

Thin-wall, semirigid, fluoropolymer heat-shrinkable tubing

RW-175 heat-shrinkable tubing is a tough, semirigid, very-thin-wall insulation. It is especially suitable for applications requiring high-temperature performance, outstanding abrasion and cut-through resistance, or superior chemical and solvent properties. The translucent polyvinylidene fluoride material permits visual inspection of covered components.

RW-175 tubing provides electrical insulation and strain relief of multipin connectors and solder joints. It is also widely used as insulation for high-temperature components and heater leads. With its thin-wall construction, RW-175 is ideal for applications that require dense packing of components.

RW-175 provides protection from most industrial solvents, fuels, and chemicals – including JP-8, oxidants, and strong acids. It is UL-recognized and CSA-certified at 150°C, 600 V, with VW-1 and OFT flame-retardancy ratings.

Temperature rating

Full recovery temperature:	175°C
Continuous operating temperature:	-55°C to 175°C
Recommended maximum temperature for use as a primary insulator:	135°C

Specifications*

Type	Raychem	Military	UL	CSA
RW-175	RW-3029/2	AMS-DTL-23053/8	E35586 VW-1	LR31929 OFT

*When ordering, always specify latest issue.

Dimensions (millimeters/inches)



Size	Inside diameter		Wall thickness		Size	Inside diameter		Wall thickness					
	D (min.) Expanded as supplied	d (max.) Recovered after heating	W Recovered after heating	W Recovered after heating**		D (min.) Expanded as supplied	d (max.) Recovered after heating	W Recovered after heating	W Recovered after heating**				
3/64	1.2	0.046	0.6	0.023	0.25 ± 0.05	0.010 ± 0.002	1/2	12.7	0.500	6.4	0.250	0.33 ± 0.05	0.013 ± 0.002
1/16	1.6	0.063	0.8	0.031	0.25 ± 0.05	0.010 ± 0.002	3/4	19.1	0.750	9.5	0.375	0.43 ± 0.08	0.017 ± 0.003
3/32	2.4	0.093	1.2	0.046	0.25 ± 0.05	0.010 ± 0.002	1	25.4	1.000	12.7	0.500	0.48 ± 0.08	0.019 ± 0.003
1/8	3.2	0.125	1.6	0.062	0.25 ± 0.05	0.010 ± 0.002	1 1/2	38.1	1.500	19.1	0.750	0.51 ± 0.08	0.020 ± 0.003
3/16	4.7	0.187	2.4	0.093	0.25 ± 0.05	0.010 ± 0.002	2	50.8	2.000	25.4	1.000	0.51 ± 0.08	0.020 ± 0.003
1/4	6.4	0.250	3.2	0.125	0.33 ± 0.05	0.013 ± 0.002	3	76.2	3.000	38.1	1.500	0.64 ± 0.10	0.025 ± 0.004
3/8	9.5	0.375	4.7	0.187	0.33 ± 0.05	0.013 ± 0.002	4	101.6	4.000	50.8	2.000	0.76 ± 0.13	0.030 ± 0.005

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

Ordering information

Colors	Standard Nonstandard	Translucent (clear) Black
Size selection	Always order the largest size that will shrink snugly over the component being covered.	
Nonstandard sizes	Sizes of 2 inches and larger are by special order only. In addition, a variety of nonstandard sizes are available.	
Standard packaging	4-foot lengths	
Ordering description	Specify product name, size, and color; for example, RW-175 1/4-X (X=Clear).	

Specification values

	Property	Unit	Requirement	Method of test
Physical	Dimensions	mm (<i>inches</i>)	See reverse	ASTM D 2671
	Longitudinal change	percent	+0, -10 maximum	ASTM D 2671
	Tensile strength	psi (<i>MPa</i>)	5000 (<i>34.5</i>) minimum	ASTM D 2671
	Ultimate elongation	percent	150 minimum	ASTM D 2671
	Secant modulus (expanded)	psi (<i>MPa</i>)	1 x 10 ⁵ (<i>690</i>) minimum	ASTM D 2671
	Specific gravity		1.8 maximum	ASTM D 2671
	Low-temperature flexibility (4 hours at -55°C/-67°F)		No cracking	AMS-DTL-23053/8
	Heat shock (4 hours at 300°C/572°F)		No dripping, flowing, or cracking	AMS-DTL-23053
	Heat resistance (168 hours at 250°C/482°F) Followed by test for:			ASTM D 2671
	Ultimate elongation	percent	50 minimum	ASTM D 2671
	Vacuum outgassing			ASTM E 595
	TML (total mass loss)	percent	1.0 maximum	
	VCM (volatile condensable material)	percent	0.1 maximum	
	Electrical	Dielectric strength	volts/mil (<i>kV/mm</i>)	
Sizes 3/64 through 1/2			800 (<i>31.5</i>) minimum	
Sizes 3/4 through 2			600 (<i>23.6</i>) minimum	
Volume resistivity		ohm-cm	10 ¹³ minimum	ASTM D 2671
Chemical	Copper mirror corrosion (16 hours at 175°C/347°F)		Noncorrosive	ASTM D 2671 Procedure A
	Copper contact corrosion (168 hours at 175°C/347°F) Followed by test for:		No pitting or blackening of copper	ASTM D 2671 Procedure B
	Ultimate elongation	percent	100 minimum	ASTM D 2671
	Flammability (average time of burning)	seconds	15 maximum	ASTM D 2671 Procedure A
	Fungus resistance Followed by tests for:			ISO 846 Method B
	Tensile strength	psi (<i>MPa</i>)	5000 (<i>34.5</i>) minimum	ASTM D 2671
	Ultimate elongation	percent	150 minimum	ASTM D 2671
	Dielectric strength	volts/mil (<i>kV/mm</i>)		ASTM D 2671
	Sizes 3/64 through 1/2		800 (<i>31,500</i>) minimum	
	Sizes 3/4 through 2		600 (<i>23,600</i>) minimum	
	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) Salt water (5% salt) Anti-icing fluid (MIL-A-8243) Lubricating oil (MIL-L-7808) Followed by tests for:			ASTM D 2671
	Dielectric strength	volts/mil (<i>kV/mm</i>)		ASTM D 2671
	Sizes 3/64 through 1/2		700 (<i>27.6</i>) minimum	
Sizes 3/4 through 2		500 (<i>19.7</i>) minimum		
Tensile strength	psi (<i>MPa</i>)	5000 (<i>34.5</i>) minimum	ASTM D 2671	

Note: Consult RW-3029/2 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.

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

All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Tyco Electronics Corporation makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. Tyco Electronics Corporation's only obligations are those in the Standard Terms and Conditions of Sale for these products and in no case will Tyco Electronics Corporation be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of the product. Tyco Electronics Corporation's Specifications are subject to change without notice. In addition, Tyco Electronics Corporation reserves the right to make changes in materials or processing without notification to the Buyer which do not affect compliance with any applicable specification.

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

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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А