ALLOY CHAINS AND FITTINGS (G80)

Chain slings
SANS7593, SANS50818-6 and EN818-4

Working load limits
using Grade 80 short link chain

chain Ø	1 Leg				2 Leg				3 and 4 Leg			
					angle between the legs				angle between the legs			
	0°	choke	endless basket	endless reeving	60°	90°	120°	choke	60°	90°	120°	choke
[mm]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]
7	1.50	1.20	1.95	2.40	2.55	2.10	1.50	1.65	3.90	3.15	2.25	2.55
8	2.00	1.60	2.60	3.20	3.40	2.80	2.00	2.20	5.20	4.20	3.00	3.40
10	3.15	2.52	4.10	5.04	5.36	4.41	3.15	3.47	8.19	6.62	4.73	5.36
13	5.30	4.24	6.89	8.48	9.01	7.42	5.30	5.19	13.78	11.13	7.95	9.01
16	8.00	6.40	10.40	12.80	13.60	11.20	8.00	8.80	20.80	16.80	12.00	13.60
20	12.50	10.00	16.25	20.00	21.25	17.50	12.50	13.75	32.50	26.25	18.75	21.25
22	15.00	12.00	19.50	24.00	25.50	21.00	15.00	16.50	39.00	31.50	22.50	25.50
26	21.20	16.96	27.56	33.92	36.04	29.68	21.20	23.32	55.12	44.52	31.80	36.04
32	31.50	25.20	40.95	50.40	53.55	44.10	31.50	34.65	81.90	66.15	47.25	53.55

factor of safety 4:1

Working load limits
using Grade 100 short link chain

chain Ø	1 Leg				2 Leg				3 and 4 Leg			
					angle between the legs				angle between the legs			
	0°	choke	endless basket	endless reeving	60°	90°	120°	choke	60°	90°	120°	choke
[mm]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]	[t]
8	2.50	2.00	3.25	4.00	4.25	3.50	2.50	2.75	6.50	5.25	3.75	4.25
10	4.00	3.20	5.20	6.40	6.80	5.60	4.00	4.40	10.40	8.40	6.00	6.80
13	6.70	5.36	8.71	10.72	11.39	9.38	6.70	7.37	17.42	14.07	10.05	11.39
16	10.00	8.00	13.00	16.00	17.00	14.00	10.00	11.00	26.00	21.00	15.00	17.00

	1.00	0.80	1.30	1.60	1.70	1.40	1.00	1.10	2.60	2.10	1.50	1.70

the working load limits above apply to normal conditions of use, in straight configuration and based on the “uniform load” method of rating

factor of safety

4:1

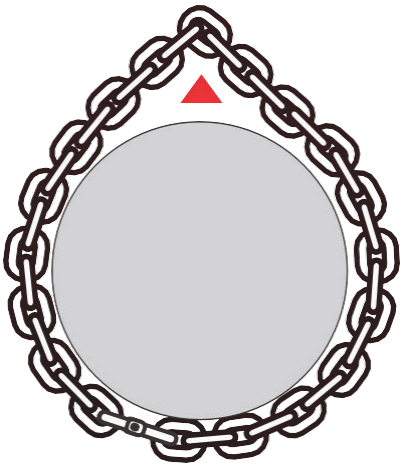
Working load limit as a function of temperature

	0°C - 200°C	200°C - 300°C	300°C - 400°C	400°C and above
Gr 80	1.0 x WLL	0.9 x WLL	0.75 x WLL	do not use
Gr100	1.0 x WLL	do not use	do not use	do not use

