-
65	2-1/2	110	130	240	68	15	-
75	2	120	150	300	78	20	-



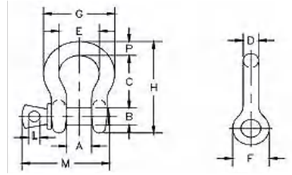
Model:JIS-B

SWL(Kg)	Dimensions(mm)						Approx 100pcs/WT(Kg)
	D	d	a	c	r	b	
80	5	5	10	19	8	11	1.9
100	6	6	13	25	10	14	34
200	8	8	16	32	12	18	7
320	10	10	19	38	16	20	13
520	12	12	25	51	19	26	26
800	16	16	32	64	28	33	50
1100	20	20	38	76	33	40	80
1500	22	22	44	89	37	50	130
2100	25	25	51	100	40	57	200
3000	28	28	57	115	47	68	310
3500	32	32	64	127	52	73	430
5000	38	38	76	152	63	85	700
7000	45	45	90	180	75	96	1250
8000	50	50	102	200	78	108	1750

D RING SHACKLES

- Material: Heavy Duty Steel
- Working Load Limit: 5 Ton (11023 Lbs Capacity)
  Breaking Load Limit: 19 Ton (41850 Lbs Capacity)
  Color: Black, Red
- Made of Drop-Forged Steel and use an electroplated coating that does not rust, does not fade and is extremely durable. Keep your safety at all times!
- Comes with washers for reducing the noises. Just unscrew the pins, attach the shackles to your car, and re-screw. Let it be a good helper for solving your problem immediately.

ModeL :CAS



ModeL :CAS-1

ModeL :CAS-2

Niminal size(in.)	Working Load Limit(t)	Weight Each (lbs.)	A	B	C	D	E	F	G	H	L	M	P	Tolerance C	Tolerance A
3/4	4-3/4	2.35	1.25	0.88	2.81	0.75	2.00	1.81	3.50	4.97	0.50	3.97	0.81	0.25	0.06

TOYO-INTL®

TURNBUCKLE

Turnbuckles to U.S.Federal Specification(FF-T-791b)

Size (Diameter x Take-Up)	Average Overall Length with Ends in Closed Position	Approx.Weight Each(lbs)					Working Load Limit(lbs)	
		Eyes and / or Hooks	Jaw & Eye	Jaw & Jaw	Stub End	Bodies Only	Hood & Hook Hood & Eye	Eye& Eye; Jaw & Eye Jaw & Jaw; Stub End
1/4"x4"	8-1/4	0.30	0.30	0.40	0.29	0.17	0.400	0.500
5/16"x4-1/2"	9-9/16	0.50	0.35	0.58	0.46	0.25	0.700	0.800
3 / 8"x6"	11-7/8	0.75	0.82	0.93	0.75	0.30	1.000	1.200
1/2"x6"	13-5/16	1.50	1.62	1.68	1.36	0.55	1.500	2.200
1/2"x9"	16-5/16	1.75	1.82	1.85	1.69	0.74	1.500	2.200
1/2"x12"	19-5/16	2.18	2.19	2.20	2.0	0.93	1.500	2.200
5/8"x6"	15-1/2	2.63	2.59	2.82	2.15	0.91	2.250	3.500
5/8"x9"	18-1/2	3.00	3.01	3.25	2.70	1.20	2.250	3.500
5/8"x12"	21-1/2	3.25	3.50	3.75	3.22	1.50	2.250	3.500
3/4"x6"	17	3.75	4.25	4.68	3.25	1.30	3.000	5.200
3/4"x9"	20	4.50	5.00	5.38	4.00	1.70	3.000	5.200
3/4"x12"	23	5.75	5.75	6.12	4.65	2.12	3.000	5.200
3/4"x18"	29	7.00	7.25	7.25	6.12	2.93	3.000	5.200
7/8"x6"	18	-	-	-	4.75	2.00	-	7.200
7/8"x12"	24-5/8	8.38	8.88	9.36	6.62	3.00	4.000	7.200
7/8"x18"	30-5/8	10.25	10.60	11.44	8.75	4.12	4.000	7.200
1"x6"	20-5/8	-	-	-	6.41	2.50	-	10.000
1"x12"	26-5/8	11.25	12.00	12.88	8.90	3.86	5.000	10.000
1"x18"	32-5/8	14.00	14.75	16.10	11.70	5.50	5.000	10.000
1"x24"	38-5/8	17.00	17.75	18.60	14.30	7.00	5.000	10.000
1-1/4"x6"	20	-	-	-	10.40	4.00	-	15.200
1-1/4"x12"	29-7/8	19.00	21.20	23.60	14.20	5.93	-	15.200
1-1/4"x18"	35-7/8	24.10	26.00	26.60	18.00	8.00	-	15.200
1-1/4"x24"	41-7/8	25.10	28.70	31.20	21.80	10.00	-	15.200
1-1/2"x6"	22-7/8	-	-	-	15.40	5.80	-	21.400
1-1/2"x12"	32-3/8	27.00	31.10	35.50	20.50	8.40	-	21.400
1-1/2"x18"	38-3/8	31.20	36.40	40.70	26.20	11.50	-	21.400
1-1/2"x24"	44-3/8	38.20	44.20	47.60	31.40	14.10	-	21.400
1-3/4"x6"	-	-	-	-	22.70	8.75	-	28.000
1-3/4"x18"	41-3/4	45.00	48.80	52.40	-	-	-	28.000
1-3/4"x24"	47-3/4	58.00	60.00	64.00	43.90	19.50	-	28.000
2"x6"	-	-	-	-	31.50	12.50	-	37.000
2"x24"	51-3/4	90.00	102.00	115.00	60.30	27.50	-	37.000
2-1/2"x6"	-	-	-	-	60.80	27.00	-	60.000
2-1/2"x24"	51-1/2	183.00	180.00	200.00	110.00	54.00	-	60.000
2-3/4"x24"	61-1/2	180.00	214.00	248.00	-	54.00	-	75.000

