



Dyneema (HMPE) Rope Specifications

Overview

Dyneema (HMPE) rope, made from ultra-high-molecular-weight polyethylene, is one of the strongest and lightest synthetic ropes available. It's up to 15 times stronger than steel by weight, floats on water, and offers excellent resistance to abrasion, UV degradation, and chemicals.

Specifications Table

Diameter	Length	Weight	Break Load	SWL
2mm	100m	0.30kg	300kg	60kg
3mm	100m	0.50kg	550kg	110kg
4mm	100m	0.90kg	1,000kg	200kg
6mm	100m	1.80kg	2,100kg	420kg
8mm	100m	2.80kg	3,800kg	760kg
10mm	100m	4.20kg	6,000kg	1,200kg
12mm	100m	6.30kg	8,400kg	1,680kg
14mm	100m	8.20kg	10,500kg	2,100kg
16mm	100m	11.00kg	14,000kg	2,800kg

Key Features

- Exceptional strength-to-weight ratio
- Lightweight and floats on water
- Very low stretch under load
- Highly resistant to UV, abrasion, and most chemicals
- Minimal water absorption
- Working temperature range: -40°C to +70°C

Applications

- Marine and sailing: winch lines, tow ropes, anchor lines
- Off-road recovery: safer and lighter than steel wire
- Lifting and rigging: synthetic slings, lifting lines
- Military and defence: field lines and tactical gear

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- Rope access and rescue: hauling lines and safety ropes

