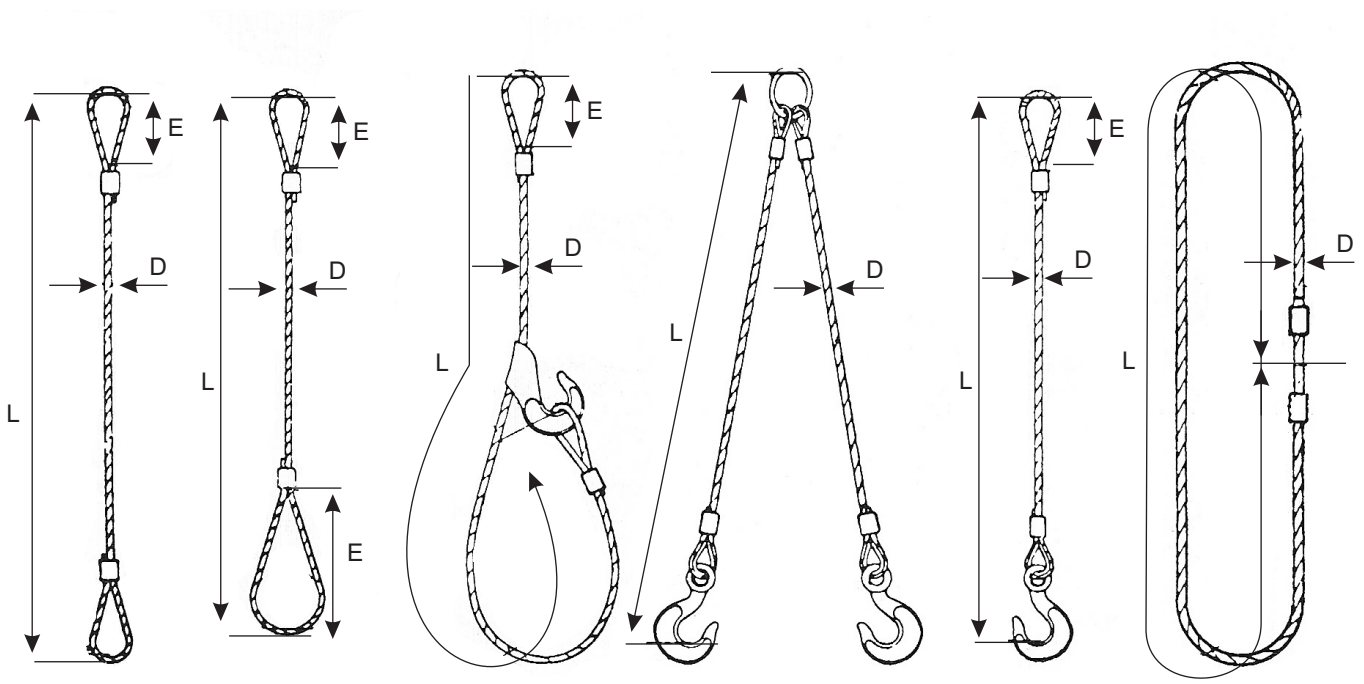
WIRE ROPE SLINGS

WIRE ROPE SLINGS made to any Specifications Required

Specify diameter and give sizes required as shown by the letters L - D - E



D1 **D2** **D3** **D4** **D5** **D6**

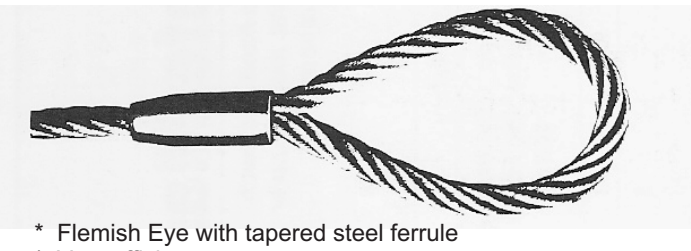
Slings made up in Afgrip Aluminium Swage and Superloop Steel Swage

Standard Eye Sizes in mm.

