

QRA-6X RoHS Compliant

**VERY HIGH SHRINK RATIO, HEAVY DUAL WALL TUBING ,
HOT MELT ADHESIVE-LINED
SHRINK RATIO 6:1**

Features/Applications

Ideal for applications of extremely different diameter between cables, connectors and components. The high shrink ratio provides close fit to a wide variety of irregular shapes, connectors and figurations. Provides excellent mechanical protection to cable joints and terminations, complete environmental protection and is resistant to impact and abrasion.



- Operating temperature: -55°C to +110°C
- Minimum shrink temperature: 120°C
- Full recovery temperature: 120°C
- Standard color: Black
- RoHS Compliant
- Very high shrink ratio
- Resistant to UV radiation
- High electrical insulation
- Superior mechanical property

Technical Data

Property	Test Method	Typical Data
Tensile Strength	ASTM D 2671	≥14 MPa
Tensile Strength After Aging (158°C, 168 hrs.)	ASTM D 2671	≥ 12 MPa
Longitudinal Shrinkage	UL 224	0 ± 10%
Elongation at Break	ASTM D 2671	≥ 400%
Elongation at Break After Aging (50°C, 168 hrs.)	ASTM D 2671	≥ 300%
Dielectric Strength	IEC 243	≥ 18kV / mm
Volume Resistance	IEC 93	≥13 ¹⁴ Ω.cm
Copper Stability	ASTM D 2671	Non-corrosive
Heat Shock (225°C, 4hrs.)	ASTM D 2671	No cracking or flowing

Property	Test Method	Typical Data
Water Absorption	ISO 62	< 0.2%
Softening Point	ASTM D E28	85°C ± 5°C
Peel Strength (PE)	DIN 30672	4N / cm
Resistance to Fungus and Decay	ISO 846	Pass

Product Dimensions

Size (mm)	As Supplied (mm)	After Recovered (mm)		Tubing Shape	Standard Packaging
	Inside Diameter (min.)	Inside Diameter (max.)	Wall Thickness (min.)		Cut to Length Pcs. *(QB) Qty per bag (48" pcs.)
19/3.2	19.0	3.2	3.2	Round	20
33/5.5	33.0	5.5	3.4	Round	20
44.4/7.4	44.4	7.4	3.6	Round	15
50.8/8.3	50.8	8.3	4.3	Round	15
69.8/11.7	69.8	11.7	4.8	Round	15
88.9/17.1	88.9	17.1	4.8	Round	15
119.4/22.9	119.4	22.9	4.8	Round	10
235/40	235.0	40.0	4.8	Round	10

Notes:

1. * See page 13 - Part Number Guide for standard packaging codes.
2. Cross Reference Guide located on page 3.
3. Special sizes, packaging, colors and cut pieces are available upon request.