

Thin wall heat shrink tube

S5-PVDF-175 175°C Semi-rigid PVDF Thin Wall Heat Shrink Tube

Introduction

A flame-retardant, semirigid, very thin wall insulation tube. Suitable for applications requiring high-temperature performance, outstanding abrasion and cut-through resistance, superior chemical and solvent resistance properties. Transparent tubing for easy see-through inspection.

Feature

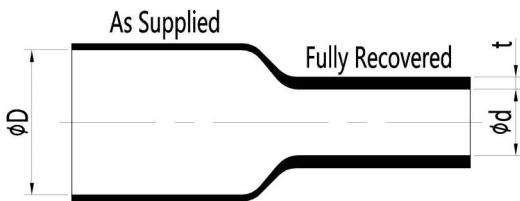
- Operating temperature: -55 to 175°C
- Minimum full recovery temperature: 175°C
- Environmental friendly, RoHS compliant
- Shrink ratio: 2:1
- Standard Color: Clear
- Excellent flame retardant

Dimension

Part No. S5-PVDF-175	As supplied(mm)	After recovered (mm)	
	Inner diameter D (min.)	Inner diameter d (max.)	Wall thickness t (nom.)
1.2/0.6	1.2	0.6	0.25
1.6/0.8	1.6	0.8	0.25
2.4/1.2	2.4	1.2	0.25
3.2/1.6	3.2	1.6	0.25
4.8/2.4	4.8	2.4	0.25
6.4/3.2	6.4	3.2	0.30
9.5/4.8	9.5	4.8	0.30
12.7/6.4	12.7	6.4	0.30
19.1/9.5	19.1	9.5	0.43
25.4/12.7	25.4	12.7	0.48
38.1/19.1	38.1	19.1	0.51
50.8/25.4	50.8	25.4	0.58

Ordering Note: Please order according to "model-specification-color", such as S5-PVDF-175-9.5/4.8-X

Color: Clear (-X) standard, Black (-0), White (-9) optional



Technical Data

Property	Test Method	Requirement
Density	ASTM D2671	$\leq 1.80 \text{ g/cm}^3$
Longitudinal Change	ASTM D2671	-10% to +5%
Tensile strength	ASTM D2671	$\geq 34.5 \text{ MPa}$
Ultimate elongation	ASTM D2671	$\geq 150\%$
Secant modulus (expanded)	ASTM D2671	$\geq 690 \text{ MPa}$
Clarity Stability (175°C/24h)	ASTM D2671	The markings in the sample are clearly visible
Low-temperature flexibility (-55°C/4h)	AMS-DTL-23053/8	No cracking
Heat shock (300°C/4h)	AMS-DTL-23053	No dripping, flowing or cracking
Heat resistance (250°C/168h)	ASTM D2671	
Ultimate elongation		$\geq 50\%$
Vacuum Outgassing	ASTM E 595	
TML (Total Mass Loss)		$\leq 1.0\%$
VCM (Volatile Condensable Material)		$\leq 0.1\%$
Dielectric strength	ASTM D2671	
Sizes 1.2/0.6 through 12.7/6.4		$\geq 31.5 \text{ kV/mm}$
Sizes 19.1/9.5 through 76.2/38.1		$\geq 23.6 \text{ kV/mm}$
Volume resistivity	ASTM D2671	$\geq 1 \times 10^{13} \Omega \cdot \text{cm}$
Water absorption (23°C/24h)	ASTM D2671	$\leq 0.5\%$
Copper mirror corrosion (175°C/16h)	ASTM D2671 Procedure A	Non-Corrosive
Copper Contact (175°C/168h)	ASTM D 2671 Procedure B	No pitting or blackening of copper
Ultimate elongation	ASTM D2671	$\geq 100\%$
Flammability (Average Time of Burning)	UL224	$\leq 15 \text{ seconds}$
Fungus Resistance	ISO 846 Method B	
Tensile Strength	ASTM D2671	$\geq 34.5 \text{ Mpa}$
Ultimate Elongation		$\geq 150\%$
Dielectric Strength		
Sizes 1.2/0.6 through 12.7/6.4		$\geq 31.5 \text{ kV/mm}$
Sizes 19.1/9.5 through 76.2/38.1		$\geq 23.6 \text{ kV/mm}$
Fluid Resistance	ASTM D2671	
24 hours at $23 \pm 3^\circ\text{C}$ ($73 \pm 5^\circ\text{F}$)		
JP-8 Fuel (MIL-T-83133)		
Skydrol* 500, Hydraulic Fluid (MIL-H-5606)		
Aviation Gasoline 100/130 (ASTM D910)		
Salt Water (5% salt)		
Anti-icing Fluid (AMS1424)		
Lubricating Oil (MIL-L-7808)		
Tensile strength		$\geq 34.5 \text{ Mpa}$
Dielectric Strength		
Sizes 1.2/0.6 through 12.7/6.4		$\geq 27.6 \text{ kV/mm}$
Sizes 19.1/9.5 through 76.2/38.1		$\geq 19.7 \text{ kV/mm}$