Synthetic Shackle/Tandem Stopper Assembly





Synthetic Shackle

Synthetic Shackle is made from our Ultrex 12-strand High Modulus Polyethylene HMPE fiber and is Maxijacket High Performance coated for structural firmness and increased abrasion resistance. It is lightweight and offers a quick connection with no tools required.

Specifications Minimum Average Work Minimum Knot Maximum Diameter Open Break Load Increment Diameter Diameter** Length* Strength 5:1 Inches (mm) Inches Inches Inches Inches Lbs Lbs 1/4 (6) 2 1.1 1.2 11,200 2,240 5/16 (8) 9 2 1.4 1.5 23,000 4,600 3/8 2 34,000 6,800 (10)11 17 18 7/16 12 4 2.0 2.0 43,700 8,740 (11)1/2 (13)14 4 2.2 2.5 63.600 12,720 9/16 (14)16 4 2.5 2.8 76,500 15,300 5/8 18 4 2.8 3.1 90,100 18,020 (16)3/4 (19)21 6 3.4 3.8 127,500 25,500 7/8 (22)25 6 4.0 4.4 166,600 33,320 6 1 (25)28 4.5 5.0 204,000 40,800 Knot 1-1/8 (29)6 5.0 5.5 251,600 50,320 1-1/4 35 8 5.7 292,400 58,480 (32)6.0 *Open length of the shackle 1-1/2 (38)43 8 6.8 7.2 391,000 78,200 describes the length as 1-5/8 (41)47 8 7.5 8.0 484,500 96,900 shown in the image above, 2 9.0 9.5 663,000 132,600 (51)omitting the knot.

^{**} Maximum diameter indicates the diameter of an object that the shackle can be closed around. Values represented are based on the minimum open lengths shown.



Tandem Stopper Assembly

An appropriately sized Tandem Stopper Assembly is the only recommended midspan termination technique for Unitrex. When properly configured, it is rated to the full working load of the underlying Unitrex (see load rating table below). Other conventional termination devices/techniques have been demonstrated to cause an unacceptable amount of damage to Unitrex when tested.

The Tandem Stopper Assembly will be packaged to include all necessary materials and hardware for installation, including a single shackle matched to the total assembly working load. connecting sling, allowing the load to be evenly shared between the two applied Stoppers.

Unitrex Diameter		Working Load	
Inches	(mm)	Lbs	Kg
0.44	(11)	5,000	2,268
0.53	(13)	6,500	2,948
0.58	(15)	8,500	3,856
0.63	(16)	10,625	4,819
0.71	(18)	12,625	5,727
0.84	(21)	18,375	8,335
1.00	(25)	25,000	11,340
1.15	(29)	31.250	14.175

Larger sizes available, contact Yale for details.