Hook&Hook

EYE&EYE

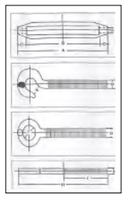
EYE&JAW

JAW&JAW

TURNBUCKLES Frame Japan Type(Forged Steel)

①⑥Sides and Weights(Approx)

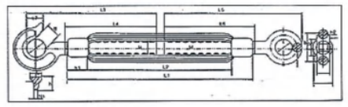
Nominal Size(D)		①Body Only						②Eye and Eye			③Hook and Eye		④Hook and Hook			⑥With Stubs				
		A		B	C	T, L	W/Pcs	F	T, L	W/Pcs	T, L	W/Pcs	E	T, L	W/Pcs	H	I($^{A}_{B}$)	G	W/Pcs
mm	in	mm	in	mm	mm	Ton	Kg	mm	Ton	Kg	Ton	Kg	mm	Ton	Kg	mm	mm	mm	Kg
6	1/4	100	4	78	11	1	0.08	10	0.1	0.116	0.04	0.114	9	0.04	0.112	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	0.295	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	0.6	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	1.79	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	2.6	250	165	20.3	2.34
25	1	350	14	285	32.5	6	1.69	35	6	3.8	2.0	3.77	26	2.0	3.73	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



JAPAN INSPECTED

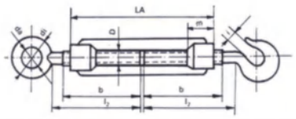
TURNBUCKLES COMMERCIAL TYPE (MALLEABLE IRON)

TURNBUCKLES COMMERICAL TYPE(MALLEABLE)



WLL(Kg)	Specification	B	C	D	E	F	L	Weight(kg)
100	6x100mm	145	215	12	10	6	100	0.06
200	8x125mm	185	280	14	12	8	125	0.125
300	10x150mm	210	325	16	14	9	150	0.250
500	12x200mm	275	430	19	18	11	200	0.480
1000	16x250mm	345	540	23	24	14	250	0.980
1500	20x300mm	435	670	28	26	18	300	1.650
2200	22x330mm	480	740	34	32	20	330	2.350
3000	24x350mm	555	830	36	36	21	350	2.750

