tyco Electronics

RT-375

Raychem

Very clear, thin-wall, flexible, fluoropolymer heat-shrinkable tubing

RT-375 is a highly flame-resistant, 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 and CSA-certified at 150°C, 600 V, with a VW-1 flame-retardancy rating.

Temperature rating

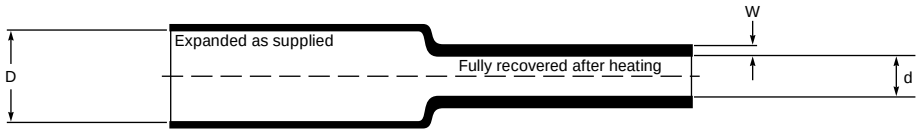
Full recovery temperature:	150°C
Continuous operating temperature:	–55°C to 150°C
Recommended maximum temperature for use as a primary insulator:	135°C

*Specifications**

Type	Raychem	Military	UL	CSA
RT-375	RT-375	AMS-DTL-23053/18, Class 2	E85381 VW-1	LR31929 VW-1

*When ordering, always specify latest issue.

*Dimensions (*millimeters*/inches)*



Size	Inside diameter D (min.) Expanded as supplied		d (max.) Recovered after heating		Wall thickness W Recovered after heating**	
3/64	1.2	*0.046*	0.6	*0.023*	0.25 ± 0.05	*0.010 ± 0.002*
1/16	1.6	*0.063*	0.8	*0.031*	0.25 ± 0.05	*0.010 ± 0.002*
3/32	2.4	*0.093*	1.2	*0.046*	0.25 ± 0.05	*0.010 ± 0.002*
1/8	3.2	*0.125*	1.6	*0.062*	0.25 ± 0.05	*0.010 ± 0.002*
3/16	4.8	*0.187*	2.4	*0.093*	0.25 ± 0.05	*0.010 ± 0.002*
1/4	6.4	*0.250*	3.2	*0.125*	0.30 ± 0.08	*0.012 ± 0.003*
3/8	9.5	*0.375*	4.8	*0.187*	0.30 ± 0.08	*0.012 ± 0.003*
1/2	12.7	*0.500*	6.4	*0.250*	0.30 ± 0.08	*0.012 ± 0.003*
3/4	19.1	*0.750*	9.5	*0.375*	0.43 ± 0.08	*0.017 ± 0.003*
1	25.4	*1.000*	12.7	*0.500*	0.48 ± 0.08	*0.019 ± 0.003*

**Wall thickness will be less if tubing recovery is restricted during shrinkage.

Ordering information

Color	Clear
Size selection	Always order the largest size that will shrink snugly over the component being covered. Special sizes may be made available upon request.
Standard packaging	On spools
Ordering description	Specify product name, size, and color; for example, RT-375 1/4-X (X=Clear).

Specification values

	Property	Unit	Requirement	Method of test
Physical	Dimensions	mm *(inches)*	See reverse	ASTM D 2671
	Longitudinal change	percent	+0, –10 maximum	ASTM D 2671
	Tensile strength	psi *(MPa)*	3500 *(24.1)* minimum	ASTM D 2671
	Ultimate elongation	percent	300 minimum	ASTM D 2671
	Concentricity (expanded)	percent	70 minimum	AMS-DTL-23053
	Secant modulus (expanded)	psi *(MPa)*	2.5 x 10^4 *(172)* minimum	ASTM D 2671
	Specific gravity		1.90 maximum	ASTM D 2671
	Low-temperature flexibility (4 hours at –55°C/*–67°F*)		No cracking	AMS-DTL-23053
	Heat shock (4 hours at 250°C/*482°F*)		No dripping, flowing, or cracking	ASTM D 2671
	Heat resistance (336 hours at 225°C/*437°F*)			ASTM D 2671
	Followed by test for:			
	Ultimate elongation	percent	100 minimum	ASTM D 2671
	Clarity stability (24 hours at 200°C/*392°F*)		Marking legible through tubing wall	AMS-DTL-23053
Electrical	Dielectric strength	volts/mil *(volt/mm)*	400 *(15.760)* minimum	ASTM D 2671
	Volume resistivity	ohm-cm	10^{11} minimum	ASTM D 2671
Chemical	Copper mirror corrosion (16 hours at 160°C/*320°F*)		Noncorrosive	ASTM D 2671 Procedure A
	Copper contact corrosion (16 hours at 160°C/*320°F*)		No pitting or blackening of copper	ASTM D 2671 Procedure B
	Flammability		Self-extinguishing within 1 minute, 25% maximum flag burn	ASTM D 2671 Procedure C
	Fungus resistance Followed by tests for:			ISO 846 Method B
	Tensile strength	psi *(MPa)*	3500 *(24.1)* minimum	ASTM D 2671
	Ultimate elongation	percent	300 minimum	ASTM D 2671
	Dielectric strength	volts/mil *(volts/mm)*	400 *(15,760)* minimum	ASTM D 2671
	Water absorption (24 hours at 23°C/*73°F*)	percent	0.5 maximum	ASTM D 2671
	Fluid resistance (24 hours at 50°C/*122°F*) in: JP-8 fuel (MIL-T-5624) Hydraulic fluid (MIL-H-5606) Lubricating oil (MIL-L-23699) Lubricating oil (MIL-L-7808) 5% NaCl, 0-S-1926 De-icing fluid (MIL-A-8243) Water			ASTM D 2671
	Followed by tests for:			
	Tensile strength	psi *(MPa)*	2000 *(13.8)* minimum	ASTM D 2671
	Ultimate elongation	percent	250	ASTM D 2671
	Dielectric strength	volts/mil *(volts/mm)*	400 *(15,760)* minimum	ASTM D 2671

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

Users should independently evaluate the suitability of the product for their application.

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Authorized Distributor

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TE Connectivity:
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