



HEAT SHRINK PRODUCTS

HEAT SHRINK THIN WALL TUBING

Part Number	Material	Product Type	Shrink Ratio	Operating Temp. & Voltage Rating	Min. Shrink Temp.	Full Recovery Temp.	Flame Retardant	Agency Certification	Military Standard	General Description
QBG	Polyolefin	Thin Wall	2:1	-55°C to +105°C, 600V	90°C	110°C	-	-	-	Flexible, Thin Wall Tubing for Flexible Gas Pipes mm Sizes: 23 to 76.2mm
Q1	Polyolefin	Thin Wall	2:1	-55°C to +105°C, 600V	80°C	100°C	-	-	-	Non Flame-Retardant, General Purpose, Flexible, Glossy Black or Clear mm Sizes: 1.0 to 50mm, Inch Sizes: 3/64" to 2"
Q2-CB	Polyolefin	Ultra Thin Wall	2:1	-55°C to +125°C, 300V	70°C	100°C	VW-1	242540	-	No PBB's, PBBE's, PBBO's, Low Cadmium and Lead mm Sizes: 1.0 to 10mm, Inch Sizes: 3/64" to 1/2"
Q2-F	Polyolefin	Thin Wall	2:1	-55°C to +135°C, 600V	70°C	100°C	VW-1	E236137 242540	SAE-AMS-DTL 23053/5 Class 1 & 3	No PBB's, PBBE's, PBBO's, Very Flexible, Highly Flame-Retardant mm Sizes: 1.2 to 151mm, Inch Sizes: 3/64" to 6"
Q2-F3X	Polyolefin	Thin Wall	3:1	-55°C to +135°C, 600V	70°C	100°C	VW-1	E236137 242540	SAE-AMS-DTL 23053/5 Class 1 & 3	No PBB's, PBBE's, PBBO's, Very Flexible, High Shrink Ratio, Highly Flame-Retardant mm Sizes: 1.5 to 39mm, Inch Sizes: 1/16" to 1 1/2"
Q2-F4X	Polyolefin	Thin Wall	4:1	-55°C to +135°C, 600V	70°C	100°C	VW-1	E236137 242540	SAE-AMS-DTL 23053/5 Class 1 & 3	No PBB's, PBBE's, PBBO's, Very Flexible, High Shrink Ratio, Highly Flame-Retardant mm Sizes: 19.1 to 115mm, Inch Sizes: 3/4" to 4 1/2"
Q2-F2X(YG) Q2-F3X(YG)	Polyolefin	Thin Wall	2:1, 3:1	-55°C to +135°C, 600V	70°C	100°C	VW-1	E236137 242540	SAE-AMS-DTL 23053/5 Class 1 & 3	Yellow-Green Striped, Flexible, Flame-Retardant Tubing 2:1 - mm Sizes: 1.2 to 101.6mm, Inch Sizes: 3/64" to 4", 3:1 - 1.6 to 39mm, Inch Sizes: 1/16" to 1 1/2"
Q2-HF	Polyolefin	Thin Wall	2:1	-55°C to +105°C, 600V	70°C	100°C	-	242540	SAE-AMS-DTL 23053/5	Halogen Free Polyolefin Tubing, Low Smoke mm Sizes: 1.0 to 150mm
Q2-LS	Polyolefin	Thin Wall	2:1	-45°C to +125°C, 600V	65°C	95°C	MVSS 302	242540	-	Very Flexible, Low Shrink Temperature, Halogen Free Polyolefin Tubing mm Sizes: 1.6 to 50.8mm, Inch Sizes: 1/16" to 2"
Q2-R	Polyolefin	Semi-Rigid Thin Wall	2:1	-45°C to +135°C, 600V	90°C	130°C	Self-extinguish in 30 seconds	E236137 242540	SAE-AMS-DTL 23053/5 Class 1 & 3	Semi-Rigid Flame-Retardant Tubing, Resistant to Common Chemicals and Solvents mm Sizes: 1.2 to 25.4mm, Inch Sizes: 3/64" to 1"
Q2-Z	Polyolefin	Thin Wall	2:1	-55°C to +125°C, 600V	70°C	100°C	VW-1	E236137 242540	-	Environment Friendly, Flexible, Flame-Retardant mm Sizes: 1.0 to 150mm, Inch Sizes: 3/64" to 6"
Q2-3X	Polyolefin	Thin Wall	3:1	-55°C to +125°C, 600V	70°C	100°C	VW-1	E236137 242540	-	Flexible, High Shrink Ratio, Highly Flame-Retardant mm Sizes: 1.5 to 39mm, Inch Sizes: 1/16" to 1 1/2"
Q2-XT Q2-XT(HF)	Polyolefin	Thin Wall	Non-Shrink	-55°C to +125°C, 600V	80°C	80°C	VW-1	-	-	No PBB's, PBBE's, PBBO's, Non-Shrink, Irradiated Flexible, Flame-Retardant, (HF) Version is Halogen Free Size: AWG 18 to 1/2"
Q-150K	Modified PVDF	Flexible Thin Wall	2:1	-55°C to +150°C, 600V	135°C	150°C	VW-1	E245010	SAE-AMS-DTL 23053/18	Black, Flexible, High Temperature, Chemical Resistant, Polyvinylidene Fluoride(PVDF) Kynar® mm Sizes: 1.2 to 38.1mm, Inch Sizes: 3/64" to 1 1/2"
Q-175K	PVDF	Semi-Rigid Thin Wall	2:1	-55°C to +175°C, 600V	175°C	-	VW-1	E245010	SAE-AMS-DTL 23053/8	Clear, High Temperature, Chemical Resistant, Polyvinylidene Fluoride(PVDF) Kynar® mm Sizes: 1.2 to 25.4mm, Inch Sizes: 3/64" to 1"
Q-200E Q-200E(TW)	Modified Fluorelastomer Viton®	Very Flexible Thin Wall	2:1	-55°C to +200°C, 600V	150°C	175°C	VW-1	E245010	SAE-AMS-DTL 23053/13	Flexible, Elastic, High Temperature, Solvent Resistant, Viton® Q-200E - mm Sizes: 3.2 to 50.8mm, Inch Sizes: 1/8" to 2", Q-200E(TW) - mm Sizes: 9.5 to 50.8, Inch Sizes: 3/8" to 2"
Q-PTFE	Modified PTFE	Semi-rigid Thin Wall	2:1	-65°C to +260°C, 600V	-	350°C	Self-extinguish	-	SAE-AMS-DTL 23053/12	Polytetrafluoroethylene Tubing Sizes: AWG 20 to AWG 0
QDR QDR(TW)	Modified Elastomer	Very Flexible Thin Wall	2:1	-75°C to +150°C, 600V	-	175°C	VW-1	-	SAE-AMS-DTL 23053/16	Diesel Resistant Elastomer QDR - mm Sizes: 3.2 to 76.2, Inch Sizes: 1/8" to 3"; QDR(TW) - mm Sizes: 2.4 to 38.1, Inch Sizes: 3/32" to 1 1/2"