TURNBUCKLES WITH HOOK AND ETE DIN 1480

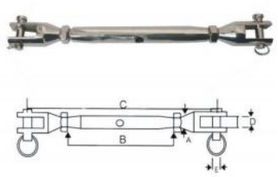


Size (mm/in.)	Permissible Load		Weight (Kg/100p-cs)	Dimensions(mm)						
	Kg	N		l1	m	l2	b	di	da	i
M6	230	2250	7.8	110	10	60	53	10	20	4.5
M8	418	4100	14.8	110	14	60	55	12	26	6.5
M10	663	6500	29.4	125	20	65	60	14	30.5	8
M12	948	9300	36.3	125	21	75	70	18	37.5	10
M16	1804	17700	91	170	27	100	90	22	48	13
M20	2752	27000	156	200	34	115	100	25	51	20
M24	3996	39200	325	255	39	140	130	28	66	27
M30	6371	62500	415	255	45	145	130	35	83	31
1-1/4"	6585	64600	595	295	55	160	150	36.5	88	33
M36	9276	91000	745	295	55	160	150	44	104	40
1-1/2"	9572	93900	1076	330	63	185	170	42	104	39

TOYO-INTL®

STAINLESS STEEL,SHACKLE, TURNBUCKLE,CLIP *AISI 316 & AISI 304*

RIGGING SCREWS

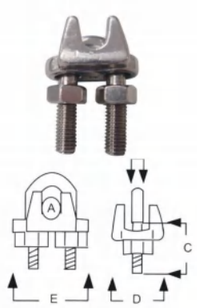


Code No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	WLL (T)	WT (Kg)
HL0251-0004	4	65	120	4	4	0.15	0.07
HL0251-0005	5	70	130	5	5	0.25	0.08
HL0251-0006	6	80	145	6	5	0.35	0.08
HL0251-0008	8	90	175	8	6	0.70	0.15
HL0251-0010	10	100	200	10	8	1.00	0.23
HL0251-0012	12	140	280	12	8	1.50	0.45
HL0251-0014	14	150	290	14	10	1.60	0.50
HL0251-0016	16	170	340	16	12	2.30	1.08
HL0251-0020	20	230	470	20	14	3.00	2.35

WIRE ROPE CLIP DIN741 TYPE

Code No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	WT (Kg)
HL0301-0003	3	4	12	10	21	0.014
HL0301-0005	5	5	13	11	23	0.015
HL0301-0006	6	5	15	12	26	0.021
HL0301-0008	8	6	19	14	30	0.041
HL0301-0010	10	8	22	18	34	0.068
HL0301-0011	11	8	22	19	36	0.072
HL0301-0013	13	10	30	23	42	0.130
HL0301-0014	14	10	30	23	44	0.135
HL0301-0016	16	12	33	26	50	0.210
HL0301-0019	19	12	38	29	54	0.280
HL0301-0022	22	14	44	33	61	0.400
HL0301-0025	25	14	45	35	65	0.440

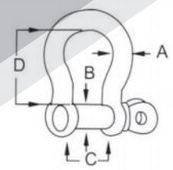
WIRE ROPE CLIP JIS TYPE



Code No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	WT (Kg)
HL0303-0002	2	3	10	14	14	0.008
HL0303-0003	3	4	12	16	17	0.017
HL0303-0004	4	4	13	18	19	0.020
HL0303-0005	5	6	15	20	24	0.035
HL0303-0006	6	6	15	22	28	0.047
HL0303-0008	8	8	20	28	34	0.085
HL0303-0010	10	10	28	35	45	0.164
HL0303-0012	12	12	35	39	51	0.250
HL0303-0014	14	12	40	45	53	0.290
HL0303-0016	16	14	45	48	60	0.400
HL0303-0018	18	14	50	53	62	0.450

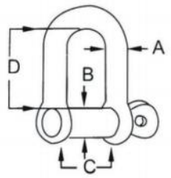
JAPAN INSPECTED

BOW SHACKLE



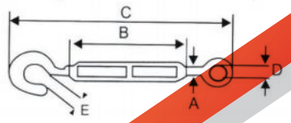
Code No.	A (mm)	B (mm)	C (mm)	D (mm)	WLL (T)	WT (Kg)
HL0107-0004	4	4	8	14	0.09	0.013
HL0107-0005	5	5	10	18	0.10	0.015
HL0107-0006	6	6	13	21	0.15	0.027
HL0107-0008	8	8	16	28	0.25	0.061
HL0107-0010	10	10	19	35	0.50	0.107
HL0107-0012	12	12	25	42	0.60	0.21
HL0107-0016	16	16	32	56	1.10	0.46
HL0107-0020	20	20	38	70	1.60	0.90
HL0107-0022	22	22	44	77	2.50	1.26
HL0107-0025	25	25	51	88	3.00	1.78
HL0107-0028	28	28	57	98	3.50	2.65
HL0107-0032	32	32	65	112	4.50	3.90

