

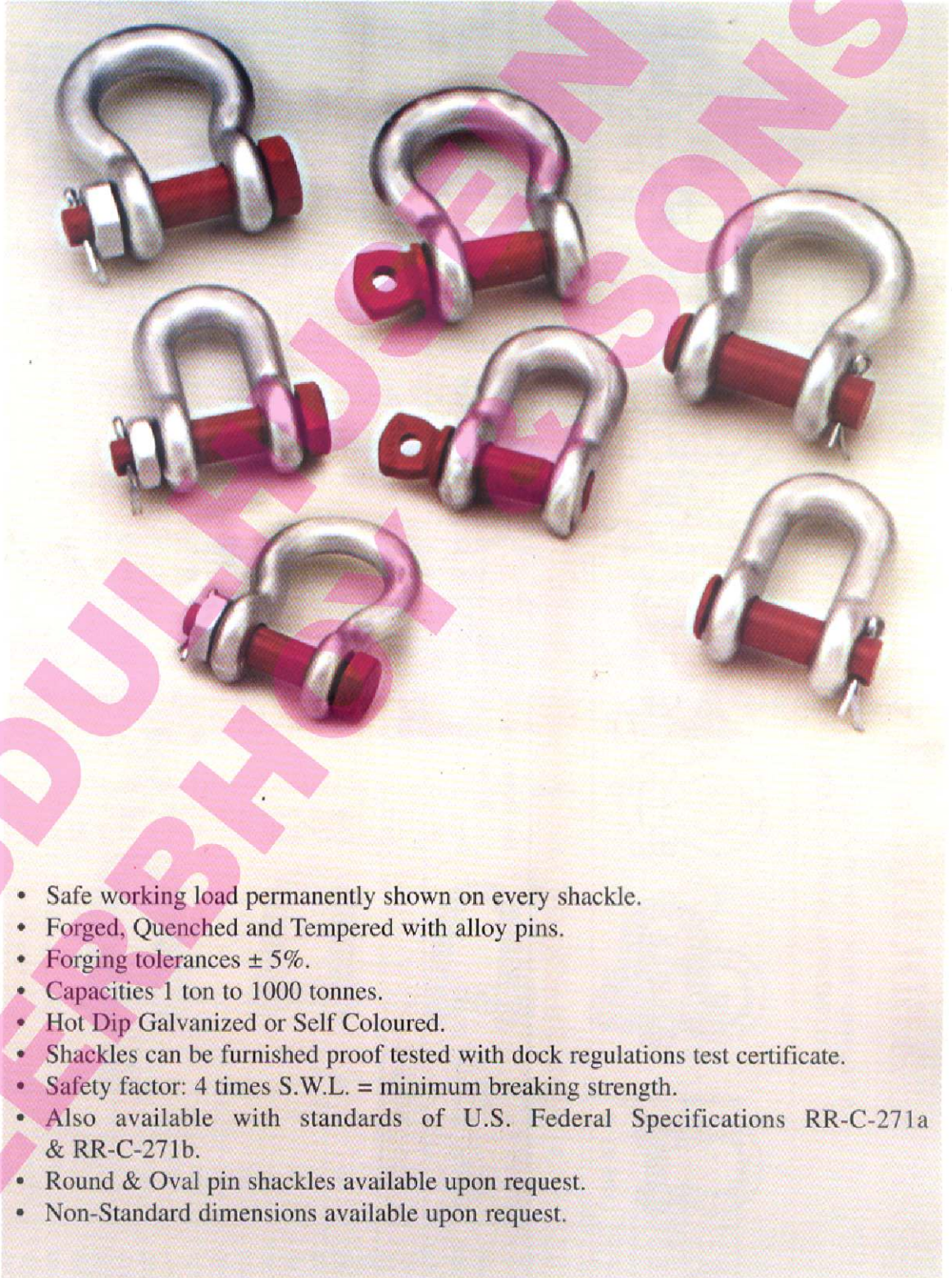
PILCO



ESTD. 1890

ABDULHUSEIN PEERBHOY & SONS

A PEERBHOY BLDG • 66-68 NARAYAN RAO KOLI MARG (BHANDARI ST.) • MUMBAI 400 003 • INDIA
TEL: 3423956, 3420014 • FACSIMILE: +91+22+3415133 • EMAIL: apeerbhoy@hotmail.com



