ROUNDSLING INFORMATION

Common Types of Sling Hitches

Hitch	Comments
Vertical Hitch	One end is placed on the hook, while the other end is attached directly to the load. A tagline should be used to prevent load rotation.
Choker Hitch	Sling passes through one end around the load and the other end is placed on the hook. Rated capacity is normally 80% of that for a vertical hitch. Load control is a potential problem with only one sling rigged in a choker hitch. Also, the choke point should always be on the sling body—not on the fittings, base of the fitting or tag.
Basket Hitch	The sling cradles the load while both ends are attached overhead. The rated capacity for a basket hitch is twice that for a vertical hitch. As with the choker hitch, more than one sling rigged in a basket hitch (or some other means) may be necessary to help ensure load control.

Increased sling tension as a function of sling-to-load angle

Angle "A" in degrees from horizontal	Tension Multiplier
90	1.000
85	1.004
80	1.015
75	1.035
70	1.064
65	1.104
60	1.155
55	1.221
50	1.305
45	1.414
40	1.555
35	1.742
30	2.000

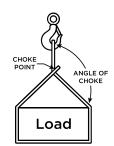


Multiply the load weight (per leg) by the tension factor to determine the increased tension of the sling leg(s)

Reductions in rated capacity as a function of angle of choke

Angle o (deg		Angle of Choke Reduction		
= or >	<	Factor		
120	180	1.000		
105	120	0.82		
90	105	0.71		
60	90	0.58		
0 60		0.50		

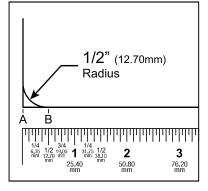
Actual Sling Capacity = Rated Capacity x Reduction Factor



The radii values apply to roundslings that are fully tensioned to their rated capacity regardless of the hitch.

When roundslings are tensioned to lower force values, the minimum radius values will reduce accordingly.

Fractional inches are rounded up to the nearest 1/16" (1.58 mm).



Minimum edge radii suitable for contact unprotected polyester roundslings

Sling Size		l Rated acity		mum Radii		mum Radii	Sling Width at Load		
3126	lbs.	kgs.	inch	mm	inch	mm	inch	mm	
1	2,600	1,200	0.14	3.55	3/16	4.76	0.97	24.63	
2	5,300	2,400	0.21	5.33	1/4	6.35	1.29	32.76	
3	8,400	3,800	0.26	6.60	5/16	7.93	1.66	42.16	
4	10,600	4,800	0.30	7.62	5/16	7.93	1.78	45.21	
5	13,200	6,000	0.33	8.38	3/8	9.52	2.00	50.80	
6	16,800	7,600	0.40	10.16	7/16	11.11	2.13	54.10	
7	21,200	9,600	0.41	10.41	7/16	11.11	2.62	66.54	
8	25,000	11,400	0.44	11.17	7/16	11.11	2.85	72.39	
9	31,000	14,100	0.50	12.70	1/2	12.70	3.15	80.01	
10	40,000	18,200	0.56	14.22	9/16	14.28	3.57	90.67	
11	53,000	24,100	0.67	17.01	11/16	17.46	4.00	101.60	
12	66,000	30,000	0.72	18.28	3/4	19.05	4.60	116.84	
13	90,000	40,900	0.87	22.09	7/8	22.22	5.22	132.58	

Suitable connection hardware sizes for Polyester Roundslings when used in Choker and Vertical hitches

	Roundsling		Minimum Hardware Size								
Sling Size	Rated Cap.	Rated Cap. Vert. Hitch		Stock Dia. or Thickness				Effective Contact Width			
0.20	lbs.	kgs.	in	mm	in	mm	in	mm	in	mm	
1	2,600	1,200	.39	9.90	7/16	11.11	.97	24.63	1	25.40	
2	5,300	2,400	.59	14.98	5/8	15.87	1.29	32.76	1-3/8	34.92	
3	8,400	3,800	.72	18.28	3/4	19.05	1.66	42.16	1-3/4	44.45	
4	10,600	4,800	.85	21.59	7/8	22.22	1.78	45.21	1-7/8	47.62	
5	13,200	6,000	.95	24.13	1	25.40	2.00	50.80	2	50.80	
6	16,800	7,600	1.12	28.44	1-1/8	28.57	2.13	54.10	2-1/8	53.97	
7	21,200	9,600	1.15	29.21	1-3/16	30.16	2.62	66.54	2-5/8	66.67	
8	25,000	11,400	1.25	31.75	1-1/4	31.75	2.85	72.39	2-7/8	73.02	
9	31,000	14,100	1.41	35.81	1-1/2	38.10	3.15	80.01	3-1/4	82.55	
10	40,000	18,200	1.60	40.64	1-5/8	41.27	3.57	90.67	3-5/8	92.07	
11	53,000	24,100	1.90	48.26	2	50.80	4.00	101.60	4	101.60	
12	66,000	30,000	2.05	52.07	2-1/8	53.97	4.60	116.84	4-5/8	117.47	
13	90,000	40,900	2.46	62.48	2-1/2	63.50	5.22	132.58	5-1/4	133.35	

Roundsling Removal from Service Criteria

- If Roundsling identification tag is missing or not readable
- Holes, tears, cuts, embedded materials, excessive abrasive wear, or snags that expose the core yarn of the Roundsling.
- Broken or damaged core yarn.
- · If Roundsling has been tied into one or more knots.
- · Acid or caustic burns of the Roundsling.
- · Melting, charring or weld spatter of any part of the Roundsling.