HEAT SHRINK MEDIUM / HEAVY WALL TUBING - ADHESIVE LINED

Q5-2X	Polyolefin	Dual Wall	2:1	-45°C to +125°C, 600V	100°C	125°C	Self-extinguish in 30 seconds	E236137 242540	SAE-AMS-DTL 23053/4	Adhesive-Lined, Flexible, High Shrink Ratio, Flame-Retardant Tubing mm Sizes: 3.2 to 38.1mm, Inch Sizes: 1/8" to 1 1/2"
Q5-3X	Polyolefin	Dual Wall	3:1	-45°C to +125°C, 600V	80°C	120°C	Self-extinguish in 30 seconds	E236137 242540	SAE-AMS-DTL 23053/4	Adhesive-Lined, Flexible, High Shrink Ratio, Flame-Retardant Tubing mm Sizes: 3.0 to 50.0mm, Inch Sizes: 1/8" to 2"
Q5-4X	Polyolefin	Dual Wall	4:1	-45°C to +125°C, 600V	80°C	125°C	Self-extinguish in 30 seconds	E236137 242540	SAE-AMS-DTL 23053/4	Adhesive-Lined, Flexible, High Shrink Ratio, Flame-Retardant Tubing mm Sizes: 4.0 to 52.0mm, Inch Sizes: 3/16" to 2"
Q5-F3X	Polyolefin	Dual Wall	3:1	-55°C to +125°C, 600V	100°C	-	Self-extinguish in 30 seconds	E236137 242540	SAE-AMS-DTL 23053/4	Adhesive-Lined, Flexible, Polyolefin Tubing mm Sizes: 3.0 to 40mm, Inch Sizes: 1/8" to 1 1/2"
Q5-F4X	Polyolefin	Dual Wall	4:1	-55°C to +125°C, 600V	100°C	-	Self-extinguish in 30 seconds	E236137 242540	SAE-AMS-DTL 23053/4	High Shrink Ratio, Adhesive-Lined, Flexible, Flame-Retardant Tubing mm Sizes: 4 to 52mm, Inch Sizes: 3/16" to 2"

Q-PTFE



TEFLON HEAT SHRINKABLE TUBING

Features/Applications

Q-PTFE heat shrinkable tubing is manufactured with polytetrafluoroethylene (PTFE). It is specially designed for applications where high temperature and chemical resistance is required. This tubing works great as an electrical insulator and where highly flame retardant properties are required, such as in the automotive, military and aerospace fields.

- Operating temperature: -65°C to +260°C
- Full recovery temperature: 350°C
- Meets: SAE-AMS-DTL-23053/12
- Standard color: Clear
- RoHS Compliant



Technical Data		
Property	Test Method	Typical Data
Tensile Strength	ASTM D 2671	≥ 17.3 MPa
Elongation at Break	ASTM D 2671	≥ 200%
Specific Gravity	ASTM D 792	2.30
Heat Shock (400°C, 4hrs.)	ASTM D 2671	No cracking or dropping
Cold Bend Test (-65°C, 4hrs.)	ASTM D 2671	No cracking
Volume Resistance	ASTM D 2671	≥ 10 ¹⁸ Ω.cm
Dielectric Strength	ASTM D 2671	≥ 34kV/mm
Copper Corrosion	UL 224	Pass
Flammability	ASTM D 2671	Self-extinguish
Fluid Resistance	SAE-AMS-DTL-23053/12	Excellent
Water Absorption	ASTM D 570	0.1 max.

Product Dimensions				
Size (AWG)	As Supplied (mm)	After Recovered (mm)		Standard Packaging
	Inside Diameter (nom.)	Inside Diameter (nom.)	Wall Thickness (nom.)	Cut to Length Pcs. *(QB) Qty per bag 48"
20	1.52	0.97	0.30	25
18	1.93	1.17	0.30	25
16	2.36	1.45	0.30	25
14	3.05	1.82	0.30	25
12	3.81	2.26	0.30	25
10	4.85	2.80	0.30	25
8	6.10	3.55	0.38	5
6	7.67	4.40	0.38	5
4	9.40	5.45	0.38	5
2	10.92	6.90	0.38	5
0	11.94	8.56	0.38	5