



Shark Byte 12

Shark Byte 12 is a 12-strand single braid product where the individual strands are a composite of copolymer olefins mixed randomly with Vectran LCP (Liquid Crystal Polymer) fiber. This product is the first synthetic rope ever designed from the ground up to resist shark-bite damage. By spreading the high-modulus Vectran fiber over a larger than required cross-sectional area to achieve a given strength and mixing it with a “tough to cut” lower modulus fiber, greater resistance to bite damage can be achieved.

Shark Byte 12 has successfully and extensively replaced wire on DART buoys, making them more easily serviced. Most importantly, this product is very hard to cut through and is also very easy to splice, entirely torque free, neutrally buoyant and supple in even sub-zero temperatures. This is especially important when line is near sharks using their teeth. Typically the residual strength of an attacked rope is in excess of 40% of a new rope’s published strength.

Specifications

Diameter Inches	Diameter mm	Weight Lbs/100ft	Weight Kg/100m	Average Break Strength* Lbs	Average Break Strength* Kg	Minimum Spliced Break Strength* Lbs	Minimum Spliced Break Strength* Kg	Ultimate Energy Absorption Ft-Lbs/Cft	Ultimate Energy Absorption Ft-Lbs/Lb	Estimated Residual Strength* %
1/2	13	4.3	6.4	9,200	4,175	8,280	3,758	16,701	3,884	32
3/4	19	10.4	15.5	22,800	10,350	20,520	9,315	40,393	3,884	42
1	25	19.5	29.0	42,000	19,065	37,800	17,159	75,738	3,884	50
1 1/8	29	25	37.2	48,000	21,790	43,200	19,611	97,100	3,884	72

Specific Gravity: 1.10

Shark Byte 12 is neutrally buoyant. The theoretical specific gravity of the combined fibers is greater than water, i.e. >1.0, interstitially trapped air may affect the actual value for buoyancy.

* Knots and abrupt bends significantly reduce the strength of all ropes and lower maximum working load.

** The estimated residual strength is from laboratory and tank bite tests and may not represent the effects during actual use.