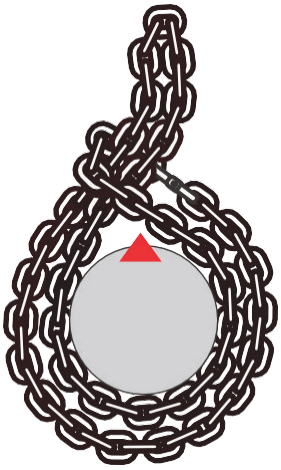
Typical chain sling configurations

ONE LEG

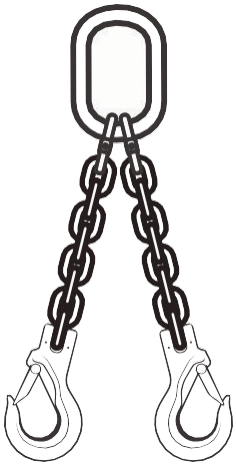
CHOKE HITCH



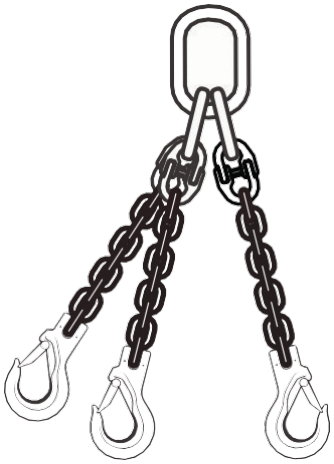
ENDLESS BASKET



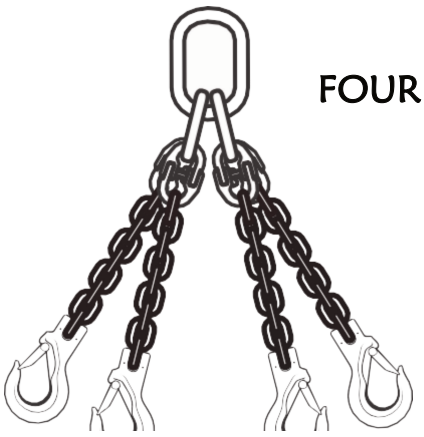
ENDLESS REEVING



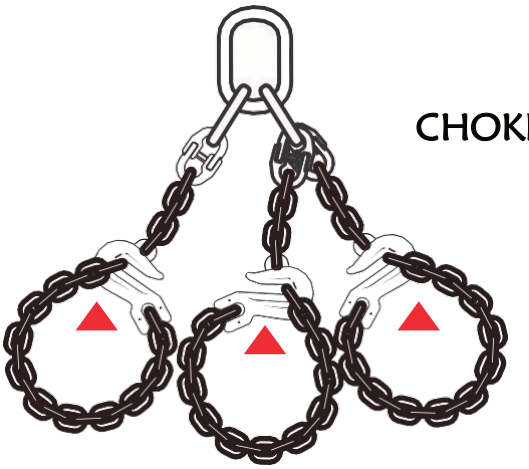
TWO LEG



THREE LEG



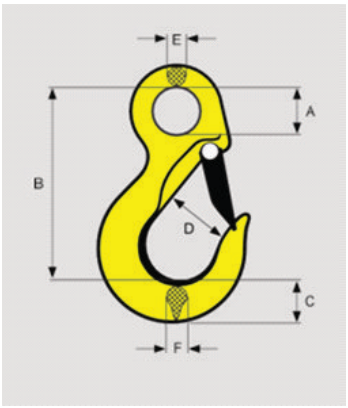
FOUR LEG



CHOKE HITCH

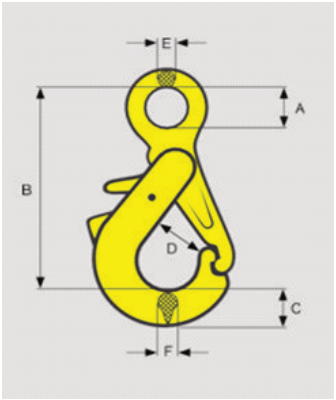
Sling hook c/w safety latch – eye type EN1677-2

for chain size	dimensions						weight
	A	B	C	D	E	F	
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
7 / 8	25.0	95.0	26.0	32.5	13.0	18.0	0.5
10	37.0	114.0	37.0	33.0	17.0	22.0	0.9
13	43.0	148.0	47.0	47.0	21.0	29.0	1.8
16	49.0	181.0	55.0	53.0	23.0	35.0	3.4
20	60.0	215.0	60.0	55.0	28.0	44.0	5.2
22	60.0	240.0	77.0	87.0	32.0	49.0	9.4
26	62.0	275.0	85.0	97.0	35.0	60.0	13.5
32	87.0	350.0	91.0	120.0	38.0	65.0	19.5



