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Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



RayBlock 85

Heat-Shrinkable Water-Blocking System

Product Facts

- Environmentally seals wire bundles of up to 20 wires
- Withstands temperature excursions to 105°C [221°F]
- Provides excellent strain relief and reduces noise
- Offers a low-profile installed product only marginally larger than the cable bundle itself
- RoHS compliant



Applications

Designed to provide consistent sealing for cable bundles and the back of connectors. The wires are placed within the channels of a specially formulated hot-melt adhesive profile, then covered by dual-wall, heat-shrinkable tubing with a flame-retardant, radiation-crosslinked outer wall and hot-melt-adhesive inner wall. When the tubing is heated, the hot-melt

adhesive melts and the tubing shrinks, forcing the molten adhesive to fill all the voids within the wire bundle and tubing. The result is a solid plug of adhesive molded around each wire in the bundle, creating a moisture-resistant seal.

Installation

Minimum shrink temperature: 80°C [176°F]
Minimum full recovery temperature: 110°C [230°F]

Operating Temperature Range

-40°C to 85°C
[-40°F to 185°F]

Specifications/Approvals

Series	Raychem
RayBlock 85	RayBlock 85 SCD RW-2101

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RHW

Rugged, Heavy Wall, Adhesive-Lined, Polyolefin Heat-Shrinkable Tubing

Product Facts

- Withstands mechanical abuse for increased product reliability
- Highly resistant to impact and abrasion
- Provides high level of strain relief when installed on splices and joints
- Resistant to chemicals, moisture and oils
- Provides a complete moisture-proof seal preventing corrosion of underlying components
- RoHS compliant



Applications

Rugged, heavy wall RHW tubing is specifically designed for insulating, protecting and sealing electrical connections and joints in low-voltage cables. It provides splice insulation thickness equal to or greater than standard wire insulation manufactured to common industry standards.

RHW is a suitable choice for applications where maximum reliability and product performance, and simplified installation are required. Because RHW is heat-shrinkable, a minimum number of sizes are needed to cover a wide range of cables and splice diameters.


Installation

Minimum shrink temperature: 110°C [230°F]
Minimum full recovery temperature: 125°C [257°F]

Operating Temperature Range

-55°C to 110°C
[-67°F to 230°F]

Specifications/Approvals

Series	UL* 	Raychem
RHW	File E91151	RHW SCD

*Sizes 9/3 through 70/21 only.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RHW (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness**	
	Minimum Expanded as Supplied	Recovered After Heating	Nominal Jacket Wall	Nominal Adhesive Wall
9/3	9 [0.354]	3 [0.118]	2.0 [0.079]	0.25 [0.010]
13/4	13 [0.512]	4 [0.158]	2.4 [0.094]	0.30 [0.012]
20/6	20 [0.787]	6 [0.236]	2.5 [0.098]	0.35 [0.014]
33/8	33 [1.299]	8 [0.315]	3.2 [0.126]	0.35 [0.014]
43/12	43 [1.693]	12 [0.472]	4.3 [0.169]	0.40 [0.016]
51/16	51 [2.008]	16 [0.630]	4.5 [0.177]	0.40 [0.016]
70/21	70 [2.756]	21 [0.827]	4.4 [0.173]	0.40 [0.016]
85/25	85 [3.346]	25 [0.984]	4.3 [0.169]	0.40 [0.016]
105/30	105 [4.134]	30 [1.181]	4.3 [0.169]	0.45 [0.018]
130/36	130 [5.118]	36 [1.417]	4.3 [0.169]	0.45 [0.018]
160/50	160 [6.299]	50 [1.968]	4.3 [0.169]	0.45 [0.018]
180/50	180 [7.087]	50 [1.968]	4.3 [0.169]	0.50 [0.020]

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

Ordering Information

Color	Standard	Black (-0)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging***	1200mm lengths	
Marking	Tubing will be marked with the product name, size and batch number. Sizes 9/3 through 70/21 will also be marked with the UL Logo	
Ordering description	Specify product name, size, cut length, coating option and color (for example, RHW 20/6-1200/ADH-0 (ADH = Adhesive-lined, 0= Black	

***Europe only. Standard packaging 1000mm lengths

RMW

**Medium Wall, Polyolefin
Heat-Shrinkable Tubing**

Product Facts

- Withstands mechanical abuse for increased product reliability
- Highly resistant to impact and abrasion
- Installation is fast and easy
- Resistant to chemicals and moisture
- Adhesive-lined version provides a complete moisture-proof seal preventing corrosion of underlying components
- RoHS compliant



Applications

Medium wall, general purpose RMW tubing is specifically designed for use in a broad range of low-voltage applications. RMW is tough and flexible, making it particularly suited for the insulation and protection of cable joints as well as for cable repair. Uncoated RMW provides insulation and strain relief. Adhesive-lined RMW also provides an environmental seal.

RMW is a suitable choice for applications where maximum reliability and product performance, and simplified installation are required. Because RMW is heat-shrinkable, a minimum number of sizes are needed to cover a wide range of cables and splice diameters.

