

- Clear
- Flame-retardant

# Thermofit® RT-375

# Flexible fluoropolymer heat-shrinkable tubing

Thermofit RT-375 is a highly flame-retardant heat-shrinkable thin-wall tubing that has excellent clarity. It is manufactured from a modified fluoropolymer whose properties include toughness, chemical resistance, and high-temperature performance. A very thin wall gives RT-375 excellent flexibility.

Applications include protection of wire and cable markers subject to abuse; bundling and jacketing of wires and cables to protect them from mechanical and chemical abuse while permitting full inspectability of the item covered; and protection of electronic components without losing the ability to identify the part.

RT-375 is UL-recognized at 150°C, 600 V, with UL VW-1 flame-retardancy ratings.

### Temperature rating

Full recovery	150°C
Continuous operating temperature	−55°C to 150°C
Recommended maximum temperature for use as a primary insulator	135°C

#### Specifications\*

Туре	Raychem	Military	UL	
RT-375	RT-375	MIL-I-23053/18, Class 2	E85381 VW-1	

<sup>\*</sup> When ordering, always specify latest issue.



# Dimensions (inches/millimeters)

	Inside diamete	Wall thickness			
Size	D (min.) expanded as supplied	d (max.) recovered after heating	W recovered after heating**		
3/64	.046 1.2	.023 0.6	.010±.002 .25±.05		
1/16	.063 1.6	.031 <i>0.8</i>	.010±.002 .25±.05		
3/32	.093 2.4	.046 1.2	.010±.002 .25±.05		
1/8	.125 <i>3.2</i>	.062 1.6	.010±.002 .25±.05		
3/16	.187 <i>4.8</i>	.093 2.4	.010±.002 .25±.05		

	D (min.) d (max.) W expanded as recovered after recovered		man timon			
Size			recovered after		W recovered after heating**	
1/4	.250	6.4	.125	3.2	.012±.003	.30±.08
3/8	.375	9.5	.187	4.8	.012±.003	.30±.08
1/2	.500	12.7	.250	6.4	.012±.003	.30±.08
3/4	.750	19.1	.375	9.5	.017±.003	.43±.08
1	1.00	25.4	.500	12.7	.019±.003	.48±.08

Inside diameter

Wall thickness

## Ordering information

Color	Clear only
Size selection	Always order the largest size that will shrink snugly over the component being covered.
Standard packaging	On spools
Nonstandard sizes	Special sizes may be made available on request.

<sup>\*\*</sup> Wall thickness will be less if tubing recovery is restricted during shrinkage.

#### **Specification values**

	Property	Unit	Performance	Method of test
Physical	Dimensions	inches (mm)	See reverse	ASTM D2671
	Longitudinal change	percent	+0, -10	ASTM D2671
	Tensile strength	psi <i>(MPa)</i>	3500 minimum (24.1)	ASTM D2671
	Ultimate elongation	percent	300 minimum	ASTM D2671
	Concentricity	percent	70 minimum	MIL-I-23053
	Secant modulus (as supplied)	psi <i>(MPa)</i>	2.5x10 <sup>4</sup> minimum <i>(172)</i>	ASTM D2671
	Specific gravity		1.85 maximum	ASTM D2671
	Low temperature flexibility (4 hours at –55°C/–67°F)		No cracking	MIL-I-23053/18
	Heat shock (4 hours at 250°C/482°F)		No dripping, flowing, or cracking	ASTM D2671
	Heat resistance (336 hours at 225°C/ <i>437°F</i> )			ASTM D2671
	Followed by test for: Ultimate elongation	percent	100 minimum	ASTM D2671
	Clarity stability (24 hours at 200°C/392°F)		Marking legible through tubing wall	MIL-I-23053
Floridad	District in the set		400 in in (45 700)	ASTM D2671
Electrical	Dielectric strength Volume resistivity	volts/mil (volts/mm) ohm-cm	400 minimum <i>(15,760)</i> 10 <sup>11</sup> minimum	ASTM D2671 ASTM D2671
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Chemical	Copper mirror corrosion (16 hours at 160°C/320°F)		Noncorrosive	ASTM D2671 Procedure A
			No pitting or blackening of copper	ASTM D2671 Procedure B
	Flammability		Self-extinguishing within 1 minute, 25% maximum flag burn	ASTM D2671 Procedure C
	Fungus resistance		Rating of 0	ASTM G21
	Water absorption (24 hours at 23°C/73°F)	percent	0.5 maximum	ASTM D2671
	Fluid resistance (24 hours at 50°C/122°F)			ASTM D2671
	JP-4 fuel (MIL-T-5624)	_		
	Hydraulic fluid (MIL-H-5606)			
	Lubricating oil (MIL-L-23699	<u>)</u>		
	Lubricating oil (MIL-L-7808)			
	5% NaCl (0-S-1926)	=		
	De-icing fluid (MIL-A-8243)	_		
	Water			
	Followed by tests for:	nsi (MPa)	2000 minimum (12.0)	ACTM DOGT1
	Tensile strength	psi (MPa)	2000 minimum <i>(13.8)</i>	ASTM D2671
	Ultimate elongation	percent	250	ASTM D2671
	Dielectric strength	volts/mil (volts/mm)	400 minimum (15,760)	ASTM D2671

Note: Consult RT-375, Issue 2 for specific details about test procedures.

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