

3M™ Heat Shrink Tubing PSTH

Elastomeric Polyester, Flexible

Data Sheet

November 2018

Description	3M™ Heat Shrink Tubing PSTH is a high performance, rugged heat shrinkable tubing designed for harsh operating conditions. The tubing is made from flexible elastomeric polyester and has a continuous operating temperature range of -55°C (-70°F) to 150°C (302°F). 3M PSTH tubing is resistant to a wide range of solvents and chemicals including aviation fuel, diesel fuel, lubricating oils and hydraulic fluid. 3M PSTH tubing is specifically designed to pass the SC-X1511C military specification but also meets the functional requirements of MIL-DTL-23053/16.
Agency Approvals & Self Certifications	Meets requirements of: <ul data-bbox="451 835 1260 949" style="list-style-type: none">• AS23053/16*• SC-X-1511• For RoHS and REACH information, please visit www.3M.com/regs <p data-bbox="451 987 1409 1016">*Formerly MIL-I-AS23053/16, MIL-DTL-23053/16 and SAE-AMS-DTL-23053/16</p>
Typical Applications	3M PSTH tubing is primarily designed for wire harnessing applications on military ground vehicles. It was primarily developed for the M-1 tank program, but is well suited for any application where conditions call for a high performance heat shrink tubing, particularly where the tubing will be exposed to petroleum based fluids. 3M PSTH tubing is also an excellent choice for heavy duty equipment and off-road vehicles.
Shrink Ratio	3M PSTH 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.

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Standard Sizes and Dimensions

Ordering Size	Expanded I.D. (Minimum)		Recovered I.D. (Maximum)		Recovered Wall Thickness (Nominal)	
	In.	(mm)	In.	(mm)	In.	(mm)
3/16	.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)	.250	(6,35)	.042	(1,07)
7/8	.875	(22,23)	.437	(11,10)	.045	(1,14)
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)
2 1/2	2.500	(63,50)	1.250	(31,75)	.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.

Physical Property	Typical Value US units (metric)
Tensile Strength	2200 PSI
Ultimate Elongation	350%
Longitudinal Change	+2, -8%
Specific Gravity	1.6
Operating Temperature Range	-55°C to +150°C
Shrink Temperature (Min.)	170°C (338°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	7x10 ¹⁴ 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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Standard Colors Black

Shelf Life & Storage 3M™ Heat Shrink Tubing PSTH has a 4-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).

Availability **Standard Packaging**

Spools

Order 3M PSTH tubing 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: PSTH, 3/8", black, spools.

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

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