# Q2-F4X

RoHS Compliant

**HIGH SHRINK RATIO, HIGHLY FLEXIBLE FLAME RETARDANT POLYOLEFIN TUBING SHRINK RATIO 4:1**



Features/Applications
Manufactured with specially developed formulation and technology, it can easily fit over a large diameter connector or transition and shrink down onto a smaller diameter jacket. Because of its outstanding physical, chemical and electrical properties it's widely used in some important fields such as military, aerospace and fine electronic instruments for insulating or repairing harnesses, cables and connectors.

- Operating temperature: -55°C to +135°C
- Minimum shrink temperature: 70°C
- Full recovery temperature: 100°C
- Approval: File No. E236137, File No. 242540, 125°C, VW-1, 600V
- Meets: SAE-AMS-DTL-23053/5 Class 1 & 3, Sony-SS-00259
- Standard color: Black
- Special colors: Red, blue, yellow, green
- UV Resistant
- RoHS Compliant

## Technical Data

| Property | Test Method | Typical Data |
|---|---|---|
| Operating Temperature | IEC 216 | -55°C to +135°C |
| Tensile Strength | ASTM D 2671 | >14 MPa |
| Ultimate Elongation | ASTM D 2671 | > 600% |
| Longitudinal Shrinkage | UL 224 | 0 ± 5% |
| Eccentricity | ASTM D 2671 | < 35% |
| Heat Aging<br>Tensile Strength<br>Ultimate Elongation | 175°C, 168 hrs. | <br>> 11 MPa<br>> 350 % |
| Flammability | VW-1 | Pass |
| Dielectric Strength | ASTM D 150 | > 20kV / mm |
| Voltage Withstand | ASTM D 2671 / AC2500V. 1 min. | No Breakdown |
| Volume Resistance | ASTM D 2671 | > $10^{14}$ Ω.cm |
| Copper Stability | UL 224 | Pass |
| Copper Corrosion | UL 224 | No Corrosion |

## Product Dimensions

| Size | | As Supplied (mm) | After Recovered (mm) | | Standard Packaging | |
|---|---|---|---|---|---|---|
| Inch | mm | Inside Diameter (min.) | Inside Diameter (max.) | Wall Thickness (min.) | Cut to Length Pcs. *(QB) Qty per bag | |
| | | | | | 6" | 48" |
| 3/4 | 19.1/4.6 | 19.1 | 4.6 | 1.7 | 12 | 25 |
| 1 | 25.4/7.0 | 25.4 | 7.0 | 1.7 | 8 | 25 |
| 1 1/2 | 38.1/9.5 | 38.1 | 9.5 | 1.7 | 5 | 25 |
| 2 | 50.8/14.0 | 50.8 | 14.0 | 1.7 | 3 | 25 |
| 3 | 76.2/20.6 | 76.2 | 20.6 | 1.7 | 2 | 25 |
| 4 | 102.0/26.7 | 102.0 | 26.7 | 1.7 | 1 | 5 |
| 4 1/2 | 115.0/36.8 | 115.0 | 36.8 | 1.7 | 1 | 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.