



VFP-876 Tubing

Very Flexible Polyolefin

Data Sheet

Product Description

3M™ VFP-876 is the most flexible of the heat-shrinkable, polyolefin tubings. Rated at 135°C, VFP-876 Tubing has been engineered to offer a low shrink temperature of 100°C (212°F). This allows the tubing to shrink rapidly, thereby minimizing heat exposure and possible damage to sensitive substrate materials or components.

VFP-876 Tubing meets MIL-R-46846, Type V and AMS-3587 and is UL Recognized (ULFile Nos. E-39100 and E-69751). It is rated for continuous operation from -55°C (-67°F) to 135°C (275°F) and withstands elevated temperatures to 300°C (572°F) for brief periods.

Typical Applications

The extra flexibility and low shrink temperature of VFP-876 Tubing make it ideal for shrink-fit jacketing and insulation of flexible wire bundles and sensitive components.

Shrink Ratio

VFP-876 Tubing has a 2:1 shrink ratio. When freely recovered, the tubing will shrink to 50% of its as-supplied internal diameter. The recovered wall thickness of the tubing is proportional to the degree of recovery. High expansion-ratio VFP-876 Tubing is available subject to factory quotation.

Standard Colors

VFP-876 (flame retardant)—black, white and yellow. Other colors and clear available subject to factory quotation.

Standard Packaging

Four-foot lengths or large spools. Cut pieces available subject to factory quotation.

Ordering Information

Order VFP-876 by product name, size equivalent to expanded inside diameter, package type and color. Always order the largest size that will shrink snugly over the item to be covered.

Example: VFP-876, 1/4," 4 ft., white.

Standard Sizes and Dimensions

Ordering Size	Expanded I.D. (Minimum)		Recovered I.D. (Maximum)		Recovered Wall Thickness (Nominal)	
	in.	(mm)	in.	(mm)	in.	(mm)
3/64	.046	(1,17)	.023	(0,58)	.016	(0,41)
1/16	.063	(1,60)	.031	(0,79)	.017	(0,43)
3/32	.093	(2,36)	.046	(1,17)	.020	(0,51)
1/8	.125	(3,18)	.062	(1,57)	.020	(0,51)
3/16	.187	(4,75)	.093	(2,36)	.020	(0,51)
1/4	.250	(6,35)	.125	(3,18)	.025	(0,64)
3/8	.375	(9,53)	.187	(4,75)	.025	(0,64)
1/2	.500	(12,70)	.250	(6,35)	.025	(0,64)
3/4	.750	(19,05)	.375	(9,53)	.030	(0,76)
1	1.000	(25,40)	.500	(12,70)	.035	(0,89)
1-1/2	1.500	(38,10)	.750	(19,05)	.040	(1,02)
2	2.000	(50,80)	1.000	(25,40)	.045	(1,14)

Typical Properties

Applicable Specification

MIL-R-46846, Type V; ULFile E-39100, E-69751; CSA LR38227

Physical

Tensile Strength 2100 PSI
 Ultimate Elongation 450%
 Longitudinal Change ±5%
 Secant Modulus (2%) 11,000 PSI
 Specific Gravity 1.3
 Heat Aging Elongation (168 hrs. @ 175°C)(200% min.) 250%
 Heat Shock No dripping, (4 hrs. @ 250°C) cracking, passes mandrel wrap test
 Low Temperature Flexibility (4 hrs. @ -55°C) No cracking
 Flammability Self-extinguish meets UL 224 All-Tubing Flame Test

Electrical

Dielectric Strength 800 V/mil
 Volume Resistivity 10¹⁴ ohm-cm

Chemical

Corrosive Effect Non-corrosive
 Solvent Resistance
 Tensile Strength 750 PSI
 Dielectric Strength 400 V/mil
 Water Absorption 0.2%
 Fungus Resistance Non-nutrient

Technical information provided consists of typical product data and should not be used for specification purposes. Unless otherwise noted, all tests are performed at room temperature.