

# Q5-F4X

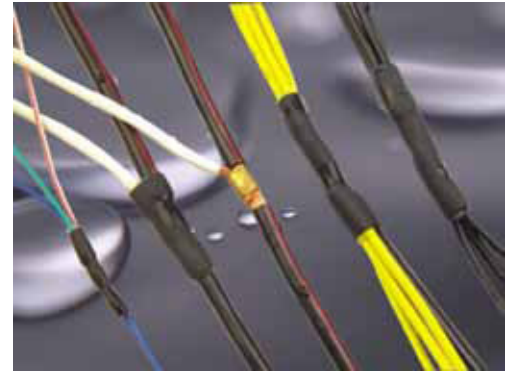


**DUAL WALL, ADHESIVE LINED, FLEXIBLE POLYOLEFIN TUBING  
SHRINK RATIO 4:1**

**Features/Applications**

Q5-F4X is manufactured by co-extrusion of polyolefin and meltable adhesive. It is designed to provide insulation and 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
<b>Property of adhesive</b>		
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"
3/16	4/1	4.0	1.0	1.00	0.5	100	24	25
5/16	8/2	8.0	2.0	1.00	0.5	50	18	25
1/2	12/3	12.0	3.0	1.40	0.6	25	14	5
5/8	16/4	16.0	4.0	1.60	0.8	25	14	5
1	24/6	24.0	6.0	2.15	0.8	25	8	5
1 1/4	32/8	32.0	8.0	2.40	1.0	25	5	5
1 1/2	38.1/9.5	38.1	9.5	2.40	1.0	25	5	5
2	52/13	52.0	13.0	2.40	1.0	-	3	5

- 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.
  4. Clear tubing is not flame retardant, UL or CSA approved.