









CHAIN DIA.  mm	WORKING LOAD LIMIT (W.L.L.) IN TONNES UNDER GENERAL CONDITIONS OF USE								
	SINGLE LEG SLINGS				SLINGS OF 2, 3 OR 4 LEGS			2 LEG SLINGS	
									
					60°	90°	120°		
LOADING FACTORS	1	0.75	0.75	1.3	1.73	1.41	1	1.3	2.25
CHAIN SIZE, MM									
6	1.1	0.8	0.8	1.4	1.9	1.6	1.1	1.4	2.5
7	1.5	1.1	1.1	2	2.6	2.1	1.5	2.0	3.4
8	2.0	1.5	1.5	2.6	3.5	2.8	2.0	2.6	4.5
10	3.2	2.4	2.4	4.2	5.5	4.5	3.2	4.2	7.2
13	5.3	4.0	4.0	6.9	9.2	7.5	5.3	6.9	11.9
16	8.0	6.0	6.0	10.4	13.8	11.3	8.0	10.4	18.0
19	11.2	8.4	8.4	14.6	19.4	15.8	11.2	14.6	25.2
20	12.5	9.4	9.4	16.3	21.6	17.6	12.5	16.3	28.1
22	15.0	11.3	11.3	19.5	26.0	21.2	15.0	19.5	33.8
26	21.2	15.9	15.9	27.6	36.7	29.9	21.2	27.6	47.7
32	31.5	23.6	23.6	41	54.5	44.4	31.5	41.0	70.9

BEAVER ALLOY GRADE 80 CHAIN SLINGS CARE AND USAGE INSTRUCTIONS

BEAVER ALLOY GRADE 80 CHAIN SLINGS SHOULD ONLY BE USED BY A COMPETENT PERSON.

Maximum Working Load Limit in Tonnes of 1000kg, under general conditions of use.

- DO NOT EXCEED WORKING LOAD LIMIT
- DO NOT EXCEED 120°
- WLL at 60° must never be exceeded, even at smaller angles.
- WLL at other angles - apply the next greater angle and relevant load factor

Extreme care should be taken when using the Beaver Grade 80 Chain Slings in high temperature environments. It is therefore our instruction that the user must always err on the side of caution and make ample provisions for reduced Working Load Limits.

The WLL of a sling must not exceed the lowest working load limit of the components in the system.

The following are our instructions:

ACIDIC CONDITIONS









Beaver Alloy Grade 80 slings shall not be used in acidic solutions or in any other corrosive environment.

TEMPERATURE CONDITIONS

-10°C up to 200° C No reduction in WLL
 200°C up to 300°C Reduce WLL by 10%
 300°C up to 400°C Reduce WLL by 25%
 Do not use above 400°C

GALVANISING

Beaver alloy chains and fittings should not be hot-dip galvanised or electro-plated, except by Beaver. Galvanised slings must always have the Working Load Limits reduced by 20%.

CHAIN DIA.  mm	WORKING LOAD LIMIT (W.L.L.) IN TONNES UNDER GENERAL CONDITIONS OF USE								
	SINGLE LEG SLINGS				SLINGS OF 2, 3 OR 4 LEGS			2 LEG SLINGS	
									
					60°	90°	120°		
LOADING FACTORS	1	0.75	0.75	1.3	1.73	1.41	1	1.3	2.25
CHAIN SIZE, MM									
6	1.4	1.1	1.1	1.8	2.4	2.0	1.4	1.8	3.2
8	2.5	1.9	1.9	3.3	4.3	3.5	2.5	3.3	5.6
10	4	3.0	3.0	5.2	6.9	5.6	4	5.2	9.0
13	6.7	5.0	5.0	8.7	11.6	9.4	6.7	8.7	15.1
16	10	7.5	7.5	13.0	17.3	14.1	10	13.0	22.5
20	16	12.0	12.0	20.8	27.7	22.6	16	20.8	36.0
22	19	14.3	14.3	24.7	32.9	26.8	19	24.7	42.8
26	26.5	19.9	19.9	34.5	45.8	37.4	26.5	34.5	59.6
28	31.5	23.6	23.6	41.0	54.5	44.4	31.5	41.0	70.9
32	40	30.0	30.0	52.0	69.2	56.4	40	52.0	90.0

GRADE 100 CHAIN SLINGS SHOULD ONLY BE USED BY A COMPETENT PERSON.

