

WIRE ROPE SLINGS

Working Load Limits (WLL) for Wire Rope Slings

Applicable For:

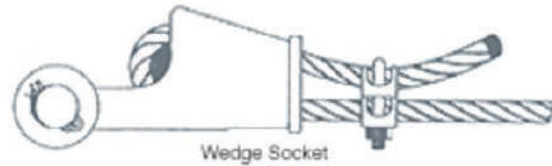
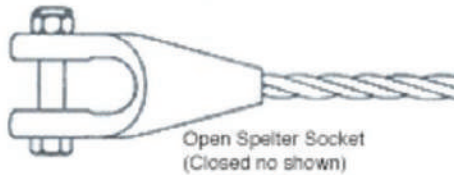
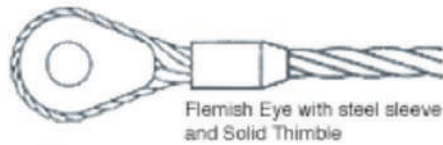
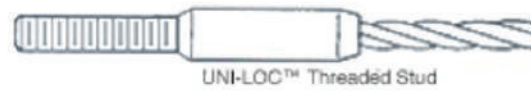
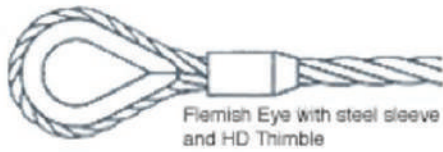
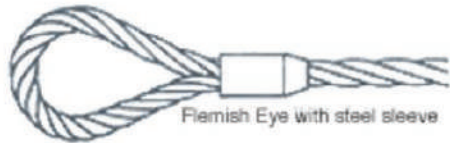
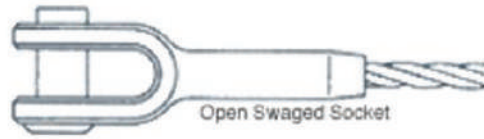
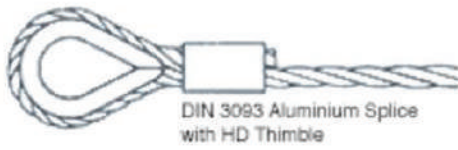
- Steel cored wire rope, classes 6 x 19 & 6 x 36
- Ferrule secured eye terminations
- 1770 n/mm², Grade 180 kg/mm² rope

	Single Leg	2 Leg		3 & 4 Leg - Same Ratings		Endless
Lifting Mode						
Angle to the Vertical	0°	β 0-45°	β 45-60°	β 0-45°	β 45-60°	-
Leg Factor	Factor 1	Factor 1.4	Factor 1	Factor 2.1	Factor 1.5	Factor 1.6
Rope Ø (mm)	Working Load Limits (t)					
8	0.75	1.05	0.75	1.55	1.10	1.20
9	0.95	1.30	0.95	2.00	1.40	1.50
10	1.15	1.60	1.15	2.40	1.70	1.85
11	1.40	2.00	1.40	3.00	2.12	2.25
12	1.70	2.30	1.70	3.55	2.50	2.70
13	2.00	2.80	2.00	4.15	3.00	3.15
14	2.25	3.15	2.25	4.80	3.40	3.70
16	3.00	4.20	3.00	6.30	4.50	4.80
18	3.70	5.20	3.70	7.80	5.65	6.00
20	4.60	6.50	4.60	9.80	6.90	7.35
22	5.65	7.80	5.65	11.8	8.40	9.00
24	6.70	9.40	6.70	14.0	10.0	10.6
26	7.80	11.0	7.80	16.5	11.5	12.5
28	9.00	12.5	9.00	19.0	13.5	14.5
32	11.8	16.5	11.8	25.0	17.5	19.0
36	15.0	21.0	15.0	31.5	22.5	23.5
40	18.5	26.0	18.5	39.0	28.0	30.0
44	22.5	31.5	22.5	47.0	33.5	36.0
48	26.0	37.0	26.0	55.0	40.0	42.0
52	31.5	44.0	31.5	66.0	47.0	50.0
56	36.0	50.0	36.0	76.0	54.0	58.0
60	42.0	58.0	42.0	88.0	63.0	67.0

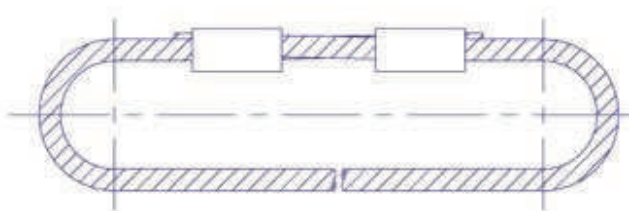
NOTE 1 - The working load limits (WLLs) in the above table are based on the assumption that soft eyes of single-leg slings are used over bearing points having diameters no less than twice the nominal diameter of the rope.

