

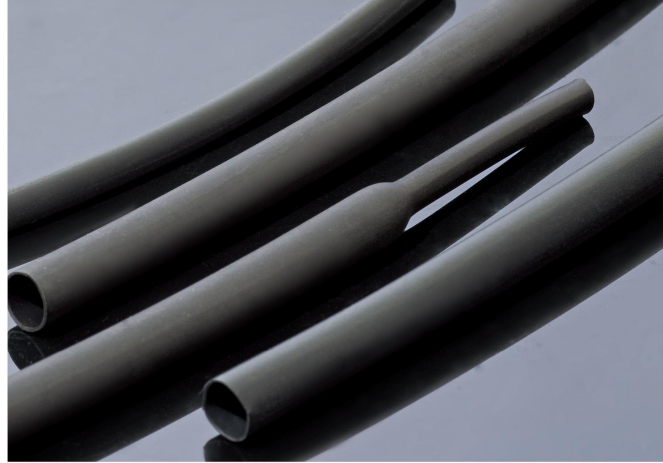
Thin Wall Tubing

**GTF (3X/4X)**

*Flexible highly flame retardant tubing*

**Features**

- ⦿ 3:1 and 4:1 shrink ratio
- ⦿ Very good chemical and solvent resistance
- ⦿ RoHS compliant



**Applications**

*Provides electrical insulation and strain relief of in-line components, electrical connections, wire terminations, and splices.*

*Bundles wires for flexible light duty harnesses.*

*Identifies or color codes wires, cables, terminals and electrical and electronic components.*

**Specification/Approvals**

*UL224/VW-1/600V/SAE-AMS-DTL 23053/5*

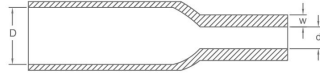
*Class1(colors); Class 2(clear)*

**Operating Temp**

*-55°C to 135°C*

**Typical technical performances**

Test Items	Test Method	Test Requirements
Tensile strength	ASTM D 2671	10.4MPa minimum
Ultimate elongation	ASTM D 2671	200% minimum
Tensile strength after Aging at 175°C for 168hrs	UL 224	70% retention minimum
Ultimate elongation after Aging at 175°C for 168hrs	UL 224	100% minimum
Heat shock at 250°C for 4hrs	UL 224	No dropping & cracking
Flammability	UL 224	VW-1
Volume resistance	UL 224	10 <sup>14</sup> Ω.cm minimum
Cold bend at -30°C for 1hr	ASTM D 2671	No cracking



## Dimensions

Size(Inch)	As supplied(mm)		After recovered (mm)	
	D*(Min.)	d*(Max.)	d*(Max.)	w*(Min.)
GTF(3X)				
1/16	1.6	0.5	0.45	
1/8	3.2	1.1	0.50	
3/16	4.8	1.6	0.60	
1/4	6.4	2.1	0.65	
3/8	9.5	3.2	0.75	
1/2	12.7	4.2	0.80	
3/4	19.1	6.4	0.90	
1	25.4	8.5	1.20	
1-1/2	39.0	13.0	1.25	
GTF(4X)				
3/4	19.1	4.8	1.80	
1	25.4	7.0	1.80	
1-1/2	38.1	9.5	1.80	
2	50.8	14.0	1.80	
3	76.2	21.3	1.80	
4	101.6	26.7	1.90	
4-1/2	114.3	36.8	1.90	

D\* = Inner diameter as supplied

d\* = Inner diameter after fully recovered

w\* = Wall thickness after fully recovered

## Ordering information

Color	Standard	Black
Standard packaging	In 1.2-meter [4-foot] lengths or on spools.	
Ordering description	Specify product name, size and color (for example, GTF(3X) 19.1/6.4 Black)	

\* Other colors and cutting length are available on request.