Maximum Working Load Limit in Tonnes of 1000kg, under general conditions of use.

- DO NOT EXCEED WORKING LOAD LIMIT
- DO NOT EXCEED 120°
- WLL at other angles - apply the next greater angle and relevant load factor
- Some Shortening Hooks & Grab Hooks with cradle configuration, may not derate the WLL for the sling

SAFETY WARNING OF HAZARDOUS CONDITIONS:

Extreme care should be taken when using the Beaver Grade 100 Chain and fittings in high temperature environments.

It is therefore our instruction that the user must always err on the side of caution and NEVER EXCEED 200°C

WIRE ROPE SLINGS - GRADE 1770 STEEL CORE TO AS 1666.1 & AS 1666.2






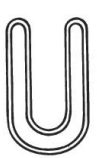
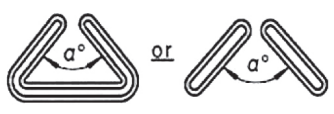
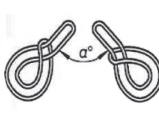
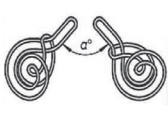
METHOD OF LOADING	DIRECT LOADED			CHOKE HITCH			DIRECT LOAD				CHOKE HITCH				BASKET HITCH					
	WIRE ROPE DIA. mm	Round load	Rectangular load	Round Load			Other than round load		Round load			Other than round load								
				Single wrap	Double wrap	Single wrap	Double wrap	Single wrap	Double wrap	Single wrap	Double wrap									
Included angle	-	-	-	0° - 60°	90°	120°	0° - 45°	0° - 60°	0° - 45°	0° - 60°	0°	60°	90°	120°	0°	60°	90°	120°		
MAXIMUM WORKING LOAD LIMITS IN TONNES OF 1000 KG FOR 1770 GRADE STEEL CORE - BLACK																				
LOADING FACTOR	1 x 0.95	0.75 x 0.95	0.5 x 0.95	1.73 x 0.95	1.41 x 0.95	1 x 0.95	1.30 x 0.95		0.87 x 0.95		2 x 0.95	1.73 x 0.95	1.41 x 0.95	1 x 0.95	1 x 0.95	0.87 x 0.95	0.71 x 0.95	0.5 x 0.95		
8	0.78	0.58	0.39	1.35	1.1	0.78	1.01		0.68		1.56	1.35	1.1	0.78	0.78	0.68	0.55	0.39		
9	0.99	0.74	0.49	1.71	1.4	0.99	1.29		0.86		1.98	1.71	1.4	0.99	0.99	0.86	0.7	0.49		
10	1.22	0.92	0.61	2.1	1.72	1.22	1.59		1.06		2.4	2.1	1.72	1.22	1.22	1.06	0.87	0.61		
11	1.48	1.11	0.74	2.6	2.1	1.48	1.92		1.29		3	2.6	2.1	1.48	1.48	1.29	1.05	0.74		
12	1.76	1.32	0.88	3	2.5	1.76	2.3		1.53		3.5	3	2.5	1.76	1.76	1.53	1.25	0.88		
13	2.1	1.55	1.04	3.6	2.9	2.1	2.7		1.8		4.1	3.6	2.9	2.1	2.1	1.8	1.47	1.04		
14	2.4	1.8	1.2	4.2	3.4	2.4	3.1		2.1		4.8	4.2	3.4	2.4	2.4	2.1	1.71	1.2		
16	3.1	2.3	1.56	5.4	4.4	3.1	4.1		2.7		6.2	5.4	4.4	3.1	3.1	2.7	2.2	1.56		
18	4	3	1.98	6.8	5.6	4	5.1		3.4		7.9	6.8	5.6	4	4	3.4	2.8	1.98		
20	4.9	3.7	2.4	8.4	6.9	4.9	6.3		4.2		9.8	8.4	6.9	4.9	4.9	4.2	3.5	2.4		
22	5.9	4.4	3	10.2	8.3	5.9	7.7		5.1		11.8	10.2	8.3	5.9	5.9	5.1	4.2	3		
24	7	5.3	3.5	12.2	9.9	7	9.1		6.1		14.1	12.2	9.9	7	7	6.1	5	3.5		
26	8.3	6.2	4.1	14.3	11.6	8.3	10.7		7.2		16.5	14.3	11.6	8.3	8.3	7.2	5.9	4.1		
28	9.6	7.2	4.8	16.6	13.5	9.6	12.4		8.3		19.1	16.6	13.5	9.6	9.6	8.3	6.8	4.8		
32	12.5	9.4	6.3	22	17.6	12.5	16.3		10.9		25	22	17.6	12.5	12.5	10.9	8.9	6.3		
36	15.8	11.9	7.9	27	22	15.8	21		13.8		32	27	22	15.8	15.8	13.8	11.2	7.9		
40	19.6	14.7	9.8	34	28	19.6	25		17		39	34	28	19.6	19.6	17	13.9	9.8		
44	24	17.7	11.8	41	33	24	31		21		47	41	33	24	24	21	16.8	11.8		
48	28	21	14	49	40	28	37		24		56	49	40	28	28	24	19.9	14		
52	33	25	16.6	57	47	33	43		29		66	57	47	33	33	29	24	16.6		
56	38	29	19.2	66	54	38	50		33		77	66	54	38	38	33	27	19.2		
60	44	33	22	76	62	44	57		38		88	76	62	44	44	38	31	22		