- Safe working load permanently shown on every shackle.
- Forged, Quenched and Tempered with alloy pins.
- Forging tolerances $\pm 5\%$.
- Capacities 1 ton to 1000 tonnes.
- Hot Dip Galvanized or Self Coloured.
- Shackles can be furnished proof tested with dock regulations test certificate.
- Safety factor: 4 times S.W.L. = minimum breaking strength.
- Also available with standards of U.S. Federal Specifications RR-C-271a & RR-C-271b.
- Round & Oval pin shackles available upon request.
- Non-Standard dimensions available upon request.

All our products comply with ISI specifications and some are also ISO9000 approved.

We can also offer from exstock STAINLESS STEEL & BRASS SHACKLES

Approved by: American Petroleum Institute, Lloyd's Register of Shipping, American Bureau of Shipping,

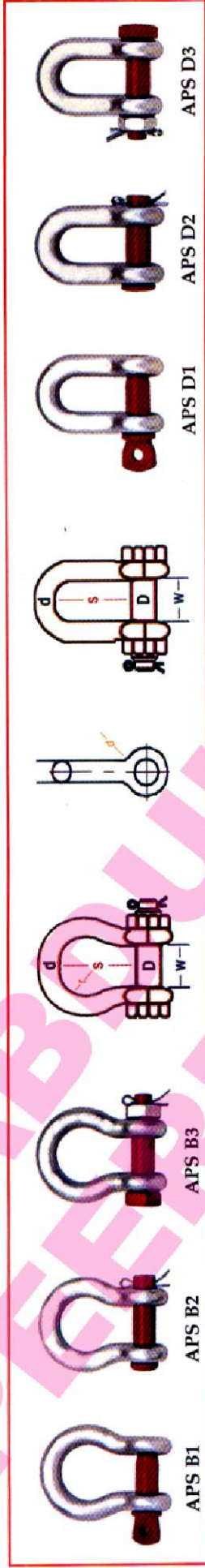
Det Norske Veritas and Bureau Veritas of shipping.

Certification from our own Rigging and Gears Test Certificate or a Certificate from a Government App. Test House

DEW & BOW SHACKLES

ABDULHUSEIN PEERBHOY & SONS

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BOW SHACKLES

Jaw Width W	Inside Length S	Bow Diameter I	Body Diameter d	Pin Diameter Dmin	Safe Working Load Tonnes		
					Grade 30	Grade 40	Grade 63
18	45	31	11	12	-	-	1.0
20	50	34	13	14	-	1.0	1.25
22	55	37	14	16	1.0	1.25	1.6
25	63	42	16	19	1.25	1.6	2.0
28	70	48	18	20	1.6	2.0	2.5
32	80	54	20	22	2.0	2.5	3.2
36	90	61	23	26	2.5	3.2	4.0
40	100	68	25	28	3.2	4.0	5.0
45	110	76	28	31	4.0	5.0	6.3
50	125	85	32	35	5.0	6.3	8.0
56	140	95	36	39	6.3	8.0	10
63	155	105	40	44	8.0	10	12.5
70	175	120	45	50	10	12.5	16
80	200	135	50	55	12.5	16	20
90	225	155	58	62	16	20	25
100	250	170	63	69	20	25	32
107	270	180	68	77	25	32	40
117	295	200	75	82	32	40	45
130	325	220	85	91	40	45	63
140	350	240	88	98	50	63	80
155	390	265	95	110	63	80	-

DEE SHACKLES

Jaw Width W	Inside Length S	Body Diameter d	Pin Diameter Dmin	Safe Working Load Tonnes		
				Grade 30	Grade 40	Grade 63
18	40	10	12	-	-	1.0
20	44	12	14	-	1.0	1.25
22	49	14	16	1.0	1.25	1.6
25	55	16	19	1.25	1.6	2.0
28	62	17	20	1.6	2.0	2.5
32	70	19	22	2.0	2.5	3.2
34	79	22	26	2.5	3.2	4.0
40	88	24	28	3.2	4.0	5.0
45	99	27	31	4.0	5.0	6.3
50	110	30	35	5.0	6.3	8.0
56	124	34	39	6.3	8.0	10
63	139	38	44	8.0	10	12.5
70	154	43	50	10	12.5	16
80	176	48	55	12.5	16	20
90	198	54	62	16	20	25
100	220	60	69	20	25	32
107	236	66	77	25	32	40
117	258	71	82	32	40	50
130	286	79	91	40	50	63
140	308	84	98	50	63	80
153	337	93	110	63	80	-