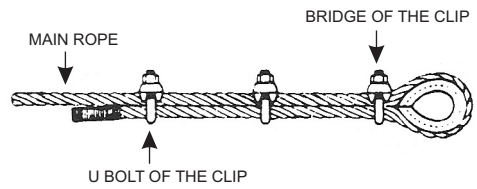
Diameter of rope	Afgrip	Superloop
6 mm	100	100
8 mm	130	130
10 mm	150	150
13 mm	200	200
16 mm	250	250
19/20 mm	300	300
22 mm	350	350
26 mm	380	400
28 mm	450	450
32 mm	600	-

* Eye sizes larger than standard to be specified.
* Rubber covering for steel wire rope slings available.
* Slings in diameters not indicated also available.

WIRE ROPE SLINGS

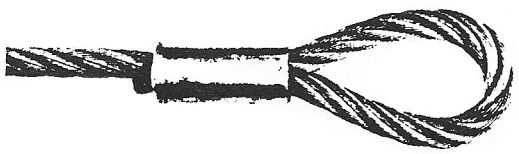


* Flemish Eye with tapered steel ferrule
* Very efficient
* Robust steel ferrule
* Tapered ferrule to prevent snagging
* No galvanic action between rope and ferrule
* Recommended also for fiery coal mines - does not have low temp spark.



WIRE ROPE CLAMPS

* Convenient for on-site use. (Note correct method of fitting)
* Not recommended for sling applications.



"AFGRIP"

* Turnback Eye with aluminium ferrule.
* Economic and efficient.

* Cane Trailer Rope with "Dimple" end stop.
* End stop can withstand high tension.
* Flexible rope.
* High strength

"HAND SPLICE"

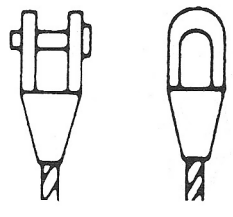
* Standard Liverpool or Admiralty methods
* Other special hand splices available.

"TAPERED ENDS"

* Useful for reeving steel wire rope through systems, for tirfors, for fitting wedge sockets, etc.
* Eliminates seizing of steel rope.

COPPER FERRULE MECHANICAL SPLICE

* For termination of stainless steel ropes.



WHITE METAL, ZINC AND RESIN SOCKETS

* Very efficient termination.
* Durable.