- Distortion, excessive pitting, corrosion or other damage to fitting(s).
- Broken or worn stitching in the cover which exposes the core yarn.
- Any conditions which cause doubt as to the strength of the Roundsling.

WHERE TO FIND ADDITIONAL INFORMATION:

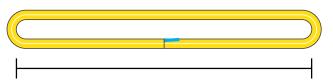
- WSTDA-RS-1 RECOMMENDED STANDARD SPECIFICATION FOR SYNTHETIC POLYESTER ROUNDSLINGS
- WSTDA-RS-1HP RECOMMENDED STANDARD SPECIFICATION FOR HIGH PERFORMANCE YARN ROUNDSLINGS
- WSTDA-RS-2 RECOMMENDED OPERATING AND INSPECTION MANUAL FOR SYNTHETIC POLYESTER ROUNDSLINGS
- ASME B30.9 SYNTHETIC ROUNDSLINGS: SELECTION, USE AND MAINTENANCE
- OSHA GUIDANCE ON SAFE SLING USE
 (HTTP://WWW.OSHA.GOV/DSG/GUIDANCE/SLINGS/SYNTH-ROUND.HTML)
- OSHA 29 CFR 1910.184 SLINGS
- RIGGING HANDBOOKS
- FORMAL TRAINING FROM CERTIFIED THIRD PARTY OR MANUFACTURER

BIG EASY HIGH PERFORMANCE ROUNDSLING





Overall Length



High Performance Roundslings are constructed using a continuous loop of UHMPE core yarns encased in a texturized nylon, double wall cover. This heavy duty cover helps to protect the load bearing core yarn from abrasion and increase the life of the sling.

Features & Benefits:

- · Vertical, Choker & Basket Hitch
- Vertical Capacities from 10,000 lbs. to 500,000 lbs.
- · Load bearing points can be rotated to extend life
- Lightweight: Ease of use compared to wire rope and chain
- Low Stretch: Approximately 1% at rated capacity
- · Highest capacity for the lightest weight
- Texturized Nylon Double Wall, Seamless Cover
 - » Helps protect core yarn from UV degradation
 - » Soft cover helps to prevent scratches to load surface
- Two sliding wear sleeves standard on all BHP slings

Manufacturing Tolerance:

+/-1"+ 2% of specified length

	RATED CAPACITY IN POUNDS									
Size	Vertical	Choker	Basket At 90°	Basket At 45°	Min. Length	Body DIA Relaxed (in.)	Width at Load (in.)	Weight Per Foot (lbs.)	Min. Hardware Diameter (in.)	Min. Edge Radii (in.)
BHP10	10,000	8,000	20,000	14,100	4′	1.00	1.60	0.45	0.69	.43
BHP20	20,000	16,000	40,000	28,000	4′	1.25	2.00	0.55	1.06	.63
ВНР30	30,000	24,000	60,000	42,000	6′	1.40	2.13	0.70	1.44	.75
BHP40	40,000	32,000	80,000	56,000	6′	1.75	2.75	0.82	1.50	.88
BHP50	50,000	40,000	100,000	70,000	8′	1.90	2.88	1.02	1.75	.88
ВНР60	60,000	48,000	120,000	84,000	8′	2.00	3.13	1.15	2.00	1.00
ВНР70	70,000	56,000	140,000	98,000	8′	2.15	3.25	1.29	2.19	1.13
ВНР80	80,000	64,000	160,000	113,000	8′	2.25	3.50	1.5	2.38	1.25
ВНР90	90,000	72,000	180,000	127,000	10′	2.50	3.88	1.64	2.38	1.25
BHP100	100,000	80,000	200,000	141,000	10′	2.75	4.25	1.77	2.50	1.38
BHP125	125,000	100,000	250,000	176,000	10′	3.00	4.88	2.15	2.63	1.50
BHP150	150,000	120,000	300,000	210,000	10′	3.25	5.25	2.49	2.88	1.50
BHP175	175,000	140,000	350,000	240,000	10′	3.50	5.75	3.12	3.13	1.75
BHP200	200,000	160,000	400,000	280,000	10′	3.75	6.13	3.46	3.38	1.75

^{*} Capacities available up to 500,000 lbs. in a Vertical Hitch. Please contact our office for a quote and more information on larger sizes

^{**} BHP10 is made using a Non Heavy Cover Jacket



WARNING: Do not exceed rated capacities. Sling capacity decreases as the angle from horizontal decreases. Slings should never be used at angles less than 30 degrees.