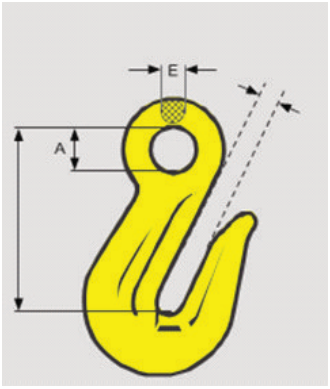
Self locking hook latch –eye type EN1677-2

for chain size	dimensions						weight
	A	B	C	D	E	F	
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
7 / 8	25.0	128.0	26.0	33.0	12.0	18.5	0.8
10	32.0	157.0	28.0	41.0	16.0	23.0	1.3
13	40.0	191.0	35.0	49.0	18.0	29.0	2.3
16	49.0	230.0	38.0	58.0	25.0	33.0	4.0
20	67.0	268.0	62.0	71.0	27.0	52.0	7.5
22	69.0	315.0	70.0	85.0	29.5	52.5	10.0
26	80.0	363.0	75.0	110.0	34.0	60.0	18.0



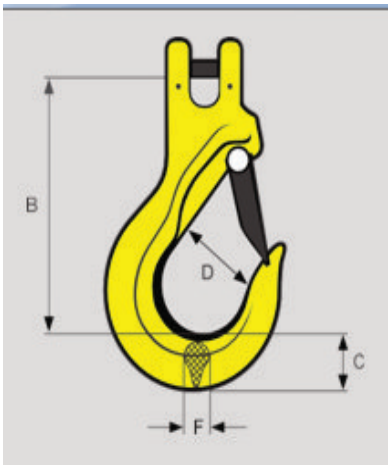
Grab hook with cradle –eye type EN1677-2

for chain	dimensions				weight
	A	B	D	E	
[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
7 / 8	17.0	57.5	9.0	10.0	0.3
10	20.0	78.0	12.0	15.0	0.6
13	26.0	97.5	14.5	17.0	1.2
16	30.0	103.0	17.5	18.0	2.4
20	37.0	137.0	21.0	24.0	4.6
22	43.0	166.0	25.0	26.0	6.2



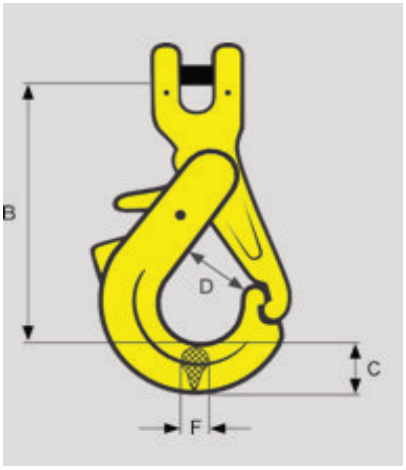
Sling hook c/w safety latch –clevis type
EN1677-2

for chain size	Dimensions				weight
	B	C	D	F	
[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
7 / 8	84.0	34.0	21.0	18.0	0.
10	103.0	34.0	27.0	22.0	0.9
13	124.0	50.0	42.0	29.0	2.0
16	143.0	60.0	46.0	36.0	3.6
20	174.0	62.0	49.0	44.0	6.0
22	195.0	71.0	65.0	51.0	10.0



