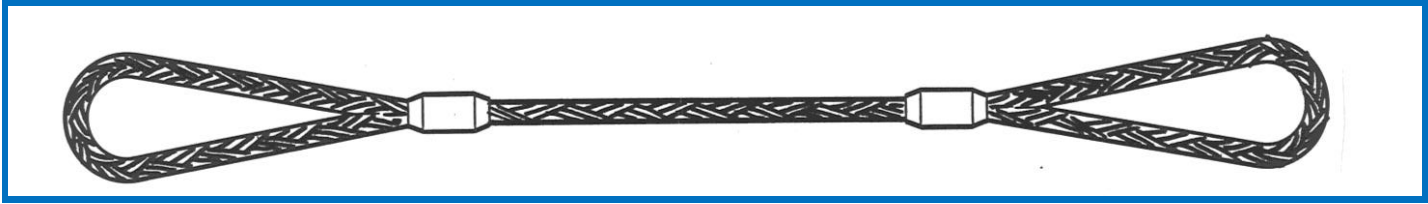


Working Load Limits of Superflex Single Slings

Andromeda Technical sheet # SF101- 02



Superflex Single Slings are used for general lifting purposes where a flexible steel sling is needed. The WLL is shown in the table in tonnes of 1000 kgsf – the standard Factor of Safety is 5

Basic cable details			Diagrammatic configurations				WLL for various included angles of two, three or four leg slings			
Cable Size or number	Minimum Breaking Force (MBF) kN	Cable nominal diameter (D) mm								
			Single Fall WLL	Cradle lift, angle <30°	Choked on round load	Choked on rectangular load with edge radius > 1.0 D	<30°	60°	90°	120°
Two-5	52	10	1.0	2.0	0.7	0.5	2.0	1.7	1.4	1.0
Three-0	75	12	1.5	2.9	1.1	0.8	2.9	2.6	2.1	1.5
Three-5	95	14	1.8	3.5	1.4	0.9	3.5	3.1	2.5	1.8
Four-0	125	16	2.4	4.7	1.8	1.2	4.7	4.2	3.4	2.4
Four-5	157	18	3.0	5.9	2.3	1.5	5.9	5.2	4.2	3.0
Five-0	210	20	4.1	8.0	3.1	2.1	8.0	7.1	5.8	4.1
Five-5	270	22	5.2	10.2	3.9	2.6	10.2	9.0	7.3	5.2
Six-5	345	26	6.7	13.1	5.0	3.4	13.1	11.6	9.4	6.7
Eight-0	530	32	10.3	20.2	7.7	5.2	20.2	17.8	14.5	10.3
Ten-0	790	40	15.3	30.0	11.5	7.7	30.0	26.5	21.6	15.3
Twelve-0	1110	48	21.6	42.1	16.1	10.8	42.1	37.2	30.3	21.5
Fourteen	1460	56	28.3	55.5	21.2	14.2	55.5	49.0	39.9	28.3
Seventeen	2168	68	42.1	82.5	31.6	21.1	82.5	72.8	59.4	42.1
Twenty-0	3015	80	58.5	114.7	43.9	29.3	114.7	101.2	82.5	58.5
TwentyFour-0	4340	96	84.3	165.2	63.2	42.1	165.2	145.8	118.9	84.3
Loading factors for various configurations based on the single fall WLL			1.0	1.96	0.75	0.5	1.96	1.73	1.41	1.0

These WLL figures are derived in accordance with AS 1666.1

Notes on these calculations: to convert the list MBF of Superflex cable in kNs to WLL of a Superflex sling in tonne (1000kgsf) made from that cable, use the following procedure – divide the MBF by 49.05 (9.81 x 5), then multiply this result by 0.95 to allow for the 5% reduction for sling assembly as required by AS 1666.1. (the all up divisor = 51.5)

This provides the WLL for a sling in single fall configuration, and from this all the other configurations are calculated.

Please note – figures are rounded to the closest decimal point