

QRA3

HEAVY WALL POLYOLEFIN TUBING WITH ADHESIVE SHRINK RATIO: 3:1

Features/Applications

QRA3 has properties of excellent insulation, environmental sealing and resistant to impact and abrasion. Designed for applications to seal and protect electrical and communication connections, providing excellent mechanical protection to cable joints and termination. 3:1 shrink ratio allows it to easily fit over irregular shapes and large connectors.

QRA3 is recommended to applications for light cable and wire harnesses where requiring waterproofing, protection of connector components and thus encapsulates and seal components contained within the tubing.

- ▶▶ Resistant to UV
- ▶▶ High electrical insulation
- ▶▶ Superior mechanical protection

Operating temperature: -55°C to +110°C

Full recovery temperature: 120°C

Standard color: Black, Red

RoHS Compliant



Technical Data

Property	Test Method	Typical Data
Operating temperature	IEC 216	-55°C to +110°C
Tensile strength	ASTM D 638	>14 MPa
Elongation at break	ASTM D 638	>400%
Density	ASTM D 792	1.05g/cm ³
Longitudinal shrinkage	UL 224	0 to-10%
Eccentricity	ASTM D 2671	<30%
Elongation at break after aging	150°C, 168 hrs.	>300%
Dielectric strength	IEC 243	>20KV/mm
Volume resistance	IEC 93	>10 ¹⁴ Ω.cm
Copper stability	ASTM D 2671	Pass
Resistance to stress cracking (50°C)	ASTM D 1693	No cracking
Water absorption	ISO 62	<0.15%

Product Dimensions (mm)

Order Ref. Number	Diameter		Recovered Wall Thickness (mm)	Standard Length (mm)
	As Supplied (mm)	After Recovery (mm)		
QRA3, Heavy-wall Tubing with Hot Melting Adhesive				
QRA3 φ9/3	9	3	2.0	1000-1500
QRA3 φ13/4	13	4	2.5	1000-1500
QRA3 φ22/6	22	6	2.7	1000-1500
QRA3 φ33/8	33	8	3.2	1000-1500
QRA3 φ40/12	40	12	4.1	1000-1500
QRA3 φ45/12	45	12	4.1	1000-1500
QRA3 φ55/16	55	16	4.1	1000-1500
QRA3 φ75/22	75	22	4.1	1000-1500
QRA3 φ85/25	85	25	4.1	1000-1500
QRA3 φ95/29	95	29	4.1	1000-1500
QRA3 φ115/34	115	34	4.3	1000-1500
QRA3 φ130/36	130	36	4.3	1000-1500
QRA3 φ160/55	160	55	4.3	1000-1500
QRA3 φ175/55	175	55	4.3	1000-1500
QRA3 φ200/65	200	65	4.3	1000-1500

Special sizes, cut pieces are available upon request.

Thermoplastic Adhesive for QRA3

Property	Test Method	Typical Data
Water absorption	ISO 62	<0.2%
Softening point	ASTM D E8	80°C
Peel strength (PE)	DIN 30672	4 N/cm
Copper stability	ASTM D 2671	Non-corrosive
Resistance to fungus and decay	ISO 846	Pass