NOTE:—The Pin Diameters actually used may be based on any standard series for sizes of bar material, provided that the intervals between adjacent sizes do not exceed the R20 interval (1:12). The next size above the minimum pin diameter, D MIN as given in the above table should be used. The nominal diameter D used is then subject to the tolerances specified in 5.2 of IS:6132 (PART I) - 1971. The Eye Outside Diameter then becomes twice the nominal pin diameter D subject to the tolerance in 5.2 of IS:6132 (PART I) -1971. Specification for Shackles: PART I general requirements for Grade 30, 40 and 63 only. Shackles of Grade 30, 40, 63 conform to ISI specification 6132. Grade 80 shackles are made of Carbon Manganese forged steel with alloy steel pins heat treated for optimum strength.

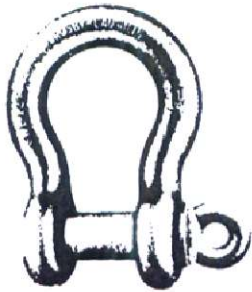
Shackles

Hi-Load Shackles

To U.S. Federal Specifications

- SAFE WORKING LOAD PERMANENTLY SHOWN ON EVERY SHACKLE.
- FORGED, QUENCHED AND TEMPERED, WITH ALLOY PINS.
- CAPACITIES 1/3 TO 130 TONS.

MINIMUM ULTIMATE STRENGTH—6 times safe working load through 50 ton; 5 times safe working load on 75,100 and 130 ton capacities. Proff load twice safe working load.



KG-109
Screw pin anchor shackles meet Federal Specification

Safe Working Load—Tons	DIMENSIONS IN INCHES								Weight Pounds Each
	Size Inches	Inside Length	Inside Width		Diameter		Tolerance Plus or Minus		
			at Pin	at Bow	Pin	Outside of Eye	Length	Width	
† 1/3	3/16	7/8	3/8	19/32	1/4	9/16	1/16	1/16	.05
1/2	1/4	1 1/8	15/32	23/32	5/16	1 1/16	1/16	1/16	.12
3/4	5/16	1 1/32	1 1/32	2 7/32	3/8	1 3/16	1/16	1/16	.18
1	3/8	1 7/16	2 1/32	1 1/32	7/16	3 1/32	1/8	1/16	.3
1 1/2	7/16	1 11/16	2 3/32	1 1/32	1/2	1 1/16	1/8	1/16	.49
2	1/2	1 7/8	1 9/16	1 1/16	5/8	1 3/16	1/8	1/16	.74
3 1/4	5/8	2 3/8	1 1/16	1 11/16	3/4	1 1/16	1/8	1/16	1.44
4 3/4	3/4	2 13/16	1 1/4	2	7/8	1 7/8	1/4	1/16	2.16
6 1/2	7/8	3 5/16	1 1/16	2 9/32	1	2 1/8	1/4	1/16	3.37
8 1/2	1	3 3/4	1 1/16	2 11/16	1 1/8	2 3/8	1/4	1/16	5.3
9 1/2	1 1/8	4 1/4	1 3/16	2 29/32	1 1/4	2 5/8	1/4	1/16	7
12	1 1/4	4 11/16	2 1/32	3 1/4	1 3/8	3	1/4	1/16	9.6
13 1/2	1 3/8	5 1/4	2 1/4	3 5/8	1 1/2	3 5/16	1/4	1/8	12.6
17	1 1/2	5 3/4	2 3/8	3 3/8	1 5/8	3 3/8	1/4	1/8	17.3
25	1 3/4	7	2 7/8	5	2	4 5/16	1/4	1/8	27.8
35	2	7 3/4	3 1/4	5 3/4	2 1/4	5	1/4	1/8	41.1
55	2 1/2	10 1/2	4 1/8	7 1/4	2 3/4	6	3/4	1/8	83.5
*85	3	13	5	7 7/8	3 1/4	6 1/2	3/4	1/8	119

†Furnished in screw pin only.
*Furnished in round pin only.

