

Semirigid, flame-retardant polyolefin heat-shrinkable tubing



RT-3 tubing is ideally suited for wire strain-relief applications. It provides excellent strain relief and insulation of "weak points," transferring flex stress away from solder and crimp joints and other typically sensitive wire-splice and termination points.

RT-3 is especially well suited for semi-automated production

equipment requiring tubing with a tightly controlled expanded diameter. Sizes and expansion ratios of RT-3 are available for specific spade/disconnect terminals.

RT-3 tubing is made from a semirigid, radiation-crosslinked, flame-retardant polyolefin. Unlike other typical flame-retardant tubings, RT-3 tubing is free

of polybrominated biphenyls (PBBs) and polybrominated biphenyl oxides (PBBOs). In Europe, these chemicals are classified as environmentally hazardous substances.

RT-3 is UL-recognized in all colors and CSA- certified in black at 125°C, 600 V.

Temperature rating

Full recovery temperature:	135°C
Continuous operating temperature:	-55°C to 135°C

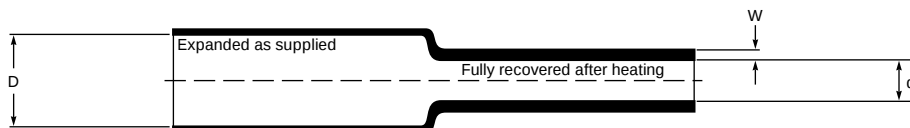
Specifications*

Type	Raychem	 UL	 CSA
RT-3	RT-360**	E35586	LR31929 (Black only)

* When ordering, always specify latest issue.

** Except dimensions and longitudinal change.

Dimensions (millimeters/inches)



Size*	Inside diameter		Wall thickness	
	D Expanded as supplied	d (max.) Recovered after heating	W Recovered after heating***	
RT-3 No. 1	6.1 ± 0.4 0.240 ± 0.015	2.4 0.095	0.79 ± 0.08 0.031 ± 0.003	
RT-3 No. 2	8.1 ± 0.4 0.320 ± 0.015	3.2 0.125	0.79 ± 0.08 0.031 ± 0.003	
RT-3 No. 3	9.5 ± 0.5 0.375 ± 0.020	3.8 0.150	0.79 ± 0.08 0.031 ± 0.003	
RT-3 No. 4	12.3 ± 0.5 0.485 ± 0.020	5.1 0.200	0.79 ± 0.08 0.031 ± 0.003	

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

Ordering information

Color	Standard Black only.
Size selection	Always order the largest size that will shrink snugly over the component being covered. A variety of nonstandard sizes are available.
Standard packaging	1-inch cut-pieces or 4-foot lengths
Ordering description	Specify product name, size, and color; for example, RT-3 No. 1-0 (0=Black).

Specification values

	Property	Unit	Requirement	Method of test
Physical	Dimensions	mm (<i>inches</i>)	See reverse	ASTM D 2671
	Longitudinal change	percent	+0, -10	ASTM D 2671
	Tensile strength	psi (<i>MPa</i>)	2000 (13.8) minimum	ASTM D 2671
	Ultimate elongation	percent	200 minimum	ASTM D 2671
	Secant modulus (expanded)	psi (<i>MPa</i>)	2.5 x 10 ⁴ (172) minimum	ASTM D 2671
	Specific gravity		1.35 maximum	ASTM D 2671
	Low-temperature flexibility (4 hours at -55°C/-67°F)		No cracking	ASTM D 2671
	Heat shock (4 hours at 250°C/482°F)		No dripping, flowing, or cracking	ASTM D 2671
	Heat resistance (168 hours at 175°C/347°F) Followed by test for:			ASTM D 2671
	Ultimate elongation	percent	150 minimum	ASTM D 2671
Electrical	Dielectric strength	volts/mil (<i>kV/mm</i>)	500 (19.7) minimum	ASTM D 2671
	Volume resistivity	ohm-cm	10 ¹⁴ minimum	ASTM D 2671
Chemical	Copper mirror corrosion (16 hours at 150°C/302°F)		Noncorrosive	ASTM D 2671 Procedure A
	Copper contact corrosion (168 hours at 150°C/302°F)		No pitting or blackening of copper	ASTM D 2671 Procedure B
	Flammability		Self-extinguishing within 1 minute; no more than 25% of indicator burned or charred; no falling, burning particles.	ASTM D 2671 Procedure B
	Fungus resistance Followed by tests for:			ISO 846 Method B
	Tensile strength	psi (<i>MPa</i>)	2000 (13.8) minimum	ASTM D 2671
	Ultimate elongation	percent	200 minimum	ASTM D 2671
	Dielectric strength	volts/mil (<i>kV/mm</i>)	500 (19.7) 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 23°C/73°F) in: JP-8 fuel (MIL-T-5624) Skydrol 500 Hydraulic fluid (MIL-H-5606) Aviation gasoline 100/300 (MIL-G-5572) Water Followed by tests for:			ASTM D 2671
	Dielectric strength	volts/mil (<i>kV/mm</i>)	400 (15.8) minimum	ASTM D 2671
	Tensile strength	psi (<i>MPa</i>)	1600 (11.0) minimum	ASTM D 2671

Note: Consult RT-360 for specific details about test procedures.

Skydrol is a trademark of Monsanto Company.

Raychem is a trademark of Tyco Electronics Corporation.

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

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