



**THE DATASHEET OF
QRA3-180/50-QC48IN-5**



PART NUMBER EXAMPLE: **Q2-F-3/64-01-QB48IN-25**

PART NUMBER EXAMPLE:

X - X - X - X X - X

- (6) QUANTITY - QB (Q BAG) ONLY
- (5) LENGTH - SEE LIST BELOW
- (4) STANDARD PACKAGING CODES - SEE LIST BELOW
- (3) COLOR - SEE LIST BELOW
- (2) SIZE - SEE TABLE BELOW
- (1) TYPE - SEE SPEC SHEET(Q1, Q2-F, Q-150K, etc...)

NOTE: Table below represents information on individual spec sheet

- ④ **STANDARD PACKAGING CODES:**
MS - MINI SPOOL + LENGTH (FT or M)
QB - Q BAG (Polybag contains quantity specified)
QX - Q BOX + LENGTH (FT or M)
RK - REFILL BAG
SS - STANDARD SPOOL + LENGTH (FT or M)

- ③ **COLOR CODES:**
01 BLACK
02 CLEAR
03 WHITE
04 RED
05 BLUE
06 GREEN
07 YELLOW
08 YELLOW / GREEN
09 BROWN
10 ORANGE
11 ASSORTED COLORS
12 GRAY

- ⑤ **LENGTH:**
FT = FEET
M = METERS
IN = INCH
MM = MILLIMETERS

HEAT SHRINK THIN WALL TUBING Qualtek Electronics

Q2-F RoHS Compliant

FLEXIBLE, FLAME RETARDANT POLYOLEFIN TUBING
ENVIRONMENT FRIENDLY, HIGHLY FLAME RETARDANT
SHRINK RATIO 2:1

Features/Applications
 Provides both commercial and military applications electrical insulation and protects in-line components, disconnect terminals and splices with its high strength and excellent resilience. Bundles wires for very flexible light-duty harnesses. Identifies or color-codes wires, cables, terminals and components.

- Operating temperature: -55°C to +135°C
- Minimum shrink temperature: 70°C
- Full recovery temperature: 100°C
- Approval: **UL**, File No. E236137, **CS** 242540
- 125°C, VW-1, 600V
- Meets: SAE-AMS-DTL-2205/35 Class 1 & 3, Sony-SS-00259
- Material: No PBB's, PBBO's, PBBE's, Free of Cadmium & Lead
- Standard colors: Black, red, blue, yellow, green, white, clear (class 2)
- RoHS Compliant

Technical Data		
Property	Test Method	Typical Data
RoHS Status	ASTM D2011	RoHS
Exemption of Lead	ASTM D2011	RoHS
Temperature/Aging (100°C/168 hrs.)		50%
Flammability	UL 94V-0, SAE-AMS-DTL-2205/35	Pass
Thermal Shrink (100°C)	ASTM D2011	2:1 (max)
Color Shrink (100°C/4 hrs.)	ASTM D2011	Non-coloring
Dielectric Strength	ASTM D149	30 kV/mm
Volume Resistance	ASTM D149	>10 ¹² Ohm-cm
Surface Resistance	UL 224	Pass
Water Absorption	ASTM D155	0.15%
Chemical Resistance	SAE-AMS-DTL-2205/35	Pass
Longitudinal Tensile	UL 224	4.5% min
Elongation	UL 224	>300%

Product Dimensions								
Size (Inch)	As Supplied (mm)			After Recovered (mm)			Standard Packaging	
	Inside Diameter (min.)	Inside Diameter (max.)	Wall Thickness (min.)	Mini Spool (MS) (Feet)	Standard Spool (SS) (Feet)	Box Length (QX) (Feet)	Cut Length (QB) (Feet)	Cut Qty per bag
3/64	1.2	0.6	0.40	100	1000	50	48	25
1/16	1.6	0.8	0.40	100	1000	50	36	25
3/32	2.4	1.2	0.48	100	500	50	32	25
1/8	3.2	1.6	0.48	100	500	50	28	25
3/16	4.8	2.4	0.48	100	500	30	24	25
1/4	6.4	3.2	0.56	100	500	30	20	25
5/16	8.0	4.0	0.62	100	250	30	18	25
3/8	9.5	4.8	0.62	100	250	30	16	25
1/2	12.7	6.4	0.62	100	200	15	14	5
5/8	15.9	8.0	0.68	50	200	15	14	5
3/4	19.1	9.5	0.68	50	200	15	12	5
1	25.4	12.7	0.87	50	200	15	8	5
1 1/4	31.8	15.9	1.00	50	100	-	8	5
1 1/2	38.1	19.1	1.00	50	100	-	5	5
2	50.8	25.4	1.10	50	100	-	3	5
3	76.2	38.1	1.20	-	100	-	2	2
4	102.0	50.8	1.35	-	100	-	1	2
5	125.0	63.5	1.40	-	50	-	1	2
6	151.0	75.0	1.40	-	50	-	1	2

Notes:
 1. See page 8, Part Number Guide for dimensional packaging codes.
 2. Cross Reference Guide located on page 10.
 3. Special color packaging, colors and cut pieces are available upon request.

ISO-9001 Company www.qualtekusa.com

SAMPLE TABLE: Q2-F

② **Product Dimensions**

Size (Inch)	As Supplied (mm)			After Recovered (mm)			Standard Packaging	
	Inside Diameter (min.)	Inside Diameter (max.)	Wall Thickness (min.)	Mini Spool *(MS) (Feet)	Standard Spool *(SS) (Feet)	Box Length *(QX) (Feet)	Cut to Length Pcs. *(QB) Qty per bag	
3/64	1.2	0.6	0.40	100	1000	50	40	25
1/16	1.6	0.8	0.40	100	1000	50	36	25
3/32	2.4	1.2	0.48	100	500	50	32	25
1/8	3.2	1.6	0.48	100	500	50	28	25
3/16	4.8	2.4	0.48	100	500	30	24	25
1/4	6.4	3.2	0.56	100	500	30	20	25
5/16	8.0	4.0	0.62	100	250	30	18	25
3/8	9.5	4.8	0.62	100	250	30	16	25
1/2	12.7	6.4	0.62	100	200	15	14	5
5/8	15.9	8.0	0.68	50	200	15	14	5
3/4	19.1	9.5	0.68	50	200	15	12	5
1	25.4	12.7	0.87	50	200	15	8	5
1 1/4	31.8	15.9	1.00	50	100	-	8	5
1 1/2	38.1	19.1	1.00	50	100	-	5	5
2	50.8	25.4	1.10	50	100	-	3	5
3	76.2	38.1	1.20	-	100	-	2	2
4	102.0	50.8	1.35	-	100	-	1	2
5	125.0	63.5	1.40	-	50	-	1	2
6	151.0	75.0	1.40	-	50	-	1	2

⑥