COOKES WORKING LOAD LIMIT CHART (W.L.L)

a BRIDON · BEKAERT Ropes Group Brand

This chart applies to general purpose chain slings made of chain and components manufactured to I.S.O grade 80 & 100, EN818 or equivalent International standards. For ratings of special purpose slings consult your local cookes branch.

Grade 80 Chain Sling Ratings

Lifting Mode								
Chain (mm)	Single Leg	Two Leg Slings			Three and Four Leg Slings			Endless Choke
	Factor 1	Factor 1.7	Factor 1.4	Factor 1	Factor 2.6	Factor 2.1	Factor 1.5	Factor 1.6
	0°	At 60°	At 90°	At 120°	At 60°	At 90°	At 120°	0°
6	1.12	1.90	1.60	1.12	2.90	2.36	1.70	1.79
7	1.50	2.55	2.12	1.50	3.90	3.15	2.24	2.40
8	2.00	3.40	2.80	2.00	5.20	4.25	3.00	3.20
10	3.15	5.35	4.25	3.15	8.20	6.70	4.75	5.04
13	5.30	9.00	7.50	5.30	13.80	11.20	8.00	8.48
16	8.00	13.60	11.20	8.00	20.80	17.00	11.80	12.80
20	12.50	19.00	16.00	11.20	29.00	23.60	17.00	17.90
22	15.00	25.50	21.20	15.00	39.00	31.50	22.40	24.00
26	21.20	36.00	30.00	21.20	55.10	45.00	31.50	33.92
32	31.50	53.50	45.00	31.50	81.90	67.00	47.50	50.40

If Chain is Choked WLL must be Derated by 20%

Grade 100 Chain Sling Ratings

Lifting Mode								
Chain (mm)	Single Leg	Two Leg Slings			Three and Four Leg Slings			Endless Choke
	Factor 1	Factor 1.7	Factor 1.4	Factor 1	Factor 2.6	Factor 2.1	Factor 1.5	Factor 1.6
	0°	At 60°	At 90°	At 120°	At 60°	At 90°	At 120°	0°
6	1.50	2.55	2.10	1.50	3.90	3.15	2.25	2.40
7	2.00	3.40	2.80	2.00	5.20	4.20	3.00	3.00
8	2.50	4.25	3.50	2.50	6.50	5.25	3.75	4.00
10	4.00	6.80	5.60	4.00	10.40	8.40	6.00	6.30
13	6.70	11.40	9.40	6.70	17.40	14.00	10.00	10.60
16	10.00	17.00	14.00	10.00	26.00	21.00	15.00	16.00
20	16.00	27.20	22.40	16.00	41.60	33.60	24.00	30.00
22	19.00	32.30	26.50	19.00	49.40	39.90	28.50	42.50
26	26.50	45.00	37.10	26.50	68.90	55.70	39.80	43.20

If Chain is Choked WLL must be Derated by 20%

Flat Web Lifting Slings & Endless Round Slings

Lifting Mode								
Angle	Vertical	Choke	Basket Parallel	Basket at 30°	Basket at 60°	Basket at 90°	2 Leg Sling at 90°	3-4 Leg Sling at 90°
WLL (Kg)	WLL (Kg)	WLL (Kg)	WLL (Kg)	WLL (Kg)	WLL (Kg)	WLL (Kg)	WLL (Kg)	WLL (Kg)
500	500	400	1000	950	850	700	700	1050
1,000	1000	800	2000	1900	1700	1400	1400	2100
2,000	2000	1600	4000	3800	3400	2800	2800	4200
3,000	3000	2400	6000	5700	5100	4200	4200	6300
4,000	4000	3200	8000	7600	6800	5600	5600	8400
5,000	5000	4000	10000	9500	8500	7000	7000	10500
6,000	6000	4800	12000	11400	10200	8400	8400	12600
8,000	8000	6400	16000	15200	13600	11200	11200	16800
10,000	10000	8000	20000	19000	17000	14000	14000	21000
12,000	12000	9600	24000	22800	20400	16800	16800	25200

INSPECTION AND CARE OF WEB SLINGS:

- Inspect slings for damage before use.
- Protect slings from sharp or abrasive edges.
- Do not use slings above its W.L.L.
- Position load on dunnage to ensure easy removal of slings.
- Do not twist or knot slings to shorten.
- Do not use when temperatures exceed 90° C
- Do not snatch or shock load slings when lifting.
- Check with manufacturer before using slings in or near alkalis and Acids.

USE OF CHAIN SLINGS:

- Keep a register of all slings in use.
- Never lift with a twisted chain
- Chain slings should be shortened with a shortening hook, never by knotting.
- Protect the chain against sharp edges by proper padding.
- Never point load a hook - the load should alway seat correctly in the bowl of the hook.
- Always use the correct size sling for the load, allowing for the included angle and the possibility of unequal loading.
- The master link should always be able to move freely on the crane hook.
- Avoid shock loading at all times.

MAINTENANCE OF CHAIN SLINGS:

- Chains should be inspected prior to use.
- Periodic thorough examinations must be carried out at least every 12 months or more frequently according to statutory regulations, type and frequency of use.
- Chains with bent links or with cracks or gouges in the link should be replaced, as should defomed components such as bent master links, opened up hooks and any fitting showing signs of damage.

CONTACT

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