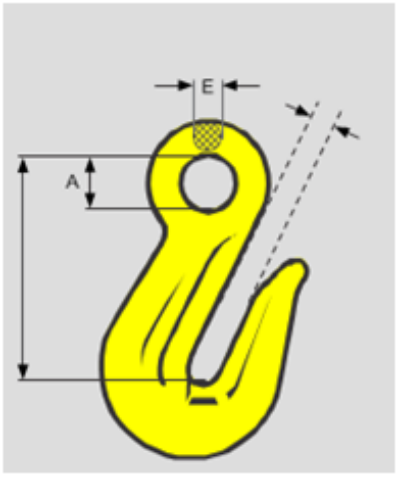
Self locking hook latch –clevis type
EN1677-2

for chain size	dimensions				weight
	B	C	D	F	
[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
7 / 8	107.0	26.0	32.0	18.5	0.8
10	137.0	28.0	41.0	22.0	1.3
13	166.0	33.0	49.0	28.5	2.9
16	187.0	39.0	59.0	32.0	3.9
20	225.0	59.0	82.0	47.0	8.3
22	270.0	72.5	82.0	52.5	11.2
26	310.5	75.0	110.0	60.0	18.5



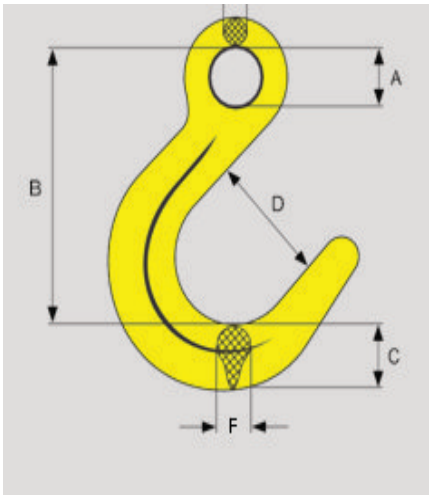
Grab hook with cradle – clevis type
EN1677-2

for chain	dimensions		weight
	B	D	
[mm]	[mm]	[mm]	[kg]
7 / 8	54.0	10.0	0.4
10	75.0	12.5	0.8
13	93.0	15.0	1.5
16	102.0	17.0	2.8
20	124.0	22.0	4.8
22	142.0	24.0	9.0



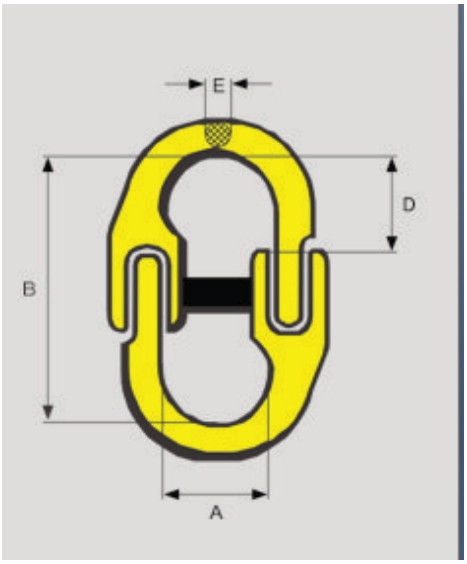
Foundry hook – eye type EN1677-2

for chain size	dimensions						weight
	A	B	C	D	E	F	
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
7 / 8	18.0	119.0	33.0	61.0	12.0	25.0	0.7
10	21.0	144.0	38.0	74.0	14.0	33.5	1.3
13	27.0	170.0	48.0	84.0	19.0	39.0	2.8
16	32.0	200.0	53.0	99.0	23.0	46.0	4.9
20	38.0	175.0	65.0	110.0	26.0	57.0	10.0
22	43.0	253.0	68.0	120.0	30.0	69.0	11.5