D SHACKLE



Code No.	A (mm)	B (mm)	C (mm)	D (mm)	WLL (T)	WT (Kg)
HL0108-0004	4	4	8	14	0.09	0.008
HI0108-0005	5	5	10	18	0.10	0.01
HI0108-0006	6	6	12	21	0.15	0.023
HI0108-0008	8	8	16	28	0.25	0.052
HI0108-0010	10	10	20	35	0.50	0.095
HI0108-0012	12	12	25	42	0.60	0.19
HI0108-0016	16	16	32	56	1.10	0.44
HI0108-0020	20	20	40	70	1.60	0.80
HI0108-0022	22	22	44	77	2.50	1.20
HI0108-0025	25	25	50	88	3.00	1.72
HI0108-0028	28	28	56	98	3.50	2.50
HI0108-0032	32	32	64	112	4.50	3.70

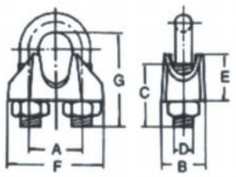
TURNBUCKLE FRAME TYPE



Code No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	WLL (T)	WT (Kg)
HL0233-0005	5	70	130	8	9	0.10	0.08
HL0233-0006	6	100	160	10	9	0.25	0.11
HL0233-0008	8	125	200	12	10	0.35	0.21
HL0233-0010	10	150	245	16	11	0.50	0.34
HL0233-0012	12	200	300	20	14	1.00	0.65
HL0233-0016	16	250	400	22	18	1.50	1.30
HL0233-0020	20	300	480	28	20	2.30	2.50
HL0233-0022	22	325	520	33	22	3.20	3.93
HL0233-0025	25	350	560	35	26	4.50	5.89

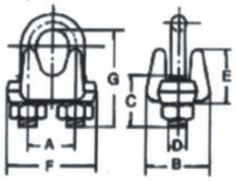
TOYO-INTL®

WIRE ROPE CLIP



DIN741 CLIP

Size		Dimensions (mm)							100/WT(Kg)
mm	in	A	B	C	D	E	F	G	
3	1/8	9	10	12	4	10	21	16	1.4
5	3/16	11	11	13	5	10	23	19	1.5
6.5	1/4	13	12	15	5	11	26	23	2.1
8	5/16	16	14	19	6	15	30	28	4.1
10	3/8	19	18	22	8	17	34	34	6.8
11	7/16	20	19	22	8	18	36	36	7.2
13	1/2	24	23	30	10	21	42	45	13
14	9/16	25	23	30	10	22	44	47	13.5
16	5/8	29	26	33	12	26	50	51	21
19	3/4	32	29	38	12	30	54	63	28
22	7/8	37	33	44	14	34	61	71	40
26	1	41	35	45	14	37	65	81	44
30	11/8	48	37	50	16	43	74	94	66
34	11/4	52	42	55	16	50	80	104	85
40	11/2	58	45	60	16	55	88	124	104



GALV MALLEABLE WIRE ROPE CLIP TYPE A

Size (in)	Dimensions (mm)							100/WT(Kg)
	A	B	C	D	E	F	G	
6	12	17	14	5	14	23	24	2.5
8	15	21	16	6	17	28	30	4.5
10	19	28	20	8	21	38	37	9
12	24	34	25	10	27	45	47	18
15	29	40	30	12	32	52	56	28
20	36	47	36	14	38	62	70	47
22	40	52	39	16	43	69	77	62
25	43	56	44	18	50	76	85	85
28	48	62	48	20	57	85	95	120
32	55	67	51	22	61	93	108	157
40	64	81	62	24	73	111	120	261
45	72	88	70	27	85	123	137	363
50	80	95	80	30	95	135	154	480

