Saturn-12™

Saturn-12, has proven to be one of the longest lasting, most durable marine ropes available, increasing residual strength as much as 15-20% when compared with other HMPE lines and their conventional coatings.

Description

Since its introduction in 2010, Its proprietary coating improves abrasion resistance and has been enhanced for greater UV resistance. In addition, Saturn-12 is now made with Dyneema® SK78 fiber, the next generation in HMPE fiber technology. SK78 provides improved service life in applications where creep results from long-term static loads. This torque-free, flexible, and easy-to-handle construction is easy to inspect and splice in the field.

Product Code: 882

Manufacturer:

Technologies, Inc.

Samson Rope

Fiber (Core/Cover): Dyneema®

For sizes 1/4" – 1-1/4":

12- Strand Class II

Splice:

Specific Gravity: 0.98 (floats)

For sizes above 1-1/4": 12- Strand Class II Modified Tuck Bury

Features

- A size-for-size strength replacement for wire rope at only 1/7th the weight
- Decreased coefficient of friction at winch surfaces
- Easy to handle
- Easy to inspect
- Easy to splice
- Flexible
- Floats
- Improved performance
 over standard HMPE ropes
- Low creep
- Proprietary coating increases residual strength as much as 15-20%
- Proprietary coating reduces internal yarn to
- yarn abrasion
- UV resistant

Applications

- Face and Wing Wire
- Lifting Sling / Mining
- Shield Hauler
- Tug Mainline
- Tug Pendant
- Winch Line / Mining
- Winch Line / Tug
- Working Line / Mining





Saturn-12™

Specifications

| Diameter (in) | Circum. (in) | Weight per 100 ft. (lbs) | Average Strength (lbs) | Minimum Strength (lbs) | Diameter (mm) | Circum. (mm) | Weight per 100M | Average Strength (kg) | Minimum Strength (kg) | ISO 2307 Strength (mt) |
|------------------|-----------------|-----------------------------|---------------------------|---------------------------|------------------|-----------------|--------------------|--------------------------|--------------------------|---------------------------|
| 1/4 | 3/4 | 1.6 | 8,600 | 7,700 | 6 | 18 | 2.4 | 3,900 | 3,500 | 3.9 |
| 5/16 | 1 | 2.7 | 13,700 | 12,300 | 8 | 24 | 4.0 | 6,200 | 5,600 | 6.2 |
| 3/8 | 1-1/8 | 3.4 | 19,600 | 17,600 | 9 | 27 | 5.1 | 8,900 | 8,000 | 8.9 |
| 7/16 | 1-1/4 | 4.2 | 23,900 | 21,500 | 11 | 33 | 6.2 | 10,800 | 9,800 | 10.8 |
| 1/2 | 1-1/2 | 5.9 | 34,000 | 30,600 | 12 | 36 | 8.8 | 15,400 | 13,900 | 15.4 |
| 9/16 | 1-3/4 | 7.9 | 40,500 | 36,500 | 14 | 42 | 11.8 | 18,400 | 16,500 | 18.4 |
| 5/8 | 2 | 10.2 | 52,800 | 47,500 | 16 | 48 | 15.2 | 24,000 | 21,600 | 24.0 |
| 3/4 | 2-1/4 | 13.3 | 64,400 | 58,000 | 18 | 54 | 19.8 | 29,200 | 26,300 | 29.2 |
| 13/16 | 2-1/2 | 17.0 | 82,000 | 73,800 | 20 | 60 | 25.3 | 37,200 | 33,500 | 37.2 |
| 7/8 | 2-3/4 | 19.6 | 90,800 | 81,700 | 22 | 66 | 29.2 | 41,200 | 37,100 | 41.2 |
| 1 | 3 | 21.8 | 109,000 | 98,100 | 24 | 72 | 32.4 | 49,400 | 44,500 | 49.4 |
| 1-1/16 | 3-1/4 | 27.5 | 134,000 | 121,000 | 26 | 78 | 40.9 | 60,800 | 54,700 | 60.8 |
| 1-1/8 | 3-1/2 | 31.9 | 148,000 | 133,000 | 28 | 84 | 47.5 | 67,100 | 60,400 | 67.1 |
| 1-1/4 | 3-3/4 | 36.2 | 165,000 | 149,000 | 30 | 90 | 53.9 | 74,800 | 67,400 | 74.8 |
| 1-5/16 | 4 | 41.8 | 184,000 | 166,000 | 32 | 96 | 62.2 | 83,500 | 75,100 | 83.5 |
| 1-3/8 | 4-1/8 | 45.0 | 205,000 | 185,000 | 34 | 100 | 67.0 | 93,000 | 83,700 | 93.0 |
| 1-1/2 | 4-1/2 | 51.7 | 228,000 | 205,000 | 36 | 108 | 76.9 | 103,000 | 93,100 | 103 |
| 1-5/8 | 5 | 65.2 | 283,000 | 255,000 | 40 | 120 | 97.0 | 128,000 | 116,000 | 128 |
| 1-3/4 | 5-1/2 | 78.4 | 335,000 | 302,000 | 44 | 132 | 117 | 152,000 | 137,000 | 152 |
| 2 | 6 | 87.0 | 381,000 | 343,000 | 48 | 144 | 129 | 173,000 | 156,000 | 173 |
| 2-1/8 | 6-1/2 | 109 | 457,000 | 411,000 | 52 | 156 | 162 | 207,000 | 187,000 | 207 |
| 2-1/4 | 7 | 116 | 537,000 | 483,000 | 56 | 168 | 173 | 244,000 | 219,000 | 244 |
| 2-1/2 | 7-1/2 | 148 | 588,000 | 529,000 | 60 | 180 | 220 | 267,000 | 240,000 | 267 |
| 2-5/8 | 8 | 167 | 662,000 | 596,000 | 64 | 192 | 248 | 300,000 | 270,000 | 300 |
| 2-3/4 | 8-1/2 | 187 | 735,000 | 662,000 | 68 | 204 | 278 | 333,000 | 300,000 | 333 |
| 3 | 9 | 206 | 832,000 | 749,000 | 72 | 216 | 307 | 377,000 | 340,000 | 377 |
| 3-1/8 | 9-1/2 | 228 | 920,000 | 828,000 | 76 | 228 | 339 | 417,000 | 376,000 | 417 |
| 3-1/4 | 10 | 240 | 1,007,000 | 906,000 | 80 | 240 | 357 | 457,000 | 411,000 | 457 |
| 3-1/2 | 10-1/2 | 295 | 1,170,000 | 1,053,000 | 86 | 254 | 439 | 531,000 | 478,000 | 531 |

* ISO strength specifications are for unspliced rope. All other strength specifications are for spliced rope.