SLINGS PROOFLOADED AND TEST CERTIFICATES SUPPLIED

STEEL WIRE ROPE SLINGS

Safe Mass Loads of Wire Rope Sling Assemblies

The data provided applies to hand and mechanically spliced slings in the more popular rope diameters and configurations.			1 leg - 1 part		1 leg - 2 parts		2 legs - 1 part each					2 legs - 2 parts each		Endless	*Max permitted angle 90°
Minimum Permitted Factor of Safety			6:1	6:1	6:1	6:1	6:1	6:1	6;1	6:1	6:1	6:1	6:1	8:1	
Rope Construction	**Rope Diameter mm**	**Est. Breaking Force M. Tons**	**Vertical Lift** t	**Choker Hitch** t	**Halshing Sling** t	**Cradle Sling** t	**30°** t	**60°** t	**90°** t	**120°** t	**Reeving Sling** t	**Double Wrap** t	**Cradle Sling** t	**Endless with bight** t	**Rope Diameter** mm
6 X19 (12/6/1)/F 1800 Mpa RH Ordinary Lay	10	5.85	0.98	0.73	1.46	1.38	1.88	1.69	1.38	0.98	1.03	2.76		1.10	10
	11	7.04	1.17	0.88	1.76	1.66	2.26	2.03	1.66	1.17	1.24	3.32		1.32	11
6 X 24 (12/12/P)P or (15/9/F)F 1800 Mpa RH Ordinary Lay	13	7.93	1.32	0.99	1.98	1.87	2.55	2.29	1.87	1.32	1.40	3.73		1.49	13
	14	9.37	1.56	1.17	2.34	2.21	3.01	2.70	2.21	1.56	1.65	4.41		1.75	14
	16	12.61	2.10	1.57	3.15	2.97	4.06	3.64	2.97	2.10	2.23	5.94		2.36	16
	18	15.36	2.56	1.92	3.84	3.62	4.94	4.43	3.62	2.56	2.71	7.23		2.88	18
	20	19.44	3.24	2.43	4.85	4.58	6.25	5.61	4.58	3.24	3.43	9.15		3.64	20
	22	23.99	3.99	3.00	5.99	5.65	7.72	6.92	5.65	3.99	4.24	11.30		4.49	22
	24	27.30	4.54	3.41	6.82	6.43	8.78	7.87	6.43	4.54	4.82	12.85		5.11	24
	26	32.65	5.44	4.08	8.15	7.69	10.50	9.42	7.69	5.44	5.77	15.38		6.12	26
6 X 36 (14/7+7/7/1)/F 1800MPa RH Ordinary Lay	13	10.48	1.75	1.31	2.63	2.47	3.38	3.03	2.47	1.75	1.86	4.95		1.97	13
	14	12.13	2.02	1.51	3.02	2.85	3.90	3.49	2.85	2.02	2.14	5.70		2.27	14
	16	15.98	2.66	1.99	3.98	3.76	5.13	4.60	3.76	2.66	2.82	7.51		2.99	16
	18	20.38	3.40	2.55	5.10	4.79	6.56	5.88	4.79	3.40	3.60	9.62		3.82	18
	20	24.77	4.13	3.10	6.20	5.82	7.97	7.13	5.82	4.13	4.38	11.69		4.64	20
	22	30.81	5.14	3.86	7.71	7.25	9.92	8.89	7.25	5.14	5.45	14.55		5.78	22
	24	34.97	5.83	4.37	8.72	8.22	11.25	10.09	8.22	5.83	6.18	16.50		6.56	24
	26	41.46	6.91	5.18	10.37	9.74	13.34	11.95	9.74	6.91	7.32	19.56		7.77	26
	28	49.01	8.17	6.13	12.26	11.52	15.77	14.13	11.52	8.17	8.66	23.12		9.19	28
	32	64.08	10.68	8.01	16.02	15.06	20.61	18.48	15.06	10.68	11.32	30.22		12.02	32
Load Factor of sling assembly (effect of sling configuration)			1.00	0.75	1.50	1.41	1.93	1.73	1.41	1.00	1.06	2.83		1.50	

WIRE ROPE SLINGS

Approximate safe working loads in kg for Aluminium Ferruled Steel Wire Rope Slings

Rope diameter mm	Single Leg at 0°	Double Leg at 30°	Double Leg at 60°	Double Leg at 90°	Triple (45°) & Quadruple Leg at 90°
6	300	550	500	420	630
8	600	1 150	1 000	800	1 260
10	1 000	1 750	1 550	1 250	2 100
13	1 500	2 800	2 500	2 100	3 150
16	2 000	3 800	3 400	2 800	4 200
19	3 000	5 700	5 100	4 200	6 300
22	4 000	7 600	6 800	5 600	8 400
26	6 000	11 500	10 300	8 400	12 600
28	8 000	15 200	13 600	11 200	16 800
32	10 000	19 000	17 000	14 000	21 000
38	15 000	28 500	25 500	21 000	31 500
44	20 000	38 000	34 000	280 000	42 000
50	26 000	49 400	44 200	36 400	54 600
56	32 000	60 800	54 400	44 800	67 200

STANDARD ROPES USED

Generally 6 x 36 (14/7/7/1) fibre core for ungalvanised slings and
6 x 36 (14/7/7/1) fibre core or
6 x 19 (12/6/1) fibre core for galvanised slings

STANDARD SOFT EYE SIZES

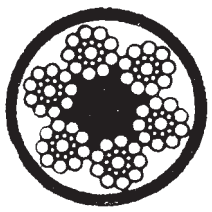
100 mm for 6 and 8 mm diameter slings
150 mm for 10 mm diameter slings
200 mm for 13 mm diameter slings
250 mm for 16 mm diameter slings
350 mm for 19 and 22 mm diameter slings
400 mm for 26 mm diameter slings
450 mm for 28 mm diameter slings
600 mm for 32 mm diameter slings
750 mm for 38 mm diameter slings
900 mm for 44 mm diameter slings
1 000 mm for 50 mm diameter slings
1 200 mm for 56 mm diameter slings