KG-100

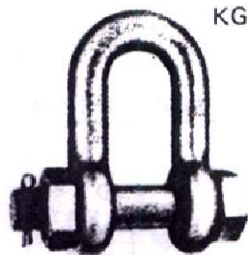


Screw pin chain shackles meet Federal Specification

Safe Working Load—Tons	CHAIN SHACKLES — ROUND PIN — SCREW PIN								Weight Pounds Each
	DIMENSIONS IN INCHES								
	Size Inches	Inside Length	Inside Width	Diameter		Tolerance Plus or Minus			
Pin				Outside of Eye	Length	Width			
1/2	1/4	7/8	15/32	5/16	1 1/16	1/16	1/16	.11	
3/4	5/16	1 1/32	1 7/32	3/8	1 3/16	1/16	1/16	.17	
1	3/8	1 1/4	2 1/32	7/16	3 1/32	1/8	1/16	.29	
1 1/2	7/16	1 7/16	2 3/32	1/2	1 1/16	1/8	1/16	.42	
2	1/2	1 5/8	1 3/16	5/8	1 3/16	1/8	1/16	.68	
3 1/4	5/8	2	1 1/16	3/4	1 9/16	1/8	1/16	1.21	
4 3/4	3/4	2 3/8	1 1/4	7/8	1 7/8	1/4	1/16	2.14	
6 1/2	7/8	2 13/16	1 7/16	1	2 1/8	1/4	1/16	3.1	
8 1/2	1	3 3/16	1 11/16	1 1/8	2 3/8	1/4	1/16	4.5	
9 1/2	1 1/8	3 9/16	1 13/16	1 1/4	2 5/8	1/4	1/16	6.6	
12	1 1/4	3 15/16	2 1/32	1 3/8	3	1/4	1/8	8.9	
13 1/2	1 3/8	4 7/16	2 1/4	1 1/2	3 5/16	1/4	1/8	12	
17	1 1/2	4 7/8	2 3/8	1 5/8	3 5/8	1/4	1/8	16.2	
25	1 3/4	5 3/4	2 7/8	2	4 5/16	1/4	1/8	25	
35	2	6 3/4	3 1/4	2 1/4	5	1/4	1/8	36	
55	2 1/2	8	4 1/8	2 3/4	6	3/4	1/8	74	
*85	3	8 1/2	5	3 1/4	6 1/2	3/4	1/8	108	

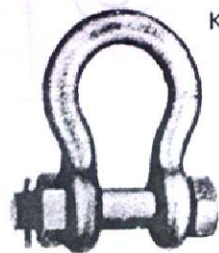
Furnished in round pin only.

SHACKLES



KG-1150

Safety type chain shackles. Thin hex head bolt—nut with cotter pin.



KG-1130

Safety type anchor shackles with thin head bolt—nut with cotter pin. Meets Federal Specification

Safe Working Load—Tons		DIMENSIONS IN INCHES								Weight Pounds Each	
Tons	Size Inches	Inside Length 1130	Inside Length 1150	Inside Width at Pin	Diameter		Tolerance Plus or Minus		1130	1150	
					Pin	Outside of Eye	Length	Width			
2	1/2	1 7/8	1 5/8	1 1/16	5/8	1 1/16	1/8	1/16	.82	.76	
3 1/4	5/8	2 3/8	2	1 1/16	3/4	1 9/16	1/8	1/16	1.58	1.56	
4 3/4	3/4	2 13/16	2 3/8	1 1/4	7/8	1 7/8	1/4	1/16	2.82	2.62	
6 1/2	7/8	3 5/16	2 13/16	1 7/16	1	2 1/8	1/4	1/16	3.95	3.65	
8 1/2	1	3 3/4	3 3/16	1 11/16	1 1/8	2 3/8	1/4	1/16	5.6	5.35	
9 1/2	1 1/8	4 1/4	3 9/16	1 13/16	1 1/4	2 5/8	1/4	1/16	7.85	7.27	
12	1 1/4	4 11/16	3 15/16	2 1/32	1 3/8	3	1/4	1/16	11.2	10.2	
13 1/2	1 3/8	5 1/4	4 7/16	2 1/4	1 1/2	3 5/16	1/4	1/8	15.2	13.35	
17	1 1/2	5 3/4	4 7/8	2 3/8	1 5/8	3 5/8	1/4	1/8	19.5	18.5	
25	1 3/4	7	5 3/4	2 7/8	2	4 5/16	1/4	1/8	31.3	28.5	
35	2	7 3/4	6 3/4	3 1/4	2 1/4	5	1/4	1/8	46.3	41.1	
55	2 1/2	10 1/2	8	4 1/8	2 3/4	6	3/4	1/8	94	84.5	
85	3	13	8 1/2	5	3 1/4	6 1/2	3/4	1/8	145	123	
100	3 1/2	15	10 1/2	5 3/4	3 3/4	8	1	1/4	250	218	
130	4	17	12	6 1/2	4 1/4	9	1	1/4	358	310	

