tyco Electronics

RNF-150

Raychem

High-performance, thin-wall, flexible, fluoropolymer heat-shrinkable tubing

RNF-150 is a highly flame-resistant thin-wall heat-shrinkable tubing that has excellent durability. It is manufactured from a modified fluoropolymer whose properties include toughness, chemical resistance, and high-temperature performance.

A very thin wall gives RNF-150 excellent flexibility.

Applications include insulation, jacketing, and identification of wire bundles; light-duty harnesses; insulation and protection of terminals and wire connections; and packaging of components. RNF-150 is not recommended for use in direct contact with ketones.

RNF-150 is UL-recognized at 150°C, 600 V, with a UL VW-1 flame retardance rating and meets the requirements of AMS-DTL-23053/18, Class 2.

Temperature rating

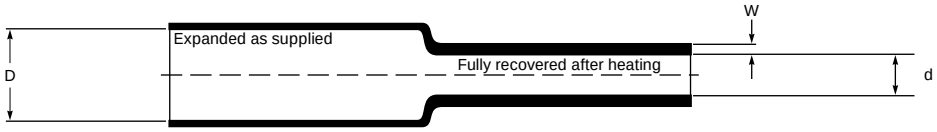
Full recovery temperature:	150°C
Continuous operating temperature:	–55°C to 155°C
Recommended maximum temperature for use as a primary insulator:	135°C

*Specifications**

Type	Raychem	Military	UL
RNF-150	RT-370	AMS-DTL-23053/18, Class 2	E85381 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**		Weight as supplied (max.) lb./100 ft.	kg./100 m
3/64	1.2	*0.046*	0.6	*0.023*	0.25 ± 0.05	*0.010 ± 0.002*	0.10	*0.15*
1/16	1.6	*0.063*	0.8	*0.031*	0.25 ± 0.05	*0.010 ± 0.002*	0.13	*0.19*
3/32	2.4	*0.093*	1.2	*0.046*	0.25 ± 0.05	*0.010 ± 0.002*	0.17	*0.25*
1/8	3.2	*0.125*	1.6	*0.062*	0.25 ± 0.05	*0.010 ± 0.002*	0.22	*0.33*
3/16	4.8	*0.187*	2.4	*0.093*	0.25 ± 0.05	*0.010 ± 0.002*	0.31	*0.46*
1/4	6.4	*0.250*	3.2	*0.125*	0.30 ± 0.08	*0.012 ± 0.003*	0.40	*0.60*
3/8	9.5	*0.375*	4.8	*0.187*	0.30 ± 0.08	*0.012 ± 0.003*	0.73	*1.09*
1/2	12.7	*0.500*	6.4	*0.250*	0.30 ± 0.08	*0.012 ± 0.003*	0.96	*1.43*
3/4	19.1	*0.750*	9.5	*0.375*	0.43 ± 0.08	*0.017 ± 0.003*	1.92	*2.85*
1	25.4	*1.000*	12.7	*0.500*	0.48 ± 0.08	*0.019 ± 0.003*	2.78	*4.14*

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

Ordering information

Colors	**Standard**	Black
	Nonstandard	White
Size selection	Always order the largest size that will shrink snugly over the component being covered. Special order sizes may be made available upon request.	
Standard packaging	On spools	
Ordering description	Specify product name, size, and color; for example, RNF-150 1/4-0 (0=Black).	

Specification values

	Property	Unit	Requirement	Method of test
Physical	Dimensions	mm *(inches)*	See reverse	ASTM D 2671
	Longitudinal change	percent	+0, -10	ASTM D 2671
	Concentricity as supplied	percent	70% minimum	ASTM D 2671
	Weight per length as supplied	lb./100 ft. *(kg./100 m)* max.	See reverse	See note below
	Recovery angle	degrees	5 maximum	See note below
	Tensile strength	psi *(Mpa)*	4000 *(27.6)* minimum	ASTM D 2671
	Ultimate elongation	percent	300 minimum	ASTM D 2671
	Secant modulus (as supplied)	psi *(Mpa)*	25,000 to 100,000 *(172 to 690)*	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
	Dynamic cut-through (135°C/*275°F*)	lb. *(kg.)*	5 *(2.3)* minimum	ASTM D 3032 See note below
	Heat resistance (336 hours at 225°C/*437°F*)			ASTM D 2671
	Followed by test for:			
	Ultimate Elongation	percent	250 minimum	ASTM D 2671
	Color		MIL-STD-104, Class I	MIL-STD-104
Electrical	Dielectric strength	volts/mil *(kV/mm)*	500 *(19.7)* minimum	ASTM D 2671
	Volume resistivity	ohm-cm	10^{11} minimum	ASTM D 2671
Chemical	Corrosive effect		Noncorrosive	ASTM D 2671
	Copper mirror corrosion (16 hours at 160°C/*320°F*)		Copper removal 5% maximum	ASTM D 2671 Procedure A
	Copper contact corrosion (16 hours at 175°C/*347°F*)		No blackening or pitting of copper	ASTM D 2671 Procedure B
	Copper stability (168 hours at 180°C/*356°F*)		No brittleness, glazing, or severe discoloration of tubing. No pitting or blackening of copper.	ASTM D 2671 Procedure B
	Followed by test for:			
	Ultimate elongation	percent	250 minimum	ASTM D 2671
	Flammability		25% maximum flag burn; no burning of cotton; no flaming or glowing longer than 60 seconds	UL 224, VW-1 ASTM D 2671 Procedure C
	Fungus resistance			ISO 846 Method B
	Followed by tests for:			
	Tensile strength	psi *(Mpa)*	4000 *(27.6)* minimum	ASTM D 2671
	Ultimate elongation	percent	300 minimum	ASTM D 2671
	Dielectric strength	volts/mil *(kV/mm)*	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 50°C/*122°F*) in: JP-8 fuel (MIL-T-5624) Hydraulic fluid (MIL-H-5606) Aviation gasoline100/300 (MIL-G-5572) Water Lubricating oil (MIL-L-23699)			ASTM D 2671
	Followed by tests for:			
	Dielectric strength	volts/mil *(kV/mm)*	400 *(15.8)* minimum	ASTM D 2671
	Tensile strength	psi *(Mpa)*	2000 *(13.8)* minimum	ASTM D 2671

Note: Consult RT-370 for specific details about test procedures.

Raychem is a trademark of Tyco Electronics Corporation.

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

Tyco Electronics Corporation

300 Constitution Drive
Menlo Park, CA 94025-1164
USA
Tel: (800) 926-2425 (US & Canada)
Tel: +1 (650) 361-3860 (All other countries)

Faraday Road
Dorcan, Swindon, SN3 5HH
United Kingdom
Tel: +44 1793 528171

3816 Noborito, Tama-ku
Kawasaki, Kanagawa 214-8533
Japan
Tel: +81 44 900 5102

Asia Pacific Headquarters
26 Ang Mo Kio, Industrial Park 2
Singapore 569507
Tel: +65 4866 151

For more information about this product visit www.tycoelectronics.com

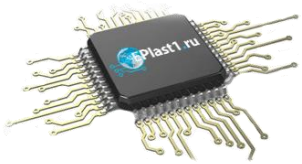
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.