

# 6x19 Fiber & Steel Core Wire Rope Weight & Nominal Strength Charts

TrucknTow.com Product Specifications

# 6/19 Fiber-Core Wire Rope 6/19 Steel-Core Wire Rope

	Approx.	Nom. Strength
Diameter	wt./ft.	(tons of
(inches)	(lbs.)	2,000 lbs)
1/4	0.11	3.02
5/16	0.16	4.69
3/8	0.24	6.71
7/16	0.32	9.09
1/2	0.42	11.80
9/16	0.53	14.90
5/8	0.66	18.30
3/4	0.95	26.20
7/8	1.29	35.40
1	1.68	46.00
1-1/8	2.13	57.90
1-1/4	2.63	71.00
1-3/8	3.18	85.40
1-1/2	3.78	101.00
1-5/8	4.44	118.00
1-3/4	5.15	136.00
1-7/8	5.91	155.00
2	6.73	176.00
2-1/8	7.60	197.00
2-1/4	8.52	220.00

	Approx.	Nom. Strength
Diameter	wt./ft.	(tons of
<u>(inches)</u>	(lbs.)	2,000 lbs)
1/4	0.12	3.40
5/16	0.18	5.27
3/8	0.26	7.55
7/16	0.35	10.20
1/2	0.46	13.30
9/16	0.58	16.80
5/8	0.72	20.60
3/4	1.04	29.40
7/8	1.41	39.80
1	1.85	51.70
<u>1-1/8</u>	2.34	65.00
<u>1-1/4</u>	2.89	79.90
<u>1-3/8</u>	3.49	96.00
<u>1-1/2</u>	4.16	114.00
<u>1-5/8</u>	4.88	132.00
1-3/4	5.66	153.00
<u>1-7/8</u>	6.49	174.00
2	7.39	198.00
<u>2-1/8</u>	8.34	221.00
<u>2-1/4</u>	9.35	247.00



6/19 Fiber-Core Wire Rope



6/19 Steel-Core Wire Rope

## Nominal Strength versus Minimum Breaking Strength

A wire rope's nominal strength is the published catalog strength calculated by a standard procedure that is accepted by the wire rope industry. Wire rope manufacturers design wire rope to this strength, and the user should consider this strength when making calculations.

The minimum breaking strength (or minimum acceptance strength) is that strength that is two-and-a-half percent lower than the catalog or nominal strength. This tolerance is used to offset variables that occur during sample preparation and actual physical testing of a wire rope.

A rope with a nominal strength of 100,000 pounds would require an actual breaking load by test to destruction of at least 97,500 pounds. A minimum breaking strength of 100,000 pounds would require an actual breaking load by test to destruction of at least 100,000 pounds.

## Fiber versus Steel Core Wire Rope

Steel-core cables are 10% to 15% stronger than fiber-core cables and are more resistant to bending and crushing. Fiber-core cables are lighter and more flexible than steel-core cables, making them easier to handle.

Both styles are manufactured with a 6x19 construction. Each cable consists of 6 braids wrapped around the core, and each of the 6 braids contains 19 individual strands of steel.