SHACKLES

COMMERCIAL STANDARD

① Screw Pin Chain Shackle "D" Type Without Collar



② Screw Pin Chain Shackle "D" Type With Collar



③ Screw Pin Anchor Shackle "HARP" Type Without Collar



④ Screw Pin Anchor Shackle "HARP" Type With Collar



⑤ Oval Pin Chain Shackle



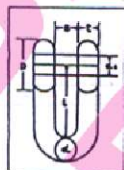
⑥ Carver Shackle with Counter Sunk Slotted Head



⑦ Trawling Chain Shackle



⑧ Bolt & Nut Shackle



①②⑤⑧ Sizes (Approx.)

Weights (Approx.)

Nominal Size		B	D	L	d ₁	SWL	①	②	③	④	⑤	⑥	⑦	⑧
%	in	%	%	%	%	Ton	kg	kg	kg	kg	kg	kg	kg	kg
4.8	3/4	10	10	18.5	5.0	0.09	0.013	0.014	0.024	0.026	—	—	—	—
6	1	12	11	25	6.5	0.15	0.026	0.028	0.062	0.068	—	—	—	—
8	1 1/4	14	15	31	8.5	0.25	0.046	0.049	0.082	0.085	—	—	—	—
9	1 1/2	18	17	36	10	0.4	0.07	0.073	0.077	0.080	0.073	0.065	0.075	0.100
12	1 3/4	24	23	46	13	0.0	0.17	0.18	0.190	0.200	0.15	0.17	0.186	0.215
16	2	30	32	59	17	0.8	0.4	0.42	0.475	0.495	0.37	0.41	0.455	0.50
16	2 1/4	36	37	74	20	1.0	0.7	0.72	0.78	0.80	0.62	0.67	0.78	0.83
22	2 3/4	43	43	86	23	1.5	1.1	1.18	1.18	1.26	1.00	1.10	1.40	1.30
25	3	47	50	95	27	2.0	1.7	1.8	1.80	1.93	1.53	1.60	1.75	2.08
28	3 1/2	55	56	110	30	2.5	2.4	2.5	2.55	2.65	2.20	2.35	2.4	3.00
32	3 3/4	64	64	130	34	3.2	3.0	3.7	3.9	4	3.20	3.35	3.6	4.23
36	4	76	76	145	40	4.2	6	6.1	6.9	7	5.25	5.7	6.0	7.1
44	4 3/4	80	90	160	47	6.5	10	—	—	—	—	—	—	10.7
50	5	90	100	185	53	8	12	—	—	—	—	—	—	17
65	5 1/2	110	130	240	68	15	28	—	—	—	—	—	—	33
75	6	120	150	300	78	20	44	—	—	—	—	—	—	50

Mild Steel Shackles

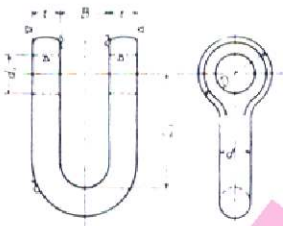
Newly revised JIS Standard (JIS-B2801-1972)



