

Marlow DATASHEET [®]

D12+ DM20

Marlow D12+ DM20 (MaxTech) is a premium and versatile "all round" rope utilising Dyneema® DM20. This superior product offers industry-leading strength, stiffness, durability and longevity in permanent load situations as a substitute for steel wire.

Manufactured using Dyneema® DM20 fibre, D12+ DM20 (MaxTech) exhibits ultra-low creep for deep water and permanent mooring applications where constant high load causes issues for traditional HMPE fibres.

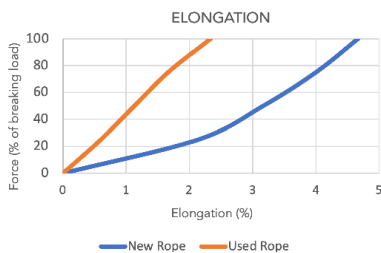
D12+ DM20 (MaxTech) has been designed to offer significantly improved strength, handling and service life and subsequently can provide a more cost effective solution compared to more traditional products.



| Nominal Diameter | | Mass (Weight) | | Minimum Linear Strength ISO 2307 | | | Minimum Spliced Strength | | | Grommet |
|------------------|---------|---------------|-----------|----------------------------------|-----------|-------|--------------------------|-----------|-------|---------|
| mm | Inch | kg/m | lb/100 ft | kg | lb | kN | kg | lb | kN | kN |
| 18 | 3/4 | 0.20 | 13 | 41,518 | 91,339 | 407 | 37,366 | 82,205 | 367 | 605 |
| 20 | 13/16 | 0.24 | 16 | 49,848 | 109,665 | 489 | 44,863 | 98,699 | 440 | 726 |
| 22 | 7/8 | 0.29 | 19 | 58,707 | 129,155 | 576 | 52,836 | 116,239 | 518 | 855 |
| 24 | 1 | 0.32 | 21 | 64,392 | 141,663 | 632 | 57,953 | 127,497 | 569 | 938 |
| 26 | 1 1/16 | 0.39 | 26 | 78,276 | 172,206 | 768 | 70,448 | 154,986 | 691 | 1,140 |
| 28 | 1 1/8 | 0.43 | 29 | 84,754 | 186,460 | 831 | 76,279 | 167,814 | 748 | 1,235 |
| 30 | 1 1/4 | 0.52 | 35 | 101,282 | 222,821 | 994 | 91,154 | 200,539 | 894 | 1,475 |
| 32 | 1 5/16 | 0.58 | 39 | 111,860 | 246,092 | 1,097 | 100,674 | 221,483 | 988 | 1,630 |
| 34 | 1 3/8 | 0.64 | 43 | 120,454 | 265,000 | 1,182 | 108,409 | 238,500 | 1,063 | 1,755 |
| 36 | 1 1/2 | 0.69 | 47 | 129,313 | 284,489 | 1,269 | 116,382 | 256,040 | 1,142 | 1,884 |
| 38 | 1 9/16 | 0.78 | 52 | 145,556 | 320,222 | 1,428 | 131,000 | 288,200 | 1,285 | 2,120 |
| 40 | 1 5/8 | 0.87 | 58 | 158,667 | 349,067 | 1,557 | 142,800 | 314,160 | 1,401 | 2,311 |
| 44 | 1 3/4 | 1.04 | 70 | 183,789 | 404,336 | 1,803 | 165,410 | 363,902 | 1,623 | 2,677 |
| 48 | 2 | 1.22 | 82 | 211,556 | 465,422 | 2,075 | 190,400 | 418,880 | 1,868 | 3,082 |
| 52 | 2 1/8 | 1.48 | 99 | 255,189 | 561,416 | 2,503 | 229,670 | 505,274 | 2,253 | 3,718 |
| 56 | 2 1/4 | 1.65 | 111 | 282,956 | 622,502 | 2,776 | 254,660 | 560,252 | 2,498 | 4,122 |
| 60 | 2 1/2 | 1.91 | 128 | 321,300 | 706,860 | 3,152 | 289,170 | 636,174 | 2,837 | 4,681 |
| 64 | 2 5/8 | 2.17 | 145 | 359,644 | 791,218 | 3,528 | 323,680 | 712,096 | 3,175 | 5,239 |
| 68 | 2 11/16 | 2.43 | 163 | 397,989 | 875,576 | 3,904 | 358,190 | 788,018 | 3,514 | 5,798 |
| 72 | 2 13/16 | 2.78 | 186 | 452,200 | 994,840 | 4,436 | 406,980 | 895,356 | 3,992 | 6,588 |
| 76 | 3 1/8 | 3.04 | 204 | 490,544 | 1,079,198 | 4,812 | 441,490 | 971,278 | 4,331 | 7,146 |
| 80 | 3 3/16 | 3.39 | 227 | 544,756 | 1,198,462 | 5,344 | 490,280 | 1,078,616 | 4,810 | 7,936 |

Ropes designed in accordance with ISO 10325:2018

Linear MBL refers to unspliced ropes determined in accordance with ISO2307:2019



| Dyneema® | Load | Temperature | Creep Rate | Creep Lifetime |
|----------|------|-------------|------------|----------------|
| SK75 | 20% | 16 Deg. C | 2.3% / yr | 7 Years |
| SK78 | 20% | 16 Deg. C | 0.5% / yr | 15 Years |
| SK99 | 20% | 16 Deg. C | 1.1% / yr | 10 Years |
| DM20 | 20% | 16 Deg. C | 0.01% / yr | 25 Years + |

Key Specifications:

- Material:** Dyneema DM20
- Construction:** 12 x 1 single braid construction
- Coating:** Marlow ArmourCoat Polyurathane
- Relative Density:** 0.97 (floats)
- Chemical Resistance:** Excellent resistance to most chemicals
- UV Resistance:** Very good
- Melting Point:** 140°C
- Critical Temperature:** 80°C (exposure to temperatures over this will result in permanent strength loss)
- Creep:** Creep is a factor of load, temperature and time. Increasing any of these factors will increase creep.

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Certificate Number 315
ISO 9001
ISO 14001