

# WIRE ROPE SLINGS

## CAPACITY CHART



ROPE DIAMETER	RATED CAPACITY - TONS = 2,000 LBS						EYE DIMENSIONS	
	VERTICAL	CHOKER HITCH	BASKET HITCH			A INCHES	B INCHES	
			U	60 DEGREE	45 DEGREE			30 DEGREE
1/4"	0.65	0.48	1.3	1.1	0.94	0.65	2	4
5/16"	1	0.74	2	1.8	1.4	1	2 1/2	5
3/8"	1.4	1.1	2.9	2.6	2.1	1.4	3	6
7/16"	1.9	1.4	3.9	3.4	2.8	1.9	3 1/2	7
1/2"	2.5	1.9	5.1	4.5	3.7	2.5	4	8
9/16"	3.2	2.4	6.4	5.6	4.6	3.2	4 1/2	9
5/8"	3.9	2.9	7.8	6.9	5.6	3.9	5	10
3/4"	5.6	4.1	11	9.7	7.9	5.6	6	12
7/8"	7.6	5.6	15	13	10	7.1	7	14
1"	9.8	7.2	20	18	14	9.8	8	16
1 1/8"	12	9.1	24	21	17	12	9	18
1 1/4"	15	11	30	26	21	15	10	20
1 3/8"	18	13	36	32	26	18	11	22
1 1/2"	21	16	42	37	30	21	12	24
1 5/8"	24	18	49	43	35	24	13	26
1 3/4"	28	21	57	50	41	28	14	28
2"	37	28	74	65	53	37	16	32

**SLING LOAD SELECTOR showing sling stresses at various angles**

All Angles Measured from Vertical (1,000 lb. Load)

All Angles Measured from Vertical (1,000 lb. Load) For Intermediate Angles Use Next Larger Angle

Example:  
This chart illustrates how the stress on a sling increases as the angle increases (all angles measured from the vertical).  
When one sling leg lifts 1,000 lbs. at 0 degrees, the sling stress is also 1,000 lbs. If the sling angle is increased to 45 degrees, the stress actually exerted on the sling would be 1,414 lbs., an increase of 41.4%.  
Should the sling angle be increased to 60°, the stress would be 2,000 lbs., or a 100% increase. At an 85° angle (extremely unlikely) sling stress increases 1,047%. With a load of 1,000 lbs. the sling stress would be 11,473 lbs.

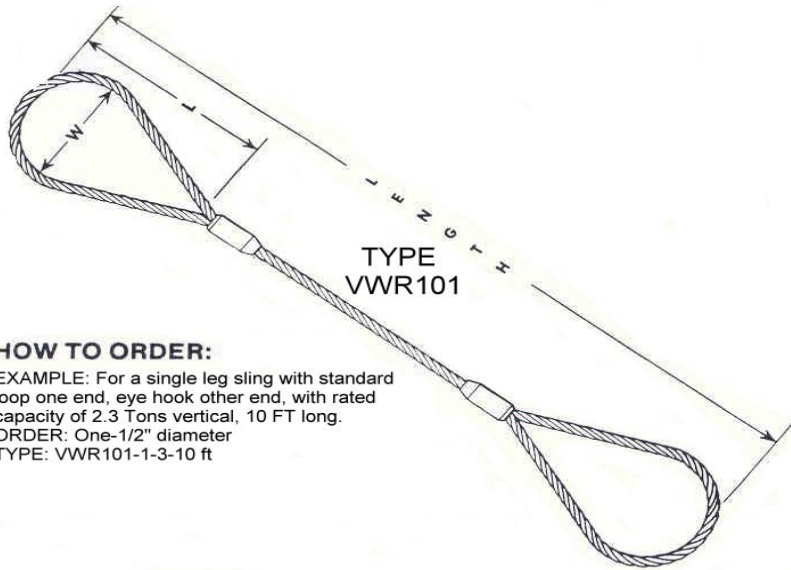
Sling charts on this page show rated capacities in tons of 2,000 lbs. with a design factor of 5. If in doubt of your exact angle always be SAFE. Use a higher angle on our Selector Chart. Always select a sling with the exact Rated Capacity or LARGER. Never use a sling with a lesser Rated Capacity. Always be safe - go safer - go to a larger Rated Capacity.

