

## Q5-F3X



**DUAL WALL, ADHESIVE LINED, FLEXIBLE POLYOLEFIN TUBING  
SHRINK RATIO 3:1**

### Features/Applications

Q5-F3X is manufactured by co-extrusion of polyolefin and meltable adhesive. It is designed to provide insulation and create a tight seal for protected articles. Typical applications are environmental sealing of electrical components such as wire splices and harnesses in the automotive and communication industry.

- Operating temperature: -55°C to +125°C
- Minimum shrink temperature: 70°C
- Full recovery temperature: 110°C
- Approvals<sup>4</sup>: File No. E236137, File No. 242540, 125°C, VW-1, 600V
- Meets: SAE-AMS-DTL-23053/4, Sony-SS-00259
- Standard color: Black
- RoHS Compliant



Technical Data		
Property	Test Method	Typical Data
Operating Temperature	IEC 216	-55°C to +125°C
Tensile Strength	ASTM D 2671	>13 MPa
Ultimate Elongation	ASTM D 2671	> 400%
Longitudinal Shrinkage	UL 224	0 ± 10%
Eccentricity	ASTM D 2671	< 40%
Heat Aging Tensile Strength Ultimate Elongation	158°C, 168 hrs.	> 11 MPa > 300 %
Flammability	VW-1	Pass
Voltage Withstand	ASTM D 2671 / AC2500V. 1 min.	No Breakdown
Volume Resistance	ASTM D 2671	> 10 <sup>14</sup> Ω.cm
Copper Stability	UL 224	Pass
Copper Corrosion	UL 224	No Corrosion
Property of adhesive		
Ring-Ball Soft Point	ASTM E28	95°C ± 5°C

Product Dimensions								
Size		As Supplied (mm)	After Recovered (mm)			Standard Packaging		
Inch	mm	Inside Diameter (min.)	Inside Diameter (max.)	Total Wall Thickness (min.)	Adhesive Thickness (nom.)	Standard Spool *(SS) (Meter)	Cut to Length Pcs. *(QB) Qty per bag	
							6"	48"
1/8	3/1	3.0	1.0	1.00	0.5	200	28	25
3/16	4.8/1.5	4.8	1.5	1.00	0.5	100	24	25
1/4	6/2	6.0	2.0	1.00	0.5	100	20	25
3/8	9/3	9.0	3.0	1.40	0.6	50	16	25
1/2	12/4	12.0	4.0	1.60	0.8	25	14	5
3/4	19/6	19.0	6.0	2.15	0.8	25	12	5
1	24/8	24.0	8.0	2.40	1.0	25	8	5
1 1/2	40/13	40.0	13.0	2.40	1.0	25	5	5

- Notes:
- \* See page 13 - Part Number Guide for standard packaging codes.
  - Cross Reference Guide located on page 3.
  - Special sizes, packaging, colors and cut pieces are available upon request.
  - Clear tubing is not flame retardant, UL or CSA approved.