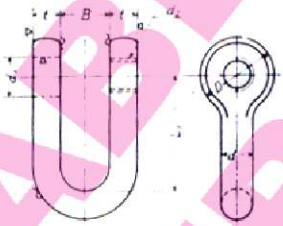
SC Shackle

6mm - 38mm
Drop Forged

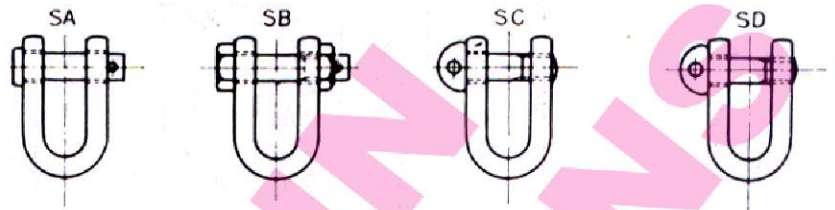
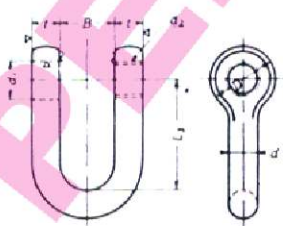
Body of SA · SB



Body of SC



Body of SD



Size	t	d	B	D	d ₁	Screw (d ₂)	L ₁	Reference Weight (kg)		
								S A	S B	S C
6	6	6	11	17	9	M 8	24	—	—	0.04
8	8	8	14	21	11	M 10	32	—	—	0.09
10	10	10	17	25	13	M 12	40	—	—	0.16
12	12	12	20	32	16	M 14	48	—	—	0.32
14	14	14	24	36	18	M 16	56	—	—	0.37
16	16	16	26	40	20	M 18	64	—	—	0.55
18	18	18	29	45	22	M 20	72	—	—	0.9
20	20	20	31	50	25	M 24	80	—	1.4	1.2
22	22	22	34	55	27	M 24	88	—	1.8	1.6
24	24	24	39	62	31	M 30	96	—	2.6	2.2
26	26	26	41	66	33	M 30	104	—	3.1	2.6
28	28	20	43	70	35	M 33	112	—	3.8	3.1
30	30	38	45	75	37	M 36	120	—	4.6	3.8
32	32	32	48	80	39	M 36	128	—	5.5	4.7
34	34	34	50	85	41	M 39	136	5.9	6.6	5.4
36	36	36	54	90	43	M 42	144	7.0	7.9	6.6
38	38	38	57	95	47	M 45	152	8.2	9.4	7.9
40	40	40	60	100	49	M 48	160	9.5	11	9.0
42	42	42	63	105	53	M 48	168	11.2	13	—
44	44	44	66	110	56	M 48	176	13.2	14	—
46	46	46	68	115	58	M 48	184	14.3	16	—
48	48	48	72	120	60	M 56	192	16.4	19	—
50	50	50	75	125	62	M 56	200	19	21	—
55	55	55	83	138	67	M 64	220	26	28	—
60	60	60	90	150	72	M 64	240	34	35	—
65	65	65	98	164	79	M 72 × 6	260	41	47	—
70	70	70	105	178	85	M 80 × 6	280	52	59	—
75	75	75	112	192	92	M 80 × 6	300	62	71	—
80	80	80	120	206	98	M 90 × 6	320	80	91	—
85	85	85	128	220	104	M 90 × 6	340	95	106	—
90	90	90	135	232	110	M 100 × 6	360	111	121	—

Size	t and d	B	D	d ₁	Screw (d ₂)	L ₁	Reference Weight (kg)
10	10	20	23	13	M 12	40	0.16
12	12	24	28	16	M 14	48	0.32
14	14	28	32	18	M 16	56	0.40
16	16	32	36	21	M 20	64	0.53
20	20	40	44	25	M 24	80	1.2
22	22	44	50	28	M 27	88	1.5
24	24	48	56	30	M 27	96	2.1
26	26	52	62	33	M 30	104	2.7
28	28	56	65	35	M 33	112	3.1
30	30	60	70	37	M 36	120	3.9
34	34	68	80	43	M 42	136	5.9
38	38	76	85	46	M 45	152	8.0
40	40	80	92	49	M 48	160	9.4
42	42	84	100	53	M 48	168	11.2
48	48	96	110	60	M 56	192	16.4
52	52	104	120	64	M 56	208	17.8
58	58	116	132	70	M 64	232	25.2

