

SHACKLE

SHACKLE OVERVIEW

General

Shackles are used in lifting static systems as removable links to connect wire rope, chain and other fittings. Shackles can be used in a variety of different applications, including:

Rigging
Towing or pulling
Lifting
Hoisting
Tie-down

Selecting the Correct Shackle

Shackles are available in a range of material grades, sizes and designs. Select the shackle to be used and plan the lift taking the following into account:

- Type of shackle: anchor / bow shackles vs. chain/dee shackles

- Type of pin: screw pin vs. bolt type



Suitable for both one-leg and multi-leg systems



Suitable for one-leg systems only

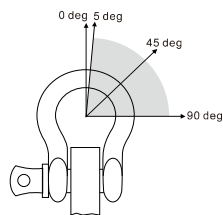


Screw pin for quick (dis)assembly
Mainly used in non - permanent applications



Double safety (cotter pin & safety bolt)
Mainly used in long-term applications

- Side loading: the following rated load reductions will occur when side loading angle deviates from in-line (0°)



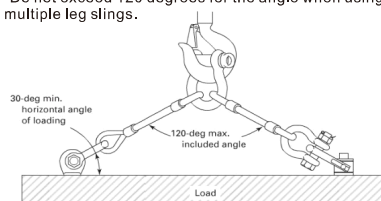
Side Loading Angle (°)	% of Rated Load Reduction
In-line (0° to 5°)	None
6°-45°	30%
46°-90°	50%
Over 90°	Not recommended

- Inspecting the shackles

- Inspect shackles regularly.
- Inspect the shackle eye and pin holes for stretching (elongation) and wear. Elongation means the metal is being overloaded.
- Inspect the shackle body for bending. A bent shackle indicates excessive side-loading.
- Inspect all shackle pins for distortion, surface blemishes, wear and fractures.
- All pins must be straight and all screw pins must be completely seated.

- Using shackles safely

- Do not force, hammer or wedge shackles into position.
- Do not exceed 120 degrees for the angle when using multiple leg slings.

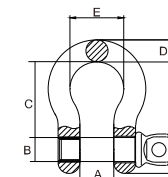


Bow shackle can take loads from different directions and are perfectly suited for rigging due to their geometric shape.

- Forged, quenched and tempered.
- Material: body-carbon steel, pin-alloy steel
- Surface finish: electro galvanized body and painted pin as standard. Hot dip galvanized finish is optional.
- Safety factor: 6:1 as standard, 4:1 is optional.
- Marking: size, WLL, " CE " mark, batch number

SCREW PIN ANCHOR SHACKLE

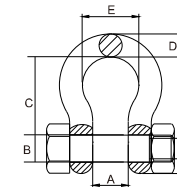
Item No.	Size	W.L.L.	Dimensions(mm)						Weight kg	Product Code
			A	B	C	D	E	L		
SH01005	3/16"	1/3T	9,65	6,35	22,4	4,85	15,2	37,3	0,022	701001005
SH01006	1/4"	1/2T	11,9	7,85	28,7	6,35	19,8	46,7	0,05	701001006
SH01008	5/16"	3/4T	13,5	9,65	31	7,85	21,3	53	0,08	701001008
SH01010	3/8"	1T	16,8	11,2	36,6	9,65	26,2	63	0,135	701001010
SH01011	7/16"	1-1/2T	19,1	12,7	42,9	11,2	29,5	74	0,195	701001011
SH01013	1/2"	2T	20,6	16	47,8	12,7	33,3	83,5	0,3	701001013
SH01016	5/8"	3-1/4T	26,9	19,1	60,5	16	42,9	106	0,61	701001016
SH01019	3/4"	4-3/4T	31,8	22,4	71,5	19,1	51	126	1,03	701001019
SH01022	7/8"	6-1/2T	36,6	25,4	84	22,4	58	148	1,6	701001022
SH01025	1"	8-1/2T	42,9	28,7	95,5	25,4	68,5	167	2,3	701001025
SH01029	1-1/8"	9-1/2T	46	31,8	108	29,5	74	190	3,2	701001029
SH01032	1-1/4"	12T	51,5	35,1	119	32,8	82,5	210	4,4	701001032
SH01035	1-3/8"	13-1/2T	57	38,1	133	36,1	92	233	6,2	701001035
SH01038	1-1/2"	17T	60,5	41,4	146	39,1	98,5	254	7,8	701001038
SH01044	1-3/4"	25T	73	51	178	46,7	127	313	13,8	701001044
SH01050	2"	35T	82,5	57	197	53	146	348	20,5	701001050
SH01063	2-1/2"	55T	105	70	267	69	184	453	39	701001063



Spec. To RR-C-271,
Type 4A,
Grade A, Class 2
MIN B.L.=6xWLL

BOLT TYPE ANCHOR SHACKLE

Item No.	Size	W.L.L.	Dimensions(mm)						Weight kg	Product Code
			A	B	C	D	E	L		
SH03005	3/16"	1/3T	9,65	6,35	22,4	4,85	15,2	37,3	0,03	701003005
SH03006	1/4"	1/2T	11,9	7,85	28,7	6,35	19,8	46,7	0,075	701003006
SH03008	5/16"	3/4T	13,5	9,65	31	7,85	21,3	53	0,1	701003008
SH03010	3/8"	1T	16,8	11,2	36,6	9,65	26,2	63	0,16	701003010
SH03011	7/16"	1-1/2T	19,1	12,7	42,9	11,2	29,5	74	0,215	701003011
SH03013	1/2"	2T	20,6	16	47,8	12,7	33,3	83,5	0,36	701003013
SH03016	5/8"	3-1/4T	26,9	19,1	60,5	17,5	42,9	106	0,7	701003016
SH03019	3/4"	4-3/4T	31,8	22,4	71,5	20,6	51	126	1,23	701003019
SH03022	7/8"	6-1/2T	36,6	25,4	84	24,6	58	148	1,8	701003022
SH03025	1"	8-1/2T	42,9	28,7	95,5	26,9	68,5	167	2,78	701003025
SH03029	1-1/8"	9-1/2T	46	31,8	108	31,8	74	190	3,75	701003029
SH03032	1-1/4"	12T	51,5	35,1	119	35,1	82,5	210	5,31	701003032
SH03035	1-3/8"	13-1/2T	57	38,1	133	38,1	92	233	6,98	701003035
SH03038	1-1/2"	17T	60,5	44,5	146	41,1	98,5	254	9,4	701003038
SH03044	1-3/4"	25T	73	51	178	57	127	313	15,4	701003044
SH03050	2"	35T	82,5	57	197	61	146	348	23,7	701003050
SH03063	2-1/2"	55T	105	70	267	79,5	184	453	44,57	701003063
SH03075	3"	85T	127	82,5	330	92	200	546	70	701003075
SH03088	3-1/2"	120T	133	95,5	372	105	229	626	120	701003088
SH03100	4"	150T	140	108	368	116	254	653	158	701003100



Spec. To RR-C-271,
Type 4A,
Grade A, Class 3
MIN B.L.=6xWLL