ANGLE	EQUIVALENT VERTICAL LOAD ON ONE LEG (LBS.)	INCREASE IN STRESS DUE TO SLING ANGLE*	TOTAL SLING STRESS (LBS.)	ANGLE
90°	1,000			90°
85°	1,000	1047%	11,473	85°
80°	1,000	476%	5,759	80°
75°	1,000	286%	3,863	75°
70°	1,000	192%	2,924	70°
65°	1,000	136%	2,366	65°
60°	1,000	100%	2,000	60°
55°	1,000	74.3%	1,743	55°
50°	1,000	55.5%	1,555	50°
45°	1,000	41.4%	1,414	45°
40°	1,000	30.5%	1,305	40°
35°	1,000	22.0%	1,220	35°
30°	1,000	15.4%	1,154	30°
25°	1,000	10.3%	1,103	25°
20°	1,000	6.4%	1,064	20°
15°	1,000	3.5%	1,035	15°
10°	1,000	1.5%	1,015	10°
5°	1,000	0.3%	1,003	5°
0°	1,000	0%	1,000	0°

Wire rope products will break if abused, misused, or overused. Regular inspection and maintenance are necessary. Consult industry recommendations and applicable codes before using.

# WIRE ROPE SLINGS

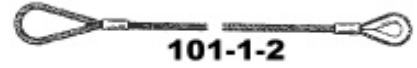
## TYPE VWR101 TAPERED SLEEVE ATTACHMENTS



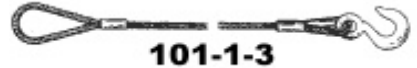
**HOW TO ORDER:**  
 EXAMPLE: For a single leg sling with standard loop one end, eye hook other end, with rated capacity of 2.3 Tons vertical, 10 FT long.  
 ORDER: One-1/2" diameter  
 TYPE: VWR101-1-3-10 ft



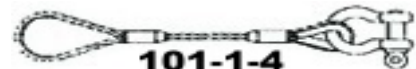
101-1-1



101-1-2



101-1-3



101-1-4



101-1-5



101-1-6

## DIMENSIONS FOR END FITTINGS

ROPE DIAMETER	LOOP* 101-1-1		THIMBLE 101-1-2		ALLOY HOOK 101-1-3	SHACKLE W/THIMBLE 101-1-4	SWIVEL HOOK 101-1-5	BUTTON FERRULE 101-1-6		RATED CAPACITIES VERTICAL
	WIDTH/IN.	LENGTH/IN.	WIDTH/IN.	LENGTH/IN.	SIZE TONS	SIZE IN.	SIZE TONS	DIAMETER	LENGTH	
1/4"	2"	4"	7/8"	1 5/8"	1	5/16"	1	0.58	1.2	.59 TONS
5/16"	2 1/2"	5"	1 1/16"	1 7/8"	1 1/2	3/8"	1 1/2	0.77	1.33	.92 TONS
3/8"	3"	6"	1 1/8"	2 1/8"	3	7/16"	3	0.77	1.69	1.3 TONS
7/16"	3 1/2"	7"	1 1/4"	2 3/8"	3	1/2"	3	1.03	1.94	1.8 TONS
1/2"	4"	8"	1 1/2"	2 3/4"	3	1/2"	3	1.16	2.17	2.3 TONS
5/8"	5"	10"	1 3/4"	3 1/4"	4 1/2	5/8"	4 1/2	1.42	2.89	3.6 TONS
3/4"	6"	12"	2"	3 3/4"	7	3/4"	7	1.55	3.25	5.1 TONS
7/8"	7"	14"	2 1/4"	4 1/4"	7	7/8"	7	1.8	3.86	6.9 TONS
1"	8"	16"	2 1/2"	4 1/2"	11	1"	11	2.05	4.36	9 TONS
1 1/8"	9"	18"	2 7/8"	5 1/8"	11	1 1/8"	11	2.3	4.81	11 TONS
1 1/4"	11"	22"	2 7/8"	5 1/8"	15	1 1/4"	15	2.56	5.42	13 TONS
1 3/8"	12"	24"	3 1/2"	6 1/4"	22	1 3/8"	22	2.75	6	16 TONS
1 1/2"	13"	26"	3 1/2"	6 1/4"	22	1 1/2"	22	3	6.5	19 TONS

\*STANDARD LOOP DIMENSIONS. OTHER SIZES FURNISHED WHEN SPECIFIED.

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**DO NOT EXCEED RATED CAPACITIES**