Mild Steel Shackles

Newly revised JIS Standard (JIS-B2801-1972)

Working load

Size	Bow Shackle				Straight Shackle			
	B A	B B	B C	B D	S A	S B	S C	S D
6	—	—	0.2	0.15	—	—	0.2	—
8	—	—	0.35	0.3	—	—	0.35	—
10	—	—	0.6	0.5	—	—	0.6	0.4
12	—	—	0.9	0.7	—	—	0.9	0.6
14	—	—	1.2	0.9	—	—	1.2	0.8
16	—	—	1.5	1.2	—	—	1.5	1.0
18	—	—	2.0	1.3	—	—	2.0	—
20	—	2.5	2.5	1.8	—	2.5	2.5	1.5
22	—	3.0	3.0	—	—	3.0	3.0	2.0
24	—	3.6	3.6	—	—	3.6	3.6	2.5
26	—	4.2	4.2	—	—	4.2	4.2	3.0
28	—	4.8	4.8	—	—	4.8	4.8	3.5
30	—	5.4	5.4	—	—	5.4	5.4	4.0
32	—	6.2	6.2	—	—	6.2	6.2	—
34	7.0	7.0	7.0	—	7.0	7.0	7.0	5.0
36	8.0	8.0	8.0	—	8.0	8.0	8.0	—
38	9.0	9.0	9.0	—	9.0	9.0	9.0	6.0
40	10	10	10	—	10	10	10	7.0
42	11	11	—	—	11	11	—	8.0
44	12	12	—	—	12	12	—	—
46	13	13	—	—	13	13	—	—
48	14	14	—	—	14	14	—	10
50	15	15	—	—	15	15	—	—
52	—	—	—	—	—	—	—	12
55	18	18	—	—	18	18	—	—
58	—	—	—	—	—	—	—	15
60	22	22	—	—	22	22	—	—
65	26	26	—	—	26	26	—	—
70	30	30	—	—	30	30	—	—
75	35	35	—	—	35	35	—	—
80	40	40	—	—	40	40	—	—
85	45	45	—	—	45	45	—	—
90	50	50	—	—	50	50	—	—

For bare steel wire rope

Size of Thimble A	Bow Shackle			Straight shackle		
	B A	B B	B C	S A	S B	S C
6	—	—	8	—	—	8
8	—	—	10	—	—	10
9	—	—	10	—	—	10
10	—	—	12	—	—	12
12	—	—	14, 16	—	—	14, 16
14	—	—	18	—	—	18
16	—	20	20	—	20	20
18	—	22	22	—	22	22
20	—	24	24	—	24	24
22	—	26, 28	26, 28	—	26, 28	26, 28
24	—	30	30	—	30	30
26	—	32	32	—	32	32
28	34	34	34	34	34	34
30	36	36	36	36	36	36
32	38, 40	38, 40	38, 40	38, 40	38, 40	38, 40
34	42	42	—	42	42	—
36	44	44	—	44	44	—
38	46, 48	46, 48	—	46, 48	46, 48	—
40	50	50	—	50	50	—
42	50	50	—	50	50	—
45	55	55	—	55	55	—
48	60	60	—	60	60	—
50	60	60	—	60	60	—
53	65	65	—	65	65	—
56	70	70	—	70	70	—
60	75	75	—	75	75	—
63	75	75	—	75	75	—

For covered steel wire rope

Size of Thimble B		8	9	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
Size of straight shackle	S D	12	14	16	20	22	24	26	28	30	34	38	40	42	48	48	52	58	58

For manila rope

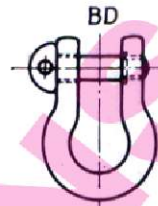
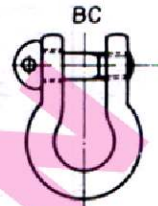
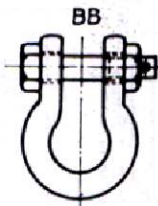
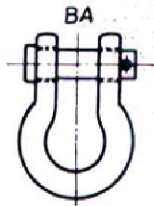
Size of Thimble C		12	14	16	18	20	22	24	26	28	30	32	35	40	45
Size of bow shackle	B D	6	6	8	8	10	10	12	12	12	14	14	16	18	20