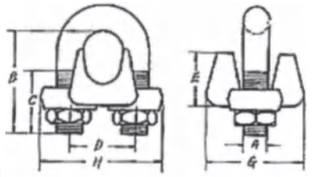
JAPAN INSPECTED

CLIP

Forged Wire Rope Clip U.S G-450 Clip

Rope Size (in.)	Weight Per 100(lbs)	Dimensions(in.)							
		A	B	C	D	E	F	G	H
*1/8	6	0.22	0.72	0.44	0.47	0.37	0.38	0.81	0.99
*3/16	10	0.25	0.97	0.56	0.59	0.50	0.44	0.94	1.18
1/4	19	0.31	1.03	0.50	0.75	0.66	0.56	1.19	1.43
5/16	28	0.38	1.38	0.75	0.88	0.73	0.69	1.31	1.66
3/8	48	0.44	1.50	0.75	1.00	0.91	0.75	1.63	1.94
7/16	78	0.50	1.88	1.00	1.19	1.13	0.88	1.91	2.28
1/2	80	0.50	1.88	1.00	1.19	1.13	0.88	1.91	2.28
9/16	109	0.56	2.25	1.25	1.31	1.34	0.94	2.06	2.50
5/8	110	0.56	2.25	1.25	1.31	1.34	0.94	2.06	2.50
3/4	142	0.62	2.75	1.44	1.50	1.39	1.06	2.25	2.84
7/8	212	0.75	3.12	1.62	1.75	1.58	1.25	2.44	3.16
1	252	0.75	3.50	1.81	1.88	1.77	1.25	2.63	3.47
1-1/8	283	0.75	3.88	2.00	2.00	1.91	1.25	2.81	3.59
1-1/4	438	0.88	4.44	2.22	2.31	2.17	1.44	3.13	4.13
1-3/8	442	0.88	4.44	2.22	2.38	2.31	1.44	3.13	4.19
1-1/2	544	0.88	4.94	2.38	2.59	2.44	1.44	3.41	4.44
1-5/8	704	1.00	5.31	2.62	2.75	2.66	1.63	3.63	4.75
1-3/4	934	1.13	5.75	2.75	3.06	2.92	1.81	3.81	5.24
2	1300	1.25	6.44	3.00	3.38	3.28	2.00	4.44	5.88
2-1/4	1600	1.25	7.13	3.19	3.88	3.19	2.00	4.56	6.38
2-1/2	1900	1.25	7.69	3.44	4.13	3.69	2.00	4.05	6.63
**2-3/4	2300	1.25	8.31	3.56	4.38	4.88	2.00	5.00	6.88
3	3100	1.50	9.19	3.88	4.75	4.44	2.38	5.31	7.61
**3-1/2	4000	1.50	10.75	4.50	5.50	6.00	2.38	6.19	8.38

