

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.

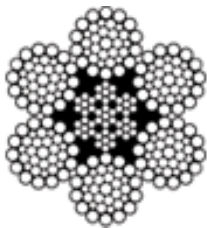
Characteristics of Standard 6 x 36 Class ropes

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.

6x36 IWRC Strength and Weights Chart (inches)

Fatigue resistant



Abrasion resistant

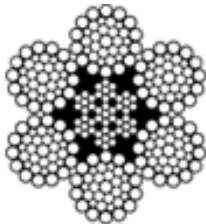
| Diameter (in) | Weight (lb/ft) | Minimum Breaking Force (tons of 2000 lbs.) | | |
|---------------|----------------|--|------|-------|
| | | IPS | EIPS | EEIPS |
| 1/4 | 0.116 | 2.94 | 3.40 | -- |
| 5/16 | 0.18 | 4.58 | 5.27 | -- |
| 3/8 | 0.26 | 6.56 | 7.55 | 8.30 |
| 7/16 | 0.35 | 8.89 | 10.2 | 11.2 |
| 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 1/8 | 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 |



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Fatigue resistant



Abrasion resistant

| Diameter (in) | Weight (lb/ft) | Minimum Breaking Force (tons of 2000 lbs.) | | |
|---------------|----------------|--|------|-------|
| | | IPS | EIPS | EEIPS |
| 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 | -- |

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