The above listed working loads represent ferrule-secured eyes.

ROUND WEBBING SLINGS - AS 4497 / FLAT WEBBING SLINGS - AS 1353

WORKING LOAD LIMITS (WLLS)



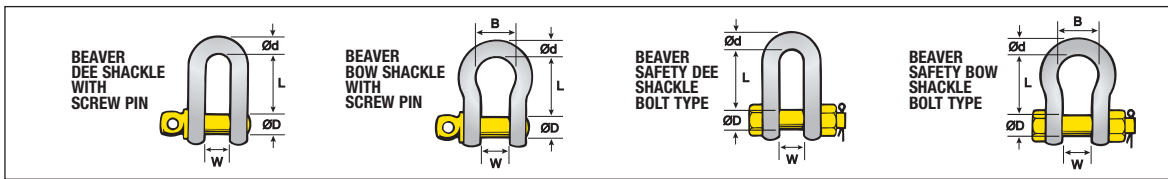
WORKING LOAD LIMITS UNDER GENERAL CONDITIONS OF USE - t									
 COLOUR MARKED WLL	STRAIGHT LIFT	CHOKED STRAIGHT LIFT	PARALLEL BASKET	BASKET HITCH OR 2, 3 AND 4 LEGS SLINGS			CHOKE HITCH OR 2, 3 AND 4 LEGS SLINGS		
				a = 60°	a = 90°	a = 120°	SINGLE WRAP a = MAX 45°	DOUBLE WRAP a = MAX 60°	
									
LOADING FACTORS	1	0.8	2	1.73	1.41	1	1.38	1.38	
VIOLET	1	1	0.8	2	1.7	1.4	1	1.38	
GREEN	2	2	1.6	4	3.4	2.8	2	2.76	
YELLOW	3	3	2.4	6	5.1	4.2	3	4.14	
GREY	4	4	3.2	8	6.9	5.6	4	5.52	
RED	5	5	4	10	8.6	7	5	6.9	
BROWN	6	6	4.8	12	10.3	8.4	6	8.28	
BLUE	8	8	6.4	16	13.8	11.2	8	11.04	
ORANGE	10	10	8	20	17.3	14.1	10	13.8	
ORANGE	Greater than 10	Marked WLL x LF	Marked WLL x LF	Marked WLL x LF	Marked WLL x LF	Marked WLL x LF	Marked WLL x LF	Marked WLL x LF	

Note: The WLL applicable to each configuration is the marked WLL multiplied by the loading factor, L.

