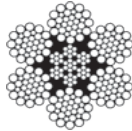


PRODUCT CATALOG

6x31 IWRC

- ▶ Fatigue resistant
- ▶ Abrasion resistant



The 6x36 classification of wire ropes includes standard 6 strand, round strand ropes with 27 through 49 wires per strand.

The 6x36 ropes are important for their fatigue resistance. This fatigue resistance is made possible by the greater number of small wires per strand.

Although there are exceptions for special applications, the constructions in 6x36 classification are primarily designed to be the most efficient for each rope diameter. As the rope size increases, for instance, a large number of wires can be used to achieve required fatigue resistance, and still those wires will be large enough to offer adequate resistance to abrasion.

Characteristics of Standard 6 x 36 Class ropes

In most rope sizes, only one 6 x 36 classification rope is made. These constructions were selected to provide fatigue resistance without having wires that are too small.

The greater number of wires in the 6 x 36 classification makes these ropes more susceptible to crushing. This can be minimized, however, by specifying an Independent Wire Rope Core (IWRC) and by using well designed sheaves, grooved drums and proper operating techniques.

6x31 IWRC Strength and Weights Chart

Diameter (in)	Approx. Wire Weight (lb/ft)	Minimum Breaking Force (tons of 2000 lbs.)		
		IPS	XIP	XXIP
1/4	0.116	2.94	3.40	
5/16	0.18	4.58	5.27	
3/8	0.26	6.56	7.55	8.30
7/16	0.35	8.89	10.2	11.2
1/2	0.46	11.5	13.3	14.6
9/16	0.59	14.5	16.8	18.5
5/8	0.72	17.9	20.6	22.7
3/4	1.04	25.6	29.4	32.4
7/8	1.42	34.6	39.8	43.8
1	1.85	44.9	51.7	56.9
1 1/18	2.34	56.5	65	71.5
1 1/4	2.89	69.4	79.9	87.9
1 3/8	3.50	83.5	96	106
1 1/2	4.16	98.9	114	125
1 5/8	4.88	115	132	146
1 3/4	5.67	133	153	169
1 7/8	6.50	152	174	192
2	7.39	172	198	217
2 1/8	8.35	192	221	244

2 1/4	9.36	215	247	272
2 3/8	10.4	239	274	
2 1/2	11.6	262	302	
2 5/8	12.8	288	331	
2 3/4	14.0	314	361	--
2 7/8	15.3	341	392	
3	16.6	370	425	
3 1/8	18.0	399	458	--
3 1/4	19.5	429	492	
3 3/8	21.0	459	529	--
3 1/2	22.7	491	564	
3 5/8	24.3	523	602	
3 3/4	26.0	557	641	--
3 7/8	27.7	591	680	
4	29.6	627	720	
4 1/8	31.7	658	757	
4 1/4	33.3	694	799	
4 3/8	35.4	734	844	
For comparison, click here to view 6x31 Fiber Core version.				

Union, a WireCo WorldGroup brand, produces wire rope for a variety of applications – each with their own exacting specifications. We employ the most experienced, talented, licensed engineers in the industry to design solutions for your application. Eight WireCo WorldGroup manufacturing operations and seven distribution centers in North America, plus manufacturing facilities in Mexico, Germany and China, give our customers unparalleled support and global reach. Find out for yourself why Union wire ropes have proven themselves time and time again in the field. **Union: Tested, Tough & True.**

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