High Tensile Shackles

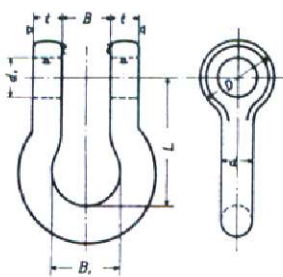
Newly revised JIS Standard (JIS-B2801-1972)



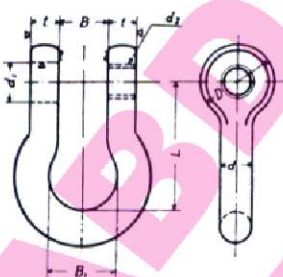
BB Shackle



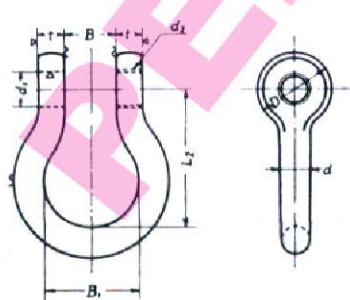
Body of BA · BB



Body of BC



Body of BD



Nom dia	t	d	B	B ₁	D	d ₁	Screw (d ₂)	L	Reference Weight (kg)		
									B A	B B	B C
6	6	8	11	20	17	9	M 8	36	—	—	—
8	8	10	14	25	21	11	M 10	45	—	—	0.13
10	10	12	17	30	25	13	M 12	54	—	—	0.25
12	12	14	20	35	32	16	M 14	63	—	—	0.37
14	14	16	24	40	36	18	M 16	72	—	—	0.50
16	16	18	26	45	40	20	M 18	80	—	—	0.77
18	18	21	29	53	45	22	M 20	95	—	—	1.2
20	20	23	31	58	50	25	M 24	104	—	1.94	1.7
22	22	26	34	65	55	27	M 24	117	—	2.4	2.1
24	24	28	39	70	62	31	M 30	126	—	3.3	2.9
26	26	30	41	75	66	33	M 30	135	—	4.2	3.4
28	28	32	43	80	70	35	M 33	144	—	4.6	4.2
30	30	34	45	85	75	37	M 36	153	—	5.8	5.0
32	32	37	48	93	80	39	M 36	167	—	7.4	6.4
34	34	39	50	98	85	41	M 39	176	8.4	8.5	7.5
36	36	42	54	105	90	43	M 42	190	9.5	10.2	9.5
38	38	44	57	110	95	47	M 45	198	12.0	12.7	11.4
40	40	47	60	118	100	49	M 48	212	15.0	15.9	13.7
42	42	49	63	123	105	53	M 48	220	16	17	—
44	44	51	66	128	110	56	M 48	230	18	18.9	—
46	46	53	68	133	115	58	M 48	240	20	20.8	—
48	48	55	72	138	120	60	M 56	248	21	24.2	—
50	50	57	75	143	125	62	M 56	257	27	27.8	—
55	55	62	83	155	138	67	M 64	280	34	35.7	—
60	60	69	90	178	150	72	M 64	310	43	46	—
65	65	75	98	188	164	79	M 72 × 6	338	56	59	—
70	70	81	105	202	178	85	M 80 × 6	360	75	79	—
75	75	87	112	218	192	92	M 80 × 6	387	85	91	—
80	80	93	120	232	206	96	M 90 × 6	414	105	113	—
85	85	99	128	248	220	104	M 90 × 6	440	119	126	—
90	90	104	135	260	232	110	M 100 × 6	473	152	161	—

Nom dia	t	d	B	B ₁	D	d ₁	Screw (d ₂)	L ₂	Reference Weight (kg)
6	6	8	12	24	17	9	M 8	36	0.06
8	8	10	16	30	24	11	M 10	45	0.14
10	10	12	20	36	28	13	M 12	54	0.27
12	12	14	24	42	32	16	M 14	63	0.38
14	14	16	28	48	35	18	M 16	72	0.53
16	16	18	32	54	40	21	M 20	80	0.9
18	18	20	36	60	45	22	M 20	100	1.2
20	20	22	40	66	50	25	M 24	112	2.17