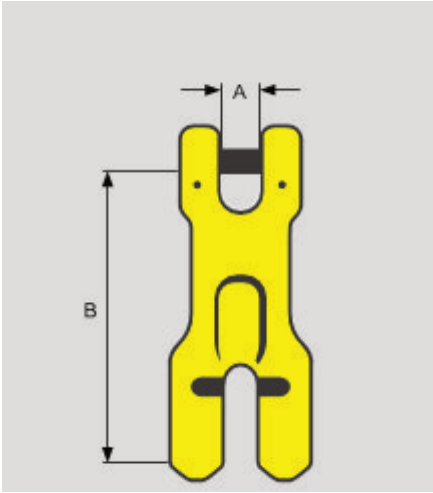
Connecting link EN1677-2

for chain size	dimensions				weight
	A	B	D	E	
[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
7 / 8	22.0	58.0	22.0	10.0	0.15
10	29.0	68.0	26.0	12.0	0.30
13	32.0	88.0	31.0	16.0	0.60
16	38.0	105.0	40.0	20.0	1.00
20	43.0	118.0	45.0	25.0	1.90
22	53.0	138.0	55.0	27.5	3.00
26	65.0	150.0	63.0	31.0	4.00
32	80.0	194.0	67.0	40.0	8.50



Shortening clutch clevis type- EN1677-2

for chain size	dimensions		weight
	A	B	
[mm]	[mm]	[mm]	[kg]
7 / 8	10.0	72.0	0.4
10	14.0	100.0	0.9
13	17.0	124.0	1.9
16	19.0	155.0	3.2

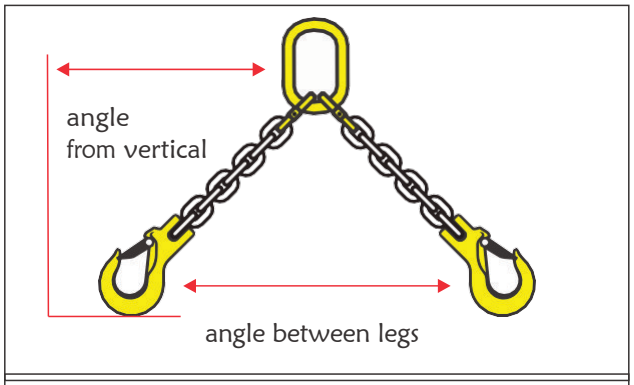


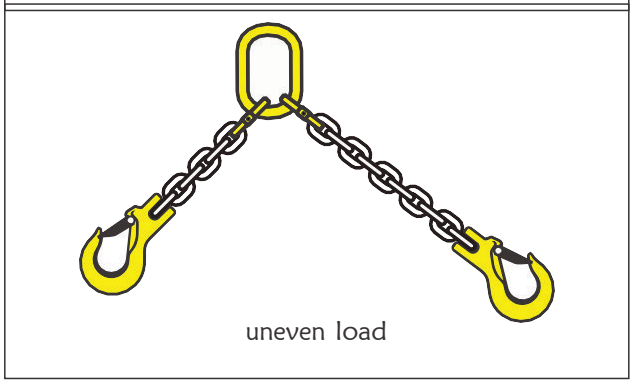
Product information

Product Benefits

- Independently tested
- Markings on all fittings
  - size - grade
  - manufacturer's mark - batch
  - grade mark on load pins
- Markings on chain
  - grade
  - manufacturer's mark
  - batch number
- Certi cation provided on componen

fi





Understanding Working Load Limits

- If using grab hooks as shortening clutches, those without cradles to support the chain links, result in the reduction of the WLL by 20%.
- The WLL of a two leg sling applies under normal conditions of use in a straight con guration and is based on the uniform load method of rating. If however, the load is not evenly distributed between each leg the WLL of the sling must be reduced by 30%.
- The WLL of a multi leg sling is always shown with the applicable angle between the legs or angle from the vertical. If the sling is used at a different angle, the WLL must be adjusted accordingly. Slings must not be used when the angle between the legs exceeds 120° or 60° from the vertical. (see WLL table for details)
- When a sling is wrapped around an edge, it is recommended that the radius of the corner is at least 2 x the chain size. When the radius is less than twice but still more than the chain size, the WLL must be reduced by 30% and it isn't