SAFETY FACTOR 6:1

WIRE ROPE SLINGS

STEEL WIRE ROPE

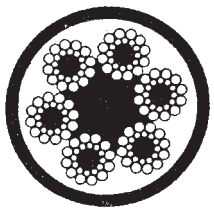
NOMINAL ROPE DIAMETER (mm)	ESTIMATED MASS (kg /m)	ESTIMATED BREAKING FORCE Depending on Tensile *(Tons Force)	SAFE MASS LOAD FACTOR OF SAFETY 6:1 *(tons)	SAFE MASS LOAD FACTOR OF SAFETY 5:1 *(tons)
12	0.560	8.92	1.49	1.78
14	0.750	12.11	2.02	3.42
16	0.997	15.85	2.64	3.17
18	1.228	20.01	3.34	4.00
20	1.550	24.73	4.12	4.95
22	1.903	28.93	4.82	5.79
24	2.184	35.60	5.93	7.12



6 X 19(9/9/1)/F

* 1 ton = 1 000 kg

NOMINAL ROPE DIAMETER (mm)	ESTIMATED MASS (kg /m)	ESTIMATED BREAKING FORCE Depending on Tensile *(Tons Force)	SAFE MASS LOAD FACTOR OF SAFETY 6:1 *(tons)	SAFE MASS LOAD FACTOR OF SAFETY 5:1 *(tons)
6	0.117	1.93	0.32	0.39
10	0.331	5.36	0.89	1.07
12	0.449	7.59	1.27	1.52
13	0.569	9.52	1.59	1.90
14	0.677	10.21	1.70	2.04
16	0.807	13.41	2.23	2.68
18	1.041	15.51	2.59	3.10
20	1.301	19.53	3.26	3.91
22	1.568	24.96	4.16	4.99
24	1.840	27.58	4.60	5.52



6 X 24(12/12/P)/P

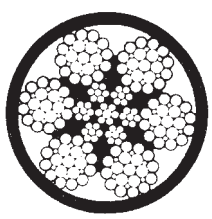
* 1 ton = 1 000 kg

TEST CERTIFICATE SUPPLIED

WIRE ROPE SLINGS

STEEL WIRE ROPE (cont.)

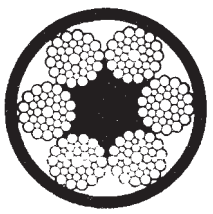
NOMINAL ROPE DIAMETER (mm)	ESTIMATED MASS (kg /m)	ESTIMATED BREAKING FORCE Depending on Tensile *(Tons Force)	SAFE MASS LOAD FACTOR OF SAFETY 6:1 *(tons)	SAFE MASS LOAD FACTOR OF SAFETY 5:1 *(tons)
10	0.437	6.64	1.11	1.33
11	0.527	8.24	1.37	1.65
13	0.743	11.27	1.88	2.25
14	0.858	13.40	2.23	2.68
16	1.130	16.90	2.82	3.38
20	1.766	27.74	4.62	5.55
22	2.112	33.26	5.54	6.65
24	2.480	39.03	6.51	7.81
26	2.925	45.99	7.67	9.20



6 X 25(12/6/6/1)/WRC

* 1 ton = 1 000 kg

NOMINAL ROPE DIAMETER (mm)	ESTIMATED MASS (kg /m)	ESTIMATED BREAKING FORCE Depending on Tensile *(Tons Force)	SAFE MASS LOAD FACTOR OF SAFETY 6:1 *(tons)	SAFE MASS LOAD FACTOR OF SAFETY 5:1 *(tons)
10	0.395	6.26	1.04	1.25
13	0.671	10.48	1.75	2.10
14	0.770	12.13	2.02	2.43
16	1.006	15.98	2.66	3.20
18	1.275	20.38	3.40	4.08
20	1.575	24.77	4.13	4.95
22	1.908	30.81	5.14	6.16
24	2.252	34.97	5.83	6.99
26	2.627	41.46	6.91	8.29
28	3.064	49.01	8.17	9.80
30	3.543	56.03	9.34	11.21
32	4.028	64.08	10.68	12.82



6 X36(14/7/7/7/1)/F

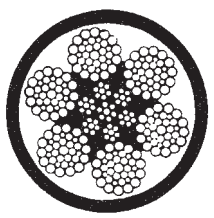
* 1 ton = 1 000 kg

TEST CERTIFICATE SUPPLIED

WIRE ROPE SLINGS

STEEL WIRE ROPE (cont.)

