## DWFR Highly Flame-Retardant, Dual Wall Polyolefin Heat-Shrinkable Tubing

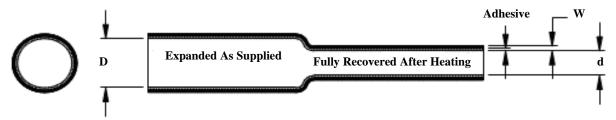


Table 1: <u>Dimensions</u>: mm (in)

Shrink Ratio	Size	Minimum Inside Diameter as supplied (D) mm (in)	Maximum Inside Diameter after recovery (d) mm (in)	Total Wall Thickness after recovery (W) mm (in)	Minimum Inner Meltable Wall Thickness after recovery mm (in)
3:1	3/1	3.0 (0.118)	1.0 (0.039)	$1.12 \pm 0.25 \; (.044 \pm .010)$	0.25 (0.010)
	6/2	6.0 (0.236)	2.0 (0.079)	$1.14 \pm 0.25 \; (.045 \pm .010)$	0.25 (0.010)
	9/3	9.0 (0.354)	3.0 (0.118)	$1.40 \pm 0.25 \; (.055 \pm .010)$	0.56 (0.022)
	12/4	12.0 (0.472)	4.0 (0.157)	$1.78 \pm 0.36 \; (.070 \pm .014)$	0.58 (0.023)
	19/6	19.0 (0.748)	6.0 (0.236)	$2.25 \pm 0.50 \; (.088 \pm .020)$	0.58 (0.023)
	24/8	24.0 (0.945)	8.0 (0.315)	$2.54 \pm 0.50 \; (.100 \pm .020)$	0.79 (0.031)
	40/13	40.0 (1.575)	13.0 (0.512)	$2.54 \pm 0.50 \; (.100 \pm .020)$	0.86 (0.034)
4:1	4/1	4.0 (0.157)	1.0 (0.039)	$1.12 \pm 0.25 \; (.044 \pm .010)$	0.25 (0.010)
	8/2	8.0 (0.315)	2.0 (0.079)	$1.14 \pm 0.25 \; (.045 \pm .010)$	0.25 (0.010)
	12/3	12.0 (0.472)	3.0 (0.118)	$1.40 \pm 0.25 \; (.055 \pm .010)$	0.56 (0.022)
	16/4	16.0 (0.630)	4.0 (0.157)	$1.78 \pm 0.36 \; (.070 \pm .014)$	0.58 (0.023)
	24/6	24.0 (0.945)	6.0 (0.236)	$2.25 \pm 0.50 \; (.088 \pm .020)$	0.58 (0.023)
	32/8	32.0 (1.260)	8.0 (0.315)	$2.54 \pm 0.50 \; (.100 \pm .020)$	0.79 (0.031)
	52/13	52.0 (2.047)	13.0 (0.512)	$2.54 \pm 0.50 \; (.100 \pm .020)$	0.86 (0.034)

## **Material**:

The tubing shall be fabricated from a modified irradiated polyolefin compounded to produce a homogeneous, uniform product whose outside surface is essentially free from flaws, defects, pinholes, seams, cracks, or inclusions. The interior wall is coated with a thermoplastic adhesive. The standard color is black.

© 2016 Tyco Electronics Corporation. All Rights Reserved

Customer	Drawing
Custonie	Diawiiiq

connectivity			Tubing TE CONNECTIVITY 300 Constitution Drive Menlo Park, CA 94025 USA	DWFR Highly Flame-Retardant, Dual Wall Polyolefin Heat-Shrinkable Tubing		
TE Connectivity reserves the right to amend this drawing at any time. Users should evaluate the suitability of the product for their application			Document No :  DWFR			
Cage Code: 06090	Scale: None	Size:	Rev. Date: 28-January-16		Rev. E	Sheet: 1 of 2

## **Properties:**

PROPERTY	UNIT	REQUIREMENT	TEST METHOD
PHYSICAL			
*Dimensions	mm (in)	In accordance with Table 1	ASTM D 2671
Longitudinal Change	Percent	0, -15%	ASTM D 2671
*Tensile Strength	psi (MPa)	1500 minimum (10.3)	
-			ASTM D 2671
*Ultimate Elongation	Percent	200 minimum	
Secant Modulus (Expanded)	psi (MPa)	2.5 x 10 <sup>4</sup> maximum (172)	ASTM D 882, 2% strain
Cold Bend Test		No cracking	UL 224, section 5.9
at $-30 \pm 1.0^{\circ}$ C ( $-22 \pm 1.8^{\circ}$ F) for 1			
hour			
*Heat Shock		No dripping, flowing or	UL 224, section 5.8
4 hours at 250.0 $\pm$ 1.0°C (482 $\pm$		cracking of outer wall	
1.8°F)			
Heat Resistance			UL 224
168 hours at 158.0°C $\pm$ 1.0°C (316.4			
± 1.8°F)			
Followed by test for:			
- Tensile Strength	psi (MPa)	Min. 70% of original	
- Elongation	Percent	100% minimum	
Sealing Efficiency		No openings on reheat	AMS-DTL 23053/4
ELECTRICAL			
Dielectric Strength	Volts/mil	300 minimum (11,811 min)	ASTM D 2671
	(volts/mm)	on dual wall specimen	
Volume Resistivity	ohm-cm	10 <sup>14</sup> minimum on dual wall	ASTM D 2671
		specimen	
CHEMICAL			
Corrosion of the bare copper		No pitting or blackening of	UL 224, section 5.16
168 hours at 158.0°C $\pm$ 1.0°C (316.4		copper	
± 1.8°F)			
Copper stability		Show no sign of degradation	UL 224, section 5.17
168 hours at 158.0°C $\pm$ 1.0°C (316.4			
$\pm 1.8^{\circ}F$ )			
Followed by test for:			
- Elongation	Percent	100% minimum	
Flammability		Self-extinguishing within 1	
		minute, 25% maximum flag	UL 224, VW-1
		burn and 0% cotton burn	
Water Absorption	Percent	0.5 maximum	ASTM D 2671
24 hours at 23°C (73°F)			

<sup>\*</sup>Denotes Lot Acceptance Test

## **Customer Drawing**

Rev. Date:	Rev.:	Document No.	Sheet:
28-January-16	E	DWFR	2 of 2

单击下面可查看定价,库存,交付和生命周期等信息

>>TE Connectivity(泰科)