NOTE 2 - Table above shows working load limit values for ferrule-secured eye slings in various configurations. These values are based on the equation given in 5.2.4, 5.3.4 and 5.4.4 [EN 13414 - 1, 2003] and have been rounded for user convenience.

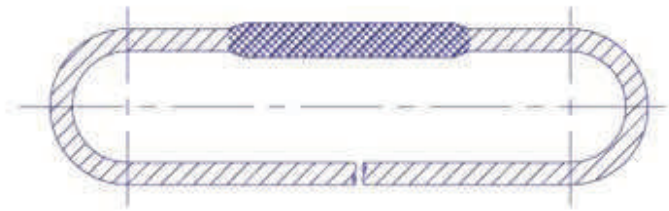
WIRE ROPE END TERMINATION



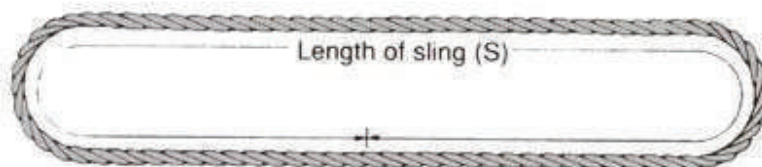
ENDLESS WIRE ROPE SLINGS



Pressed Endless Sling

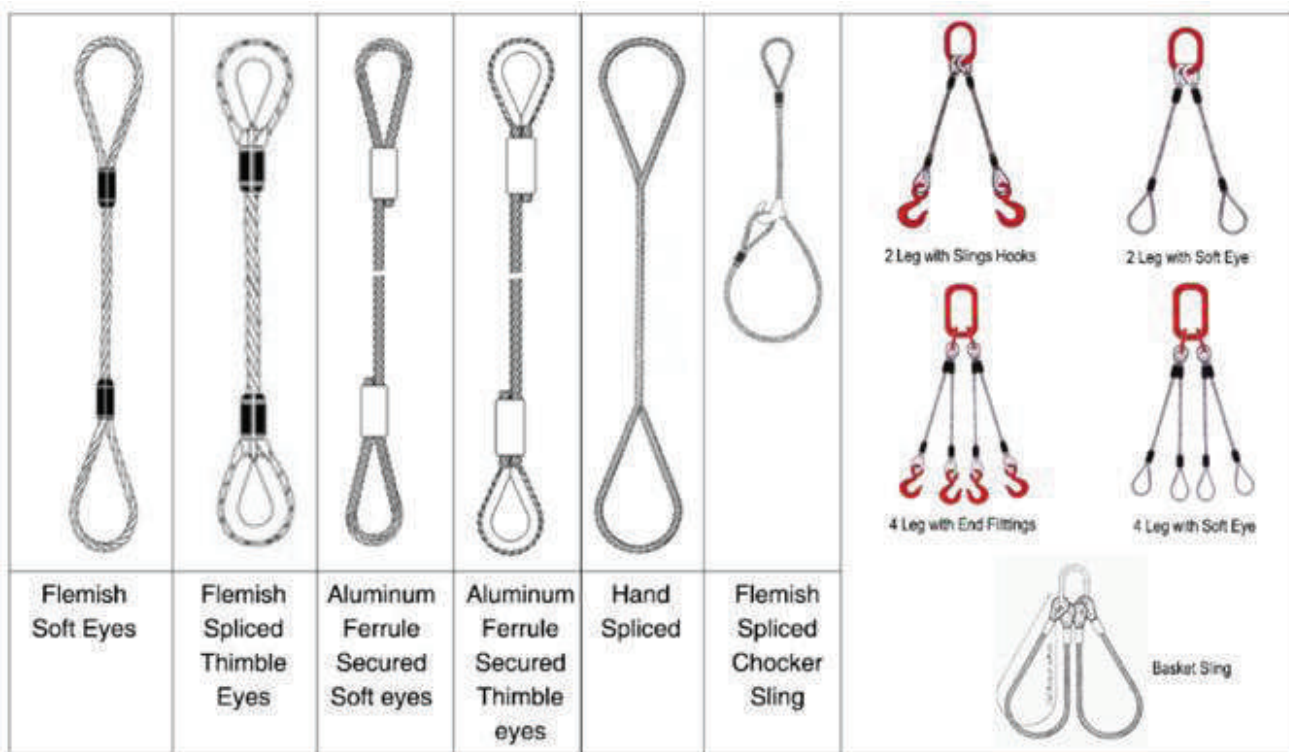
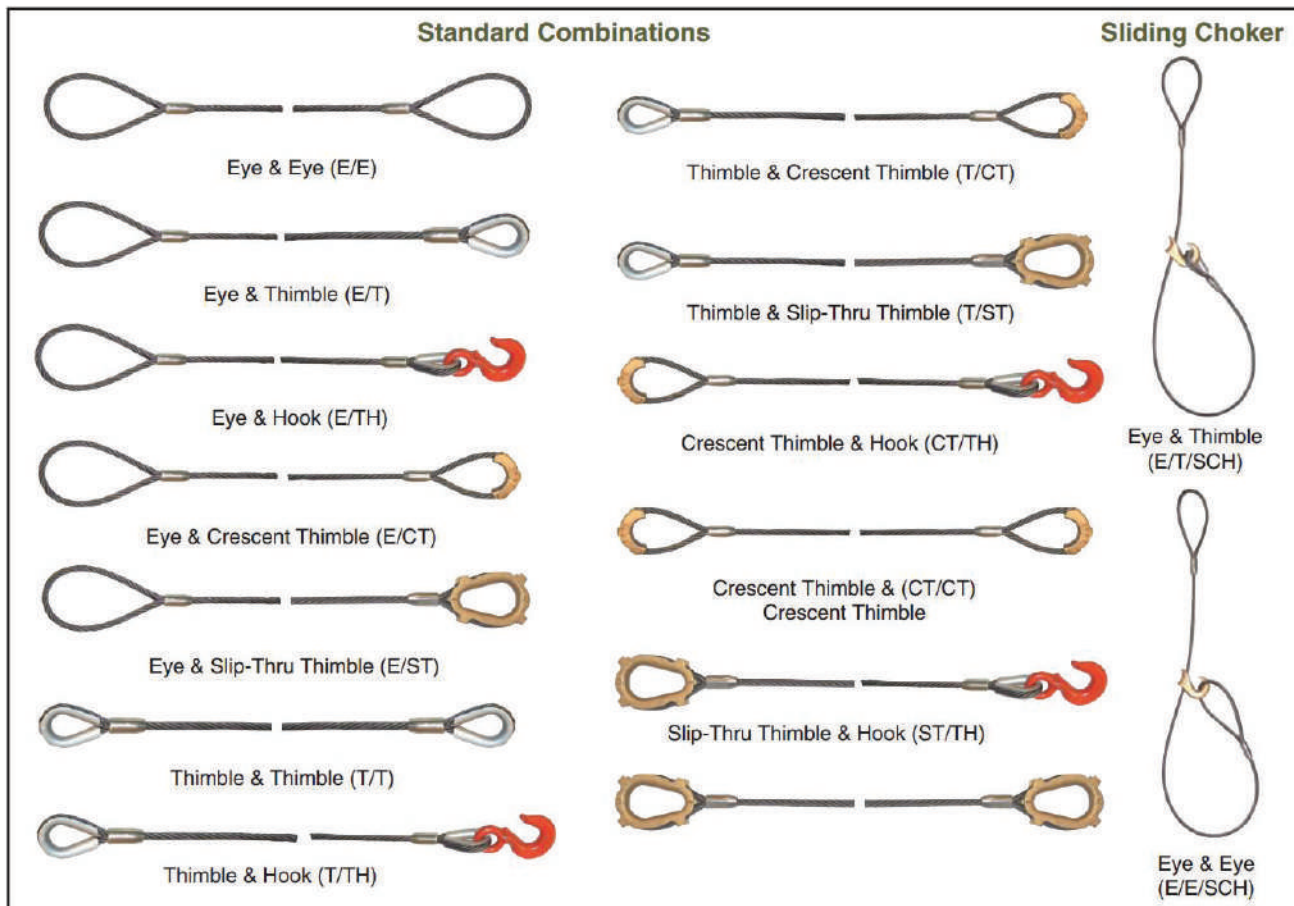


Spliced Endless Sling




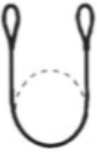


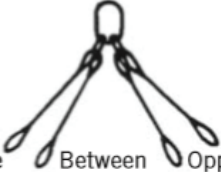


Grommet







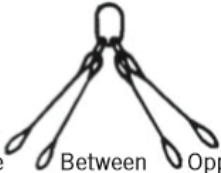
TYPE OF WIRE ROPE SLINGS



Safe working loads for 1770 Grade Steel Core wire rope slings with ferrule secured eyes.

