

Tubing Selection Guide

Part Number	Material/Typical Application	Operating Temp. Range	Shrink Temp. (min.)	Shrink Ratio	Standard Sizes Expanded Diam.	Dielectric Strength (V-mil)	Volume Resistivity (ohm-cm)	Tensile Strength (PSI)	Ultimate Elongation (%)	Longitudinal Change (%)	Specific Gravity	Flammability	Corrosive Effect	Abrasion Resistance	Flexibility	Fuel & Oil Resistance	Solvent Resistance	Resistance to Acids & Alkalis	Applicable Specifications
SINGLE-WALL POLYOLEFIN TUBING																			
H221	Flexible Polyolefin - General Purpose flame retardant insulation for UL, CSA and MIL-DTL-23053/5 applications; cable and component	-55°C to +135°C	212°F to 100°C	2:1	3/64" to 4"	900	10 ¹⁵	2400	400	5	1.3	Self-Extinguish meets UL 224 All-Tubing Flame Test (except clear)	Non-Corrosive	Good	3	Good	Exc.	Exc.	MIL-DTL-23053/5, Class 1, 2; AMS-3636 & 3637; UL File E-39100; CSA LR38227; ABS
H221VW	Highly Flame-Retardant, Flexible Polyolefin - Insulation applications, flame-	-55°C to +135°C	212°F to 100°C	2:1	3/64" to 4"	900	10 ¹⁵	2400	400	+1, -10	1.5	Self-Extinguish meets UL 224 VW-1 Test	Non-Corrosive	Good	3	Good	Exc.	Exc.	MIL-DTL-23053/5, Class 3; UL File E-39100, VW-1; CSA LR38227, OFT
H203	Very Flexible Polyolefin - Shrink-fit jacketing and insulation of flexible	-55°C to +135°C	212°F to 100°C	3:1	1/16" to 1-1/2"	700	10 ¹⁵	2600	400	5	1.29	Self-Extinguish	Non-Corrosive	Good	3	Good	Good	Exc.	MIL-DTL-23053/5, Class 1; UL File E-48398; CSA LR38227
ADHESIVE-LINED, POLYOLEFIN TUBING																			
H300	Multiple Wall Polyolefin - Insulation, strain relief and sealing of	-55°C to +110°C	275°F to 135°C	2.5:1	1/8" to 1"	900	10 ¹⁵	2200	400	+1, -10	1	Non-Flame Retardant	Non-Corrosive	Good	7	Good	Good	Exc.	MIL-DTL-23053/4, Class 1; AMS-3634; UL File E-157227
H750	Environmental Protection Sleeve - Insulation, strain relief and environmental	-55°C to +110°C	250°F to 121°C	2:1	1/8" to 2"	800	10 ¹⁴	2100	450	+1, -5	1.3	Self-Extinguish meets UL 224 All-Tubing Flame Test (jacket)	Non-Corrosive	Good	3	Good	Good	Exc.	MIL-DTL-23053/4, Class 2; UL File E-39100
H321	Environmental Protection Sleeve - Insulation, strain relief and environmental	-55°C to +110°C	250°F to 121°C	3:1	1/8" to 1-1/2"	700	10 ¹⁴	2100	450	+1, -15	1.3	Self-Extinguish meets UL 224 All-Tubing Flame Test (jacket)	Non-Corrosive	Good	3	Good	Good	Exc.	MIL-DTL-23053/4, Class 3; UL File E-157227; ABS
SPECIAL PURPOSE TUBING																			
H350	Polyvinylidene Fluoride (Kynar) - Heat-resistant transparent insulation	-55°C to +175°C	347°F to 175°C	2:1	3/64" to 2"	900	10 ¹⁴	5500	350	+1, -10	1.7	Self-Extinguish Meets UL 224 VW-1 Test	Non-Corrosive	Exc.	10	Exc.	Exc.	Exc.	MIL-DTL-23053/18, Class 1; MIL-AMS-3632; UL File E-39100, VW-1, E69751; CSA LR38227 (
H600	Modified Neoprene® - Insulation and abrasion resistant covering of wiring and	-70°C to +121°C	275°F to 135°C	2:1	1/8" to 3"	800	10 ¹²	2100	500	+1, -10	1.3	Self-Extinguish	Non-Corrosive	Exc.	1	Exc.	Good	Exc.	MIL-R-46846; Type 1, Class 1; MIL-DTL-23053/1, Class 1, 2; AMS-3623
H650	Fluoroelastomer (Viton) - Synthetic fuel and hydraulic oil resistant applications,	-55°C to +200°C	347°F to 175°C	2:1	1/8" to 2"	500	10 ¹²	2400	450	+1, -10	1.7	Self-Extinguish	Non-Corrosive	Exc.	4	Exc.	Exc.	Exc.	MIL-R-46846, Type III, Class 1; MIL-DTL-23053/18
HTFE																			
H105																			
HEAVY-DUTY TUBING																			
H700MD	Medium-Duty - Excellent abrasion, corrosion and environmental	-55°C to +110°C	250°F to 121°C	3:1	.400" to 4.30"	500	1014	2400	450	+1, -10	1.28	Self-Extinguish	Non-Corrosive	Good	8	Good	Good	Exc.	MIL-DTL-23053/15, Class 2; ABS
H700HD	Heavy-Duty - Fabricated from specially formulated cross-linked	-55°C to +110°C	250°F to 121°C	3:1	.300" to 7.00"	500	1014	2400	475	+1, -10	1.28	Self-Extinguish	Non-Corrosive	Good	9	Good	Good	Exc.	MIL-DTL-23053/15, Class 1; ABS