

Class II

Samson's patented DPX™ technology provides this high-performance, lightweight single braid with better grip.

FEATURES:

- > Good grip on capstans and H-bitts
- > Excellent abrasion resistance
- > Floats
- > Easily spliced

APPLICATIONS:

- > Heavy lift slings and grommets
- > Winch lines — standard and tapered
- > Primary and temporary vessel and barge mooring lines

SPECIFICATIONS:

Specific Gravity:
0.99

Elastic Elongation Percentage:
At % of break strength
10%.....0.65%
20%.....0.75%
30%.....0.90%

Splicing Procedures Required:

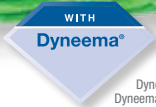
- > **EYE SPLICE**
12-Strand/Class II Rope
12-Strand Tuck-Bury Splice
- > **END-FOR-END SPLICE**
12-Strand/Class II Rope

Quantum-12 combines the best qualities of Dyneema® HMPE fiber with Samson's exclusive DPX™ fiber technology into a patented construction with enhanced grip. The DPX™ surface yarns provide the extra coefficient of friction needed in some rope applications. Quantum-12, like AmSteel® Blue, is a torque-free, buoyant, lightweight single braid that provides similar performance features with only a slight sacrifice in tensile strength.



Diameter* INCHES	Weight per 100 ft. POUNDS	Samson MBS** POUNDS	Diameter* MILLIMETERS	Weight per 100 meters KILOGRAMS	Samson MBS** METRIC TONS	ISO/BS EN919 METRIC TONS
2 in.	79.4 lb	314,000	48 mm	118 kg	142 t	158 t
2-1/8 in.	89.6 lb	357,000	52 mm	133 kg	162 t	180 t
2-1/4 in.	100 lb	403,000	56 mm	149 kg	183 t	203 t
2-3/8 in.	112 lb	453,000	57 mm	167 kg	205 t	228 t
2-1/2 in.	125 lb	506,000	60 mm	186 kg	229 t	255 t
2-5/8 in.	138 lb	563,000 lb	64 mm	205 kg	255 t	284 t
2-3/4 in.	155 lb	614,000 lb	68 mm	231 kg	278 t	309 t
3 in.	179 lb	726,000 lb	72 mm	266 kg	329 t	366 t
3-1/4 in.	213 lb	849,000 lb	80 mm	317 kg	385 t	428 t
3-5/8 in.	266 lb	1,050,000 lb	88 mm	396 kg	476 t	529 t
4 in.	324 lb	1,272,000 lb	96 mm	482 kg	577 t	641 t
4-1/4 in.	366 lb	1,428,000 lb	104 mm	545 kg	648 t	720 t
4-5/8 in.	447 lb	1,682,000 lb	112 mm	665 kg	763 t	848 t
5 in.	523 lb	1,956,000 lb	120 mm	778 kg	887 t	986 t
5-1/4 in.	577 lb	2,138,000 lb	128 mm	859 kg	970 t	1,078 t
5-1/2 in.	634 lb	2,316,000 lb	136 mm	943 kg	1,050 t	1,167 t
5-5/8 in.	737 lb	2,422,000 lb	141 mm	1,097 kg	1,099 t	1,221 t
6 in.	755 lb	2,703,000 lb	144 mm	1,123 kg	1,226 t	1,362 t
6-1/4 in.	820 lb	2,884,000 lb	158 mm	1,220 kg	1,308 t	1,453 t
6-5/8 in.	922 lb	3,221,000 lb	168 mm	1,372 kg	1,461 t	1,623 t
7 in.	1,030 lb	3,576,000 lb	178 mm	1,533 kg	1,622 t	1,802 t
7-1/4 in.	1,105 lb	3,813,000 lb	184 mm	1,644 kg	1,730 t	1,922 t
7-5/8 in.	1,188 lb	4,170,000 lb	194 mm	1,768 kg	1,891 t	2,102 t
8 in.	1,308 lb	4,563,000 lb	203 mm	1,946 kg	2,070 t	2,300 t

*Diameter measured under load **Spliced strength



Dyneema® is a registered trademark of Royal DSM N.V.
Dyneema is DSM's high-performance polyethylene product.



Samson
THE STRONGEST NAME IN ROPE

Considerations for Large Diameter Rope

Information specific to selecting, ordering and using Samson large diameter ropes.



CONSIDERATIONS IMPACTING STRENGTH

Connecting hardware:

- > The size of connecting hardware (i.e., thimbles, shackles, links, etc.) relative to the rope can impact rope strength.
- > For grommet and endless loop configurations Samson recommends a 1.6x multiplier for determining grommet strength. However, this can be greatly impacted by hardware size, and attention should be given when calculating theoretical strength values.

For grommets used in static applications Samson recommends a **MINIMUM diameter for connecting hardware of 3x the rope's diameter:**

- > This D/d ratio impacts the grommet and rope strength, and care should be taken in the design and selection of rigging hardware.

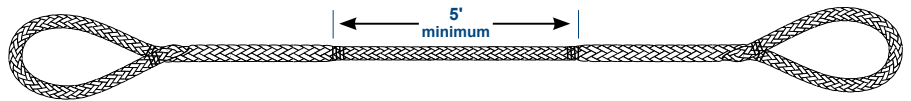
CONSIDERATIONS IMPACTING ELONGATION

Elongation characteristics vary for new and broken-in ropes:

- > Elastic elongation shown represents properties for broken-in rope.
- > For details on elongation characteristics, please contact customer service or engineering.

CONSIDERATIONS FOR ORDER PLACEMENT

- > The minimum order length requirement is 100 feet. Orders between 100 and 300 feet will be accepted with an additional set-up charge.
- > If the required strength is not listed in the charts above, please contact Samson customer service for assistance.



CONSIDERATIONS FOR SPLICING & RIGGING

Samson recommends a minimum distance of 5 feet between the ends of each splice:

- > Some applications may require shorter lengths. Careful consideration should be given to ensure that splices do not come into contact with any bearing points under tension.
- > The distance required between splices (clear rope) will impact the minimum sling fabrication length. All hardware and connections should be figured into the overall length of the rope prior to designing the final sling configuration.
- > Rope will increase in diameter in the splice area. This change is on average 1.75 times the ropes diameter.