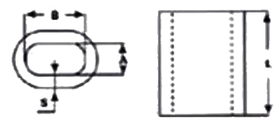
ModeL :G-450



ART. NO	SLEEVE CODE	A (mm)	B (mm)	W (mm)	L (mm)	N. W (Kg) (PER 1000PCS)
DIN 0101	1	1.2	2.4	0.65	5	0.094
DIN 0102	1.5	1.7	3.4	0.75	6	0.211
DIN 0103	2	2.2	4.4	0.85	7	0.375
DIN 0104	2.5	2.7	5.4	1.05	9	0.499
DIN 0105	3	3.3	6.6	1.25	11	0.843
DIN 0106	3.5	3.8	7.6	1.5	13	1.32
DIN 0107	4	4.4	8.8	1.7	14	1.81
DIN 0108	4.5	4.9	9.8	1.9	16	2.61
DIN 0109	5	5.5	11.0	2.1	18	3.57
DIN 0110	6	6.6	13.2	2.5	21	5.86
DIN 0111	6.5	7.2	14.4	2.7	23	7.55
DIN 0112	7	7.8	15.6	2.9	25	9.5
DIN 0113	8	8.8	17.6	3.3	28	13.7
DIN 0114	9	9.9	19.8	3.7	32	19.8
DIN 0115	10	10.9	21.8	4.1	35	26.4
DIN 0116	11	12.1	24.2	4.5	39	35.8
DIN 0117	12	13.2	26.4	4.9	42	45.8
DIN 0118	13	14.2	28.4	5.4	46	59.7
DIN 0119	14	15.3	30.6	5.8	49	73.5
DIN 0120	16	17.5	35.0	6.7	56	111
DIN 0121	18	19.6	39.2	7.6	63	156
DIN 0122	20	21.7	43.4	8.4	70	217
DIN 0123	22	24.3	48.6	9.2	77	292
DIN 0124	24	26.4	52.8	10.0	84	376
DIN 0125	26	28.5	57.0	10.9	91	481
DIN 0126	28	31.0	62.0	11.7	98	603
DIN 0127	30	33.1	66.2	12.5	105	739
DIN 0128	32	35.2	70.4	13.4	112	897
DIN 0129	34	37.8	75.6	14.2	119	1077
DIN 0130	36	39.8	79.6	15.0	126	1275
DIN 0131	38	41.9	83.8	15.8	133	1503
DIN 0132	40	44.0	88.0	16.6	140	1734
DIN 0133	42	46.2	92.4	17.5	147	2024
DIN 0134	44	48.4	96.8	18.3	154	2314
DIN 0135	46	50.6	101.2	19.2	161	2662
DIN 0136	48	52.8	105.6	20.0	168	3010
DIN 0137	50	55.0	110.0	20.8	175	3412
DIN 0138	52	57.2	114.4	21.6	182	3813
DIN 0139	54	59.4	118.8	22.5	189	4293
DIN 0140	56	61.6	123.2	23.3	196	4772
DIN 0141	58	63.8	127.6	24.2	203	5326
DIN 0142	60	66.0	132.0	25.0	210	5880

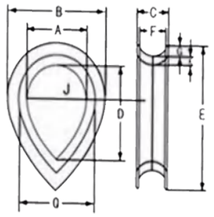
Aluminninum Ferrules

ModeL :DIN3093



TOYO-INTL®

THIMBLES FOR STEEL WIRE ROPE

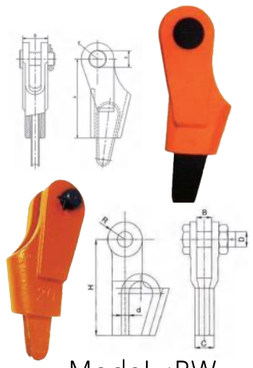


ModeL :BS464

Product Code	Rope Dia (in)	Dimensions(in) A	B	C	D	E	F	G	K	Q	Weight Each (Kg/pc)
BS464 0601	5/16"	22.2	38	12.7	33.4	52	7.9	4	4	30.1	0.077
BS464 0602	3/8"	25.4	47.6	14.3	38	64	10.3	6.3	4.8	35	0.1
BS464 0603	7/16"	28.6	52	17.5	41.3	73	12.7	7.9	4.8	38	0.107
BS464 0604	1/2"	31.7	53.8	20.6	44.5	79.4	14.3	7.9	5.5	42.9	0.17
BS464 0605	9/16"	31.7	58.8	20.6	44.5	79.4	14.3	7.9	5.5	42.9	0.189
BS464 0606	5/8"	41.3	74.5	22.2	58.8	95.8	15.9	8.7	7.9	56	0.3
BS464 0607	3/4"	50.8	92	28.6	73	124	20.6	11.1	9.5	69.8	0.6
BS464 0608	7/8"	56	102	31.7	82.5	133	22.2	12.7	9.5	76.2	0.69
BS464 0609	1	69.8	119	35	108	162	27	14.3	10.3	90.5	1.15
BS464 0610	11.8	76.2	133	38	112	178	28.6	15.9	12.7	102	1.4
BS464 0611	11.4	95	152	41.3	133	197	33.4	15.9	12.7	121	1.5
BS464 0612	8.13	105	175	47.6	152	228	38	19	15.9	137	2.5
BS464 0614	11.2	114	197	52	165	254	41.3	23.8	17.5	149	3.75
BS464 0615	8.15	114	197	58.6	165	254	42.9	23.8	17.5	149	3.91
BS464 0616	4.13	127	228	56	178	286	50.8	25.4	25.4	178	6.67
BS464 0617	8.17	133	248	66.6	190	317	60.4	28.6	28.6	190	8.42
BS464 0618	2	140	257	69.8	203	330	64	28.6	28.6	197	9.98