Wire Rope Dia. mm.	Reeved Load			Round Basket Load			2, 3, 4 Leg Sling		
								Angle	Between Opp Legs
	Straight	Round	Not Round	0°	60°	90°	0-60°	90°	120°
8	0.78	0.58	0.39	1.56	1.35	1.10	1.35	1.10	0.78
9	0.99	0.74	0.49	1.98	1.71	1.40	1.71	1.40	0.99
10	1.22	0.92	0.65	2.4	2.1	1.72	2.1	1.72	1.22
11	1.48	1.11	0.74	3.0	2.6	2.1	2.6	2.1	1.48
12	1.76	1.32	0.88	3.5	3.0	2.5	3.0	2.5	1.76
13	2.1	1.55	1.04	4.1	3.6	2.9	3.6	2.9	2.1
14	2.4	1.80	1.20	4.8	4.2	3.4	4.2	3.4	2.4
16	3.1	2.3	1.56	6.2	5.4	4.4	5.4	4.4	3.1
18	4.0	3.0	1.98	7.9	6.8	5.6	6.8	5.6	4.0
20	4.9	3.7	2.4	9.8	8.4	6.9	8.4	6.9	4.9
22	5.9	4.4	3.0	11.8	10.2	8.3	10.2	8.3	5.9
24	7.0	5.3	3.5	14.1	12.2	9.9	12.2	9.9	7.0
26	8.3	6.2	4.1	16.5	14.3	11.6	14.3	11.6	8.3
28	9.6	7.2	4.8	19.1	16.6	13.5	16.6	13.5	9.6
32	12.5	9.4	6.3	25	22	17.6	22	17.6	12.5
36	15.8	11.9	7.9	32	27	22	27	22	15.8
40	19.6	14.7	9.8	39	34	28	34	28	19.6
44	24	17.7	11.8	47	41	33	41	33	24
48	28	21.0	14.0	56	49	40	49	40	28
52	33	25	16.6	66	57	47	57	47	33
56	38	29	19.2	77	66	54	66	54	38
60	44	33	22	88	76	62	76	62	44
64	46.9	35.1	23.4	93.8	81	66	81	66	46.9
70	56.1	42.0	28.0	112.2	97	79	97	79	56.1
75	66	49.5	33.0	132.0	114	93	114	93	66

Safe working loads for 1570 Grade Fibre Core wire rope slings with ferrule secured eyes.

Wire Rope Dia. mm.	Reeved Load			Round Basket Load			2, 3, 4 Leg Sling		
								Angle	Between Opp Legs
	Straight	Round	Not Round	0°	60°	90°	0-60°	90°	120°
8	0.55	0.41	0.27	1.09	0.94	0.77	0.94	0.77	0.55
9	0.69	0.52	0.34	1.38	1.19	0.97	1.19	0.97	0.69
10	0.85	0.64	0.43	1.7	1.47	1.20	1.47	1.2	0.85
11	1.03	0.77	0.52	2.1	1.78	1.45	1.78	1.45	1.03
12	1.23	0.92	0.61	2.5	2.1	1.73	2.1	1.73	1.23
13	1.44	1.08	0.72	2.9	2.5	2.0	2.5	2.0	1.44
14	1.67	1.25	0.83	3.3	2.9	2.4	2.9	2.4	1.67
16	2.2	1.64	1.09	4.4	3.8	3.1	3.8	3.1	2.2
18	2.8	2.1	1.38	5.5	4.8	3.9	4.8	3.9	2.8
20	3.4	2.6	1.70	6.8	5.9	4.8	5.9	4.8	3.4
22	4.1	3.1	2.1	8.3	7.1	5.8	7.1	5.8	4.1
24	4.9	3.7	2.5	9.8	8.5	6.9	8.5	6.9	4.9
26	5.8	4.3	2.9	11.5	10.0	8.1	10.0	8.1	5.8
28	6.7	5.0	3.3	13.4	11.6	9.4	11.6	9.4	6.7
32	8.7	6.5	4.4	17.4	15.1	12.3	15.1	12.3	8.7