

**Part Number** FKM

**Header** FKM High Temperature Fluoroelastomer Heat Shrink Tubing

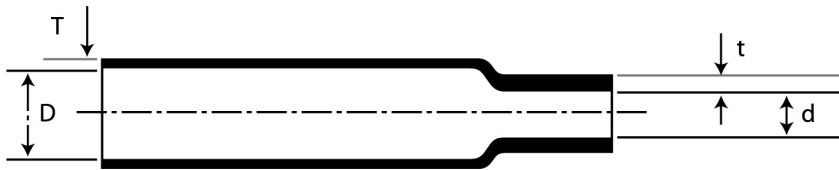
**Description** Thermosleeve USA FKM offers excellent chemical resistant properties and maintains its mechanical strength even at high temperatures. Manufactured using “Viton” Fluoroelastomer compound, FKM heat shrink tubing is flame retardant and has a minimum shrink temperature rating of 175 degrees C (347 degrees F).

**Agency Approval & Compliance** UL, cUL, ROHS, Halogen free, SAE, MIL Spec, Flame Retardant, REACH, VW1

**Application** FKM is the perfect heat shrink tubing solution for protecting a wide assortment of wiring and component covers in a broad range of aircraft/aerospace applications. FKM tubing is also ideal for those applications involving electronic control systems and hydraulic fluid transport mechanisms. Superior in both its chemical resistance properties and its ability to perform in high continuous operating temperatures, this incredibly resilient tubing is also highly abrasive and cut-through resistant. FKM tubing can easily withstand any potential damage that could be caused by an array of fuels, lubricants, acids, and other exceedingly corrosive fluids at extreme temperatures.

Shrink Ratio and Operating Temperature FKM has a 2:1 shrink ratio and when fully recovered, the 2:1 material will shrink to one half (50%) of its original supplied diameter.

FKM operating temperature range -55 degrees C (-67 degrees F) to 200 degrees C (392 degrees F)

**Standard Sizes and Dimension**

**FKM Fluoroelastomer Heat Shrink Tubing**

Size (inch)	Inside Diameter (mm)		Recovered Wall (mm) (t)	Standard Length (m/spool)
	Minimum Expanded as Supplied (D)	Maximum Recovered after Heating (d)		
1/8	3.2	1.6	0.76	50
3/16	4.8	2.4	0.84	50
1/4	6.4	3.2	0.89	50
3/8	9.5	4.8	1.02	50
1/2	12.7	6.4	1.22	30
3/4	19	9.5	1.45	30
1	25.4	12.7	1.78	30
1 1/2	38.1	19.1	2.41	1.22
2	50.8	25.4	2.79	1.22

**FKM (TW) Fluoroelastomer Thin Wall Tubing**

Size (inch)	Inside Diameter (mm)		Recovered Wall (mm) (t)	Standard Length (m/ spool)
	Minimum Expanded as Supplied (D)	Maximum Recovered after Heating (d)		
1/8	3.2	1.6	0.76	50
3/16	4.8	2.4	0.89	50
1/4	6.4	3.2	0.89	50
3/8	9.5	4.7	0.89	50
1/2	12.7	6.4	0.89	30
5/8	15.9	7.9	1.07	30
3/4	19.1	9.5	1.07	30
7/8	22.2	11.1	1.25	30
1	25.4	12.7	1.25	30
1 1/4	31.8	15.9	1.40	30
1 1/2	38.1	19.1	1.40	1.22
2	50.8	25.4	1.65	1.22

**Specifications:**

Item	Specification
Shrink Temperature (°C)	175
Temperature Range (°C)	-55 °C to + 200°C
Radial Shrinking Ratio (%)	20
Longitudinal Change (%)	≤10
Tensile Strength (MPa)	≥8.5
Ultimate Elongation (%)	≥250
Aging in Circulating-air Oven	250 ±1.0°C, 168 Hrs
Ultimate Elongation (%) - After Aging	≥200 MPa
Volume Resistivity (Ω.cm)	≥10 <sup>9</sup>
Dielectric Strength (kV/mm)	≥7.9
Flammability	VW1
Concentricity (%)	≥70
Heat Shock	No cracking or dripping
Cold Shock	No cracking or dripping

### Property Comparison with heat shrinkable silicone rubber tubing

Item	FKM Fluoroelastomer Shrinkable tubing	Silicone rubber shrinkable tubing
Operating Temperature (°C)	-55°C~+200°C	-60°C~+200°C
Mechanics	Good	Poor
Acid and alkali resistance	Good	Poor
Oil resistance	Excellent	Normal
Flammability	Good Flame Retardancy	Poor Flame Retardancy
Abrasion resistance	Normal	Poor
Sealing	Good	Poor
Insulation	Normal	Good
Water proof	Good	Normal

**Availability** Four-foot lengths, master reels and cut pieces

**Important Notice** All information contained in this data sheet is believed to be reliable and accurate. It is advised however that the end user of this material evaluate the suitability of the product for their specific application.

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