Wedge Socket

SIZE (mm)	WEGHT (KN)	B.L.L (KN)	B (mm)	D (H10) (mm)	A (mm)	R (mm)	PIN	Weight (Kg)
6	10	43	29	16	90	16	2×20	0.56
8	10	51	31	18	100	25	2×20	0.77
10	15	71	38	20	120	25	2×25	1.01
12	20	100	44	25	155	30	2×25	1.77
14	25	118.5	51	30	185	35	2×25	3.02
16	30	161.3	60	34	195	42	3×30	4.6
18	35	184	64	36	195	44	3×30	5.35
20	50	249.6	72	38	220	50	3×30	7.9
22	55	285.3	76	40	240	52	4×50	10.8
24	65	327	83	50	260	60	4×50	18.9
26	75	373.6	92	55	280	65	4×50	17.2
28	95	487.6	97	55	305	70	4×50	19.5
32	120	600	110	65	360	77	5×60	32.9
36	155	780	122	70	390	85	5×60	43
40	200	984	145	75	470	90	5×60	55

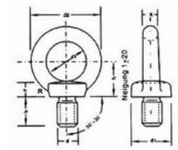


ModeL :RW

EYE SCREW

Eye Screw Din580 Finish:Bright or Galvnized

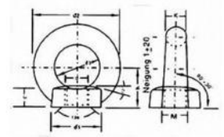
Side d	WLL(T)	WLL(T)	Dimensions(mm) d1	d2	d3	b	e	h	k	Weight %(Kg)
M6*	0.07	0.05	17	28	16	13	6	17	6	5
M8*	0.14	0.095	20	36	20	15	6	18	8	6
M10*	0.23	0.17	25	45	25	18	8	22	10	11
M12	0.34	0.24	30	54	30	22	10	26	12	18
M14*	0.49	0.34	35	63	35	28	12	30	14	28.5
M16*	0.7	0.50	35	63	35	28	12	30	14	28
M20	1.2	0.83	40	72	40	30	12	35	16	45
M22*	1.5	1.05	45	81	45	35	14	40	18	67
M24	1.8	1.27	50	90	50	38	16	45	20	87
M27*	2.5	1.65	50	90	50	38	18	45	20	88
M30	3.6	2.60	65	108	60	45	18	55	24	166
M33*	4.3	3.20	65	108	60	45	22	55	24	172
M36	5.1	3.70	75	126	70	55	22	65	28	265
M39*	6.1	4.30	75	126	70	55	26	65	28	280
M42	7.0	5.00	85	144	80	65	30	75	32	403
M45*	8.0	5.50	85	144	80	65	30	75	32	425
M48	8.6	6.10	100	166	90	70	35	85	38	638
M52*	9.9	7.30	100	166	90	70	35	85	38	660
M56	11.5	8.30	110	184	100	80	38	95	42	880
M64	16.0	11.0	120	206	110	90	42	100	48	1240



ModeL :DIN580

Ring-Nut Din582 Finish:Bright or Galvnized

Side d	WLL(T)	WLL(T)	Dimensions(mm) d1	d2	d3	e	h	k	Weight %(Kg)
M6*	-	-	20	36	20	8.5	18	8	4.9
M8*	0.14	0.095	20	36	20	8.5	18	8	5
M10*	0.23	0.17	25	45	25	10	22	10	9
M12	0.34	0.24	30	54	30	11	26	12	16
M16	0.7	0.5	35	63	35	13	30	14	24
M20	1.2	0.83	40	72	40	16	35	16	36
M22*	1.5	1.05	45	81	45	18	40	18	58
M24	1.8	1.27	50	90	50	20	45	20	72
M27*	2.5	1.65	50	90	50	20	45	20	70
M30	3.6	2.6	65	108	60	25	55	24	132
M33*	4.3	3.2	65	108	60	25	55	24	130
M36	5.1	3.7	75	126	70	30	65	28	208
M39*	6.1	4.3	75	126	70	30	65	28	202
M42	7	5	85	144	80	35	75	32	311
M45*	8	5.5	85	144	80	35	75	32	304
M48	8.6	6.1	100	166	90	40	85	38	502
M52*	9.9	7.3	100	166	90	40	85	38	495
M56	11.5	8.3	110	184	100	45	95	42	669
M64	16	11	120	206	110	50	105	48	930



ModeL :DIN582