

Rochester Wire & Cable, LLC

Recommended Spooling Tensions (Mono-Conductor)

Size	Weight/Air	Breaking Strength	1st Layer	2nd Layer	3rd Layer	Minimum Tension*
3/16"	65 lbs.	3900 lbs.	500 lbs.	800 lbs.	1,200 lbs.	500 lbs.
7/32"	97 lbs.	6,100 lbs.	800 lbs.	1,200 lbs.	2,000 lbs.	800 lbs.
1/4"	117 lbs.	6,500 lbs.	850 lbs.	1,300 lbs.	2,300 lbs.	800 lbs.
9/32"	158 lbs.	10,300 lbs.	1,100 lbs.	2,000 lbs.	3,200 lbs.	1,300 lbs.
5/16"	190 lbs.	12,400 lbs	1,200 lbs.	2,500 lbs.	4,000 lbs.	1,500 lbs.
3/8"	263 lbs.	14,600 lbs.	1,900 lbs.	3,000 lbs.	5,000 lbs.	1,800 lbs.
7/16"	318 lbs.	19,600 lbs	2,500 lbs.	4,000 lbs.	6,000 lbs.	2,500 lbs.

Recommended Spooling Tension (Multi-Conductor)

Size	Weight/Air	Breaking Strength	1st Layer	2nd Layer	3rd Layer	Minimum Tension*
5/16"	183 lbs.	11000 lbs.	1,400 lbs.	2,200 lbs.	3,500 lbs.	1,400 lbs.
3/8"	240 lbs.	(3 Cdr.) 14,900 lbs.	2,000 lbs.	3,000 lbs.	4,500 lbs.	2,000 lbs.
3/8"	260 lbs.	(7 Cdr.) 13,000 lbs.	2,000 lbs.	3,500 lbs.	5,000 lbs.	1,600 lbs.
7/16"	324 lbs.	18300 lbs.	2,600 lbs.	4,000 lbs.	6,000 lbs.	2,400 lbs.
15/32"	347 lbs.	18300 lbs.	2,600 lbs.	4,000 lbs.	6,000 lbs.	2,400 lbs.
.472"	393 lbs.	24,500 lbs	3,000 lbs.	5,000 lbs.	7,000 lbs.	2,500 lbs.
.484"	420 lbs.	27,600 lbs.	3,000 lbs.	5,500 lbs.	7,000 lbs.	2,500 lbs.
.490"	412 lbs.	26,500 lbs.	3,000 lbs.	5,500 lbs.	7,000 lbs.	2,500 lbs.

* Maintain the 3rd layer tension until reaching mid point of cable length. Then reduce tension by cable weight every 1Kft until reaching minimum tension.

Note: Maintaining recommended spooling tensions is a critical part of the spooling operation. Failure to maintain adequate tension can cause severe damage, such as crushed cable and/or dielectric failure. It is also recommended that spooling operations be done by adequately trained and experienced personnel.