Installation

Minimum shrink temperature: 110°C [230°F]
Minimum full recovery temperature: 125°C [257°F]

Operating Temperature Range

-55°C to 110°C
[-67°F to 230°F]

Specifications/Approvals

Series	Raychem
RMW	RMW SCD

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RMW (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness**
	Minimum Expanded as Supplied	Recovered After Heating	Nominal Jacket Wall
10/3	10 [0.394]	3 [0.118]	1.0 [0.039]
16/5	16 [0.630]	5 [0.197]	1.4 [0.055]
25/8	25 [0.984]	8 [0.315]	2.0 [0.079]
35/12	35 [1.378]	12 [0.472]	2.0 [0.079]
50/16	50 [1.968]	16 [0.630]	2.0 [0.079]
63/19	63 [2.480]	19 [0.748]	2.4 [0.095]
75/22	75 [2.953]	22 [0.866]	2.7 [0.106]
85/25	85 [3.346]	25 [0.984]	2.8 [0.110]
95/29	95 [3.740]	29 [1.142]	3.1 [0.122]
115/34	115 [4.527]	34 [1.339]	3.1 [0.122]
140/42	140 [5.512]	42 [1.654]	3.1 [0.122]
160/50	160 [6.299]	50 [1.968]	3.2 [0.126]
180/60	180 [7.087]	60 [2.362]	3.2 [0.126]

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

Ordering Information

Color	Standard	Black (-0)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging***	1200mm lengths	
Marking	Tubing will be marked with the product name, size and batch number.	
Ordering description	Specify product name, size, cut length, coating option and color (for example, RMW 25/8-1200/ADH-0 or RMW 75/22-1200/U-0 (ADH = Adhesive-lined, U = Uncoated, 0= Black)	

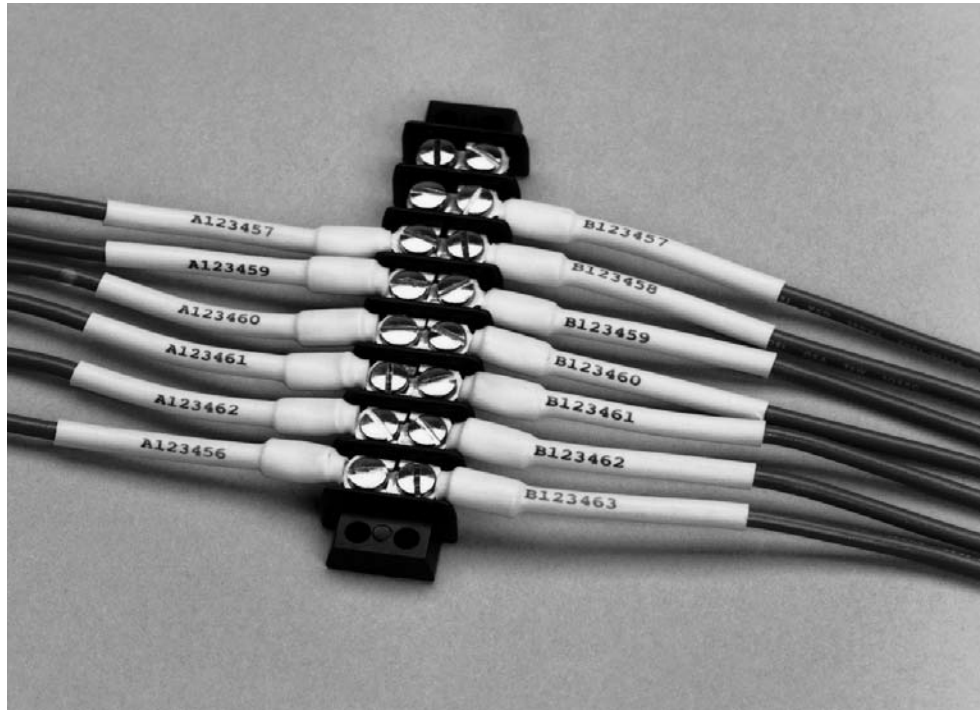
***Europe only. Standard packaging 1000mm lengths

**Flexible, Flame-Retardant,
General Purpose,
Polyolefin Tubing**

Product Facts

- 2:1 shrink ratio
- Superior abrasion and solvent resistance when compared with that of many flexible, general purpose polyolefin tubings
- Excellent physical, chemical, and electrical properties that meet or exceed industrial and military standards for highly reliable, general purpose tubing
- Flexible; conforms to irregular shapes
- Flame-retardant (colors only)
- Wide range of sizes and colors
- RoHS compliant

RNF-100



Applications

Designed to provide superior mechanical (abrasion, cut-through, and strain relief), thermal, and fluid-resistance performance in demanding environments. Widely used to provide insulation and strain relief of wire terminations and connections. Used for jacketing wire bundles and light-duty harnesses where superior abrasion resistance is a plus. Also used to identify and color-code electrical connections and wire bundles.