GRADE S SHACKLES WITH YELLOW PAINTED PIN - AS 2741



WORKING LOAD LIMIT Metric Tonnes	DIA. $\varnothing d$ mm	DIA. PIN $\varnothing D$ mm	INSIDE WIDTH W mm	INSIDE LENGTH		WIDTH OF BOW B mm	APPROX. WEIGHT EACH	
				DEE TYPE L mm	BOW TYPE L mm		SCREW PIN kg	SAFETY PIN kg
0.33	5	6	10	—	22	15	0.02	—
0.50	6	8	12	22	29	20	0.06	0.07
0.75	8	10	13	26	31	21	0.11	0.13
1.00	10	11	17	32	37	26	0.15	0.17
1.50	11	13	18	37	43	29	0.21	0.25
2.00	13	16	21	41	48	33	0.37	0.44
3.20	16	19	27	51	61	43	0.65	0.79
4.70	19	22	32	60	72	51	1.06	1.26
6.50	22	25	37	71	84	58	1.56	1.88
8.50	25	29	43	81	95	68	2.32	2.78
9.50	29	32	46	90	108	74	3.28	3.87
12.00	32	35	52	100	119	83	4.51	5.26
13.50	35	38	57	113	133	92	5.43	6.94
17.00	38	41	60	124	146	98	7.89	8.79
25.00	44	51	73	146	178	127	13.40	14.99
35.00	51	57	83	171	197	146	18.85	20.65
42.50	57	63	95	181	222	160	26.06	29.01
55.00	63	70	105	203	267	184	37.86	41.05
85.00	76	83	127	229	330	200	58.68	62.24
120.00	89	95	146	267	381	241	—	110.00
150.00	102	108	165	318	432	279	—	160.00



Other sizes up to 1000 tonnes available on request.

COLLARED EYEBOLTS AND EYENUTS - AS 2317



WLL FOR LOAD APPLICATION AS SPECIFIED BY AS 1418.1						
THREAD SIZE	SINGLE EYEBOLT OR EYENUT		PAIR OF EYEBOLT OR EYENUTS (SEE NOTES 1 AND 4)			
	TRANVERSE T	AXIAL T	TRANVERSE T	MAXIMUM INCLUDED ANGLE 30° T	MAXIMUM INCLUDED ANGLE 60° T	MAXIMUM INCLUDED ANGLE 90° T
Loading Factor	0.25	1	0.5	1.25	0.80	0.5
M10	0.06	0.25	0.12	0.31	0.20	0.12
M12	0.10	0.40	0.20	0.50	0.32	0.20
M16	0.20	0.80	0.40	1.00	0.64	0.40
M20	0.40	1.60	0.80	2.0	1.28	0.80
M22	0.50	2.0	1.00	2.5	1.60	1.00
M24	0.62	2.5	1.25	3.1	2.0	1.25
M30	1.00	4.0	2.0	5.0	3.2	2.0
M33	1.25	5.0	2.5	6.3	4.0	2.5
M36	1.57	6.3	3.1	7.9	5.0	3.1
M39	1.75	7.0	3.5	8.8	5.6	3.5
M42	2.0	8.0	4.0	10.0	6.4	4.0
M48	2.5	10.0	5.0	12.6	8.0	5.0
M56	3.7	15.0	7.5	18.9	12.0	7.5
M64	5.0	20.0	10.0	25	16.0	10.0
M72	6.2	25.0	12.5	31	20	12.5
M76	7.5	30.0	15.0	37	24	15.0