

3M™ Heat Shrink Tubing VTN-200

Modified Fluoroelastomer

Data Sheet

September 2019

Product Description

3M™ Heat Shrink Tubing VTN-200 is highly abrasion and cut-through resistant and can withstand a wide variety of fuels, lubricants, acids and highly corrosive fluids at temperatures up to 200°C. In addition to its high continuous operating temperature and chemical-resistance properties, this tubing is very flexible and is easily marked by hot-stamp or printwheel methods. When heated in excess of 175°C (347°F), 3M VTN-200 tubing rapidly shrinks to a skintight fit. 3M VTN-200 tubing is rated for continuous operation from –55°C (–67°F) to 200°C (392°F).

Regulatory Information

For RoHS and REACH information, please visit www.3M.com/regs

Typical Applications

Because of its excellent high temperature fluid performance, 3M VTN-200 tubing is often used to protect wiring and component covers in aircraft/aerospace applications including electronic control systems and hydraulic fluid transport mechanisms and in chemical plants.

Shrink Ratio

3M VTN-200 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 is proportional to the degree of recovery.

Standard Color

Black

Availability

Standard Packaging

Spools

Order 3M Heat Shrink Tubing VTN-200 by product name, size equivalent to the expanded inside diameter, package type and color. Always order the largest size that will shrink snugly over the component to be covered.
Example: VTN-200, 3/16", black, spools.

Please contact your local distributor; available from 3M.com/oem [Where to Buy] or call 1-800-676-8381.

3M™ Heat Shrink Tubing VTN-200

Standard Sizes and Dimensions

Ordering Size	Expanded I.D. (Minimum)		Recovered I.D. (Maximum)		Recovered Wall Thickness (Nominal)	
	In.	(mm)	In.	(mm)	In.	(mm)
1/8	.125	(3,18)	.062	(1,57)	.030	(0,76)
3/16	.187	(4,75)	.093	(2,36)	.035	(0,89)
1/4	.250	(6,35)	.125	(3,18)	.035	(0,89)
3/8	.375	(9,53)	.187	(4,75)	.035	(0,89)
1/2	.500	(12,70)	.250	(6,35)	.035	(0,89)
5/8	.625	(15,88)	.312	(7,92)	.042	(1,07)
3/4	.750	(19,05)	.375	(9,53)	.042	(1,07)
7/8	.875	(22,23)	.438	(11,11)	.049	(1,24)
1	1.000	(25,40)	.500	(12,70)	.049	(1,24)
1-1/4	1.250	(31,75)	.625	(15,88)	.055	(1,40)
1-1/2	1.500	(38,10)	.750	(19,05)	.055	(1,40)
2	2.000	(50,80)	1.000	(25,40)	.065	(1,65)

Typical Properties

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.

Application Specifications: AS23053/13*

*Formerly MIL-I-23053/13, MIL-DTL-23053/13 and SAE-AMS-DTL-23053/13

Physical Property	Typical Value US units (metric)
Tensile Strength	2400 PSI
Ultimate Elongation	450%
Longitudinal Change	+1, -10%
Specific Gravity	1.7
Operating Temperature Range	-55°C to +200°C
Shrink Temperature (Min.)	175°C (347°F)
Low Temperature Flexibility 4 hrs @ -55°C	No cracking
Flammability	Self-extinguish
Electrical Property	Typical Value US units (metric)
Dielectric Strength	500 V/mil
Volume Resistivity	10 ¹² ohm/cm
Chemical Property	Typical Value US units (metric)
Corrosion Resistance	Non-corrosive
Fuel & Oil Resistance	Excellent
Solvent Resistance	Excellent
Abrasion Resistance	Excellent
Acids & Alkalis Resistance	Excellent

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Shelf Life & Storage

3M™ Heat Shrink Tubing VTN-200 has a 5-year shelf life from date of manufacture when stored in a humidity controlled storage (10°C/50°F to 27°C/80°F and <75% relative humidity).

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