

# 2:1 Shrink Ratio, Neoprene, Flexible, Flame Retardent Tubing



DUNBAR-CRFR is used for insulation, strain relief, and abrasion protection on cable harnesses and wire bundles in military and aerospace industries. It provides fluid and solvent resistance, including lubricating oil, aviation and ground-vehicle fuels and hydraulic fluids. Neoprene remains flexible at low temperatures

**STANDARDS:**

- SAE AS23053/1 Class 1 & 2 (Formerly AMS-DTL-23053/1 Class 1 and Class 2)
- Declared Dimensional Life (DDL) – 5 Years
- RoHS & REACH Compliant

**PRODUCT FEATURES:**

- Shrink ratio: approx. 50% in the radial direction, -10% or less in the axial direction
- In stock for immediate shipment ☑ Continuous operating temperature: -70°C (-94°F) to 121°C (250°F)
- Flammability: ASTM D2671 Procedure A, C
- Excellent abrasion protection for military industries High resistance to chemicals and oils

## Specification Values

Property		Test Method	Value	
Physical	Unaged	Tensile Strength	Min. 1500 psi	
		Elongation	Min. 225%	
		Tensile Strength @200% Elongation	Max. 1500 psi	
	Aged	Tensile Strength	ASTM D412	Min. 1200 psi
		Elongation		Min. 175%
	Fluid Resist.	Tensile Strength	24°C/24 hrs 6 Fluids	Min. 1000 psi
		Elongation		Min. 175%
		Dielectric Strength		Min. 250 Volts/mil
	Low Temperature Flex	-70°Cx4hrs	No cracks	
	Heat Shock	200°Cx4hrs	No cracks, flowing, or dripping	
Electrical	Dielectric Strength	ASTM D2671	Min. 300 Volts/mil	
	Volume Resistivity	ASTM D876	Min. 10 <sup>11</sup> Ω · cm	
Chemical	Copper Corrosion	150°C/16hrs	No corrosion	
	Fungus Resistance	ASTM G21	No Growth	
	Water Absorption	ASTM D570	Max. 1.0	
	Flammability	ASTM D2671	Pass	

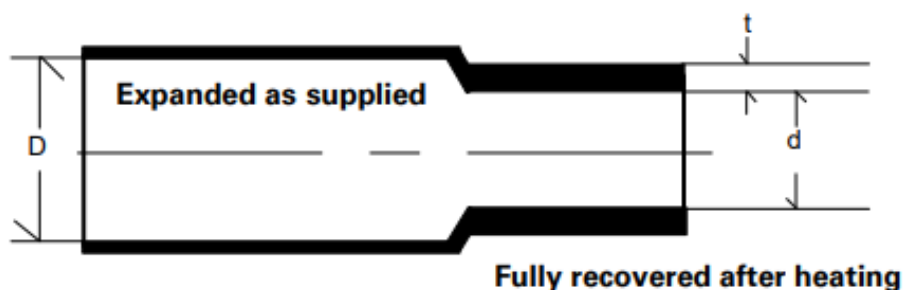
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## DUNBAR-CRFR

**2:1 SHRINK RATIO, NEOPRENE, FLEXIBLE, FLAME RETARDENT TUBING**



### Product Dimensions

**Minimum Shrink Temperature: 135 °C**

Size	Expanded		Recovered				Standard Spool Length
	Internal Diameter (Minimum) (D)		Internal Diameter (Maximum) (d)		Total Wall Thickness (Nominal) (t)		
	in.	mm	in.	mm	in.	mm	
1/8"	0.125	3.2	0.062	1.6	0.028	0.7	500
3/16"	0.188	4.8	0.093	2.4	0.030	0.7	250
1/4"	0.250	6.4	0.143	3.6	0.035	0.9	250
3/8"	0.375	9.5	0.211	5.4	0.040	1.0	100
1/2"	0.500	12.7	0.286	7.3	0.048	1.2	100
5/8"	0.625	15.9	0.357	9.1	0.052	1.3	100
3/4"	0.750	19.1	0.428	10.9	0.057	1.4	100
7/8"	0.875	22.2	0.500	12.7	0.065	1.7	100
1"	1.00	25.4	0.570	14.5	0.070	1.8	100
1-1/4"	1.25	31.8	0.714	18.1	0.087	2.2	100
1-1/2"	1.5	38.1	0.857	21.8	0.095	2.4	100