

SYNTHETIC ROPE



Part No. 17-159

DESCRIPTION

Wurtec's **Synthetic Rope** is a 12-strand single braid construction with each strand consisting of a lightweight polyolefin fiber core surrounded by high-tenacity polyester fiber. Compared to traditional manila rope, this unique strand design produces a rope that is stronger, lower-weight, non-rotational, and rot-resistant. Those benefits coupled with the ability to splice easily, superior abrasion resistance, and excellent handling properties make Synthetic Rope a safer alternative to natural fiber ropes such as manila.

Part No.	Size (in · mm)	Min. Breaking Strength (lb · kg)	Length (ft · m)	Weight (lb · kg)
17-159	3/4 · 18	14000 · 6350	300 · 91.4	45 · 20.4
17-160	3/4 · 18	14000 · 6350	600 · 182.4	90 · 41
17-161	5/8 · 16	9800 · 4445	600 · 182.4	90 · 41
17-162	3/4 · 18	14000 · 6350	1200 · 365.8	180 · 82

Working Loads

No blanket safe working load (SWL) recommendations can be made for any line because SWLs must be calculated based on application, conditions of use, and potential danger to personnel among other considerations. It is recommended that the end user establish working loads and safety factors based on best practices established by the end user's industry; by professional judgment and personal experience; and after thorough assessment of all risks. The SWL is a guideline for the use of a rope in good condition for non-critical applications and should be reduced where life, limb, or valuable property is involved, or in cases of exceptional service such as shock loading, sustained loading, severe vibration, etc. The Cordage Institute specifies that the SWL of a rope shall be determined by dividing the Minimum Tensile Strength of the rope by a safety factor. The safety factor ranges from 4 to 12 for non-critical uses and is typically set at 10 to 15 for life lines.

Working Loads	
No Knot	100%
Figure 8	75-80%
Bowline	70-75%
Double Overhand Bend	65-70%
Ring Bend	60-70%
Clove Hitch	60-65%
Overhand	60-65%
Two Half Hitches (tested over 16mm diameter ring)	60-70%
Square Knot	43-70%