NOMINAL ROPE DIAMETER (mm)	ESTIMATED MASS (kg /m)	ESTIMATED BREAKING FORCE Depending on Tensile *(Tons Force)	SAFE MASS LOAD FACTOR OF SAFETY 6:1 *(tons)	SAFE MASS LOAD FACTOR OF SAFETY 5:1 *(tons)
13	0.747	11.59	1.93	2.32
16	1.125	17.61	2.94	3.52
20	1.749	27.47	4.59	5.50
22	2.167	33.39	5.56	6.68
30	3.916	62.66	10.44	12.53
32	4.502	71.61	11.94	14.32
36	5.584	89.61	14.94	17.92
38	6.210	98.37	16.40	19.67
42	7.717	121.73	20.29	24.35
44	8.293	134.69	22.45	26.94
48	10.049	159.80	26.63	31.96

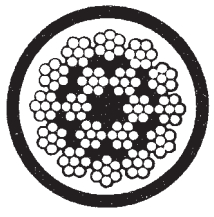


6 X 36(14/7/7/7/1)IWRC

* 1 ton = 1 000 kg

18 STRAND NON-SPIN

NOMINAL ROPE DIAMETER (mm)	ESTIMATED MASS (kg /m)	ESTIMATED BREAKING FORCE Depending on Tensile *(Tons Force)	SAFE MASS LOAD FACTOR OF SAFETY 6:1 *(tons)	SAFE MASS LOAD FACTOR OF SAFETY 5:1 *(tons)
6	0.142	2.40	0.40	0.48
8	0.252	4.04	0.67	0.81
10	0.399	6.34	1.06	1.29
11	0.486	7.58	1.26	1.52
13	0.665	10.60	1.77	2.12
14	0.805	12.67	2.11	2.53
15	0.902	14.55	2.43	2.91
16	1.005	15.92	2.65	3.18
20	1.634	25.76	4.29	5.15
22	1.860	31.01	5.17	6.20
23	2.184	34.50	5.75	6.90
24	2.316	36.60	6.10	7.32



12 X7 (6/1)/6 X 7(6/1)/F
18 strand Non-Spin

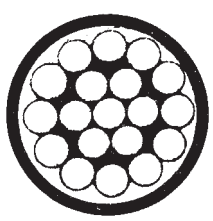
* 1 ton = 1 000 kg

TEST CERTIFICATE SUPPLIED

WIRE ROPE SLINGS

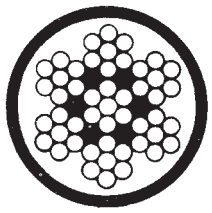
STAINLESS STEEL WIRE ROPE (Grade 316 Polished)

NOMINAL ROPE DIAMETER (mm)	ESTIMATED MASS (kg /m)	ESTIMATED BREAKING FORCE (kg Force)	SAFE MASS LOAD FACTOR OF SAFETY 6:1 (kg)	SAFE MASS LOAD FACTOR OF SAFETY 5:1 (kg)
2.5	.032	468	78	94
3	.046	820	137	164
4	.081	1191	199	238
5	.128	2180	363	436
6	.185	2822	470	564



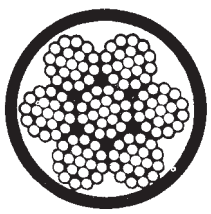
1 X 19

1.5	.009	162	27	32
2	.016	284	47	57
2.5	.026	423	71	85
3	.037	626	104	125
5	.105	1708	285	342
6	.151	2373	396	475
10	.390	6620	1103	1324



7 X 7

2	.019	276	46	55
2.5	.026	412	69	82
3	.037	610	102	122
4	.067	1067	178	213
5	.105	1643	274	329
6	.152	2311	385	462
8	.269	4024	671	805
10	.390	6048	1008	1210



7 X 19

TEST CERTIFICATE SUPPLIED