Installation

Minimum shrink temperature: 95°C [203°F]
Minimum full recovery temperature: 121°C [250°F]

Operating Temperature Range

-55°C to 135°C
[-67°F to 275°F]

Specifications/Approvals

Series	UL	CSA	Military	Industry	Raychem
RNF-100 Type 1 (colors)	E35586 600 V, 125°C	LR31929 600 V, 125°C	AMS-DTL-23053/5*, Class 1 Def. Stan. 59-97 Type 2B	VDE 0341 Pt 9005 Type A and B	RT-350, Type 1 RK-6001
RNF-100 Type 2 (clear)	—	—	AMS-DTL-23053/5*, Class 2 VG 95343 Pt 5 Type B	—	RT-350, Type 2 RK-6001

*Formerly MIL-I-23053/5 and MIL-DTL-23053/5.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RNF-100 (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness**
	Minimum Expanded as Supplied	Maximum Recovered After Heating	After Heating
3/64	1.2 [0.046]	0.6 [0.023]	0.40 ± 0.08 [0.016 ± 0.003]
1/16	1.6 [0.063]	0.8 [0.031]	0.43 ± 0.08 [0.017 ± 0.003]
3/32	2.4 [0.093]	1.2 [0.046]	0.51 ± 0.08 [0.020 ± 0.003]
1/8	3.2 [0.125]	1.6 [0.062]	0.51 ± 0.08 [0.020 ± 0.003]
3/16	4.8 [0.187]	2.4 [0.093]	0.51 ± 0.08 [0.020 ± 0.003]
1/4	6.4 [0.250]	3.2 [0.125]	0.64 ± 0.08 [0.025 ± 0.003]
3/8	9.5 [0.375]	4.8 [0.187]	0.64 ± 0.08 [0.025 ± 0.003]
1/2	12.7 [0.500]	6.4 [0.250]	0.64 ± 0.08 [0.025 ± 0.003]
3/4	19.1 [0.750]	9.5 [0.375]	0.76 ± 0.08 [0.030 ± 0.003]
1	25.4 [1.000]	12.7 [0.500]	0.89 ± 0.12 [0.035 ± 0.005]
1 1/4	31.8 [1.250]	15.9 [0.625]	1.02 ± 0.15 [0.040 ± 0.006]
1 1/2	38.1 [1.500]	19.1 [0.750]	1.02 ± 0.15 [0.040 ± 0.006]
2	50.8 [2.000]	25.4 [1.000]	1.14 ± 0.16 [0.045 ± 0.007]
3	76.2 [3.000]	38.1 [1.500]	1.27 ± 0.20 [0.050 ± 0.008]
4	101.6 [4.000]	50.8 [2.000]	1.40 ± 0.23 [0.055 ± 0.009]
5	127.0 [5.000]	63.5 [2.500]	1.52 ± 0.23 [0.060 ± 0.009]

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

Ordering Information

Color	Standard***	Black (-0, BK), white (-9, WH), red (-2, RD), blue (-6, BU), yellow (-4, YO), green (-5, GN), clear (-X, CL)
	Nonstandard	Brown (-1, BN), orange (-3, OR), violet (-7, VT), gray (-8, GY)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request	
Standard packaging****	On spools or in 1.2-meter [4-foot] lengths.	
Ordering description*****	Specify product name, size and color (for example, RNF-100 1/4-0 [Europe] or RNF-100 1/4-BK [Americas]).	

***Green (-5, GN) is nonstandard in all sizes in Europe, and nonstandard in sizes 1-1/4 through 5-inches in Americas.

****Available in the convenient Mini-Spool packaging/dispensing system, for sizes 3/64" up to 1".

*****Europe only. For supply to MIL, Def Stan and BS add -MS, -DS or -BS to ordering description.

RNF-150

**High-Performance,
Flame-Resistant, Flexible,
Fluoropolymer Tubing**

Product Facts

- 2:1 shrink ratio
- Approximately 40 percent thinner walls than most general purpose polyolefin tubings
- High flame-resistance
- Excellent physical and electrical properties after exposure to many chemicals and solvents at 50°C [122°F] (but not recommended for use in direct contact with ketones)
- Recommended maximum temperature for use as a primary insulator: 135°C [275°F]
- RoHS compliant



Applications

Can be used for jacketing and bundling of wires to form light-duty harnesses, especially where a low profile, abrasion resistance, and flexibility are needed. Can also be used to provide insulation and strain relief of electrical connections and wire terminations, identification of wires, and packaging of components.


Installation

Minimum shrink temperature: 110°C [230°F]
Minimum full recovery temperature: 150°C [302°F]

Operating Temperature Range

-55°C to 150°C
[-67°F to 302°F]

Specifications/Approvals

Series	UL 	Military	Raychem
RNF-150	E35586 VW-1 600 V, 150°C	AMS-DTL-23053/18*, Class 2	RT-370

*Formerly MIL-I-23053/18 and MIL-DTL-23053/18.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RNF-150 (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness**
	Minimum Expanded as Supplied	Maximum Recovered After Heating	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	Standard	Black (-0)
	Nonstandard	White (-9)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging	On spools.	
Ordering description***	Specify product name, size and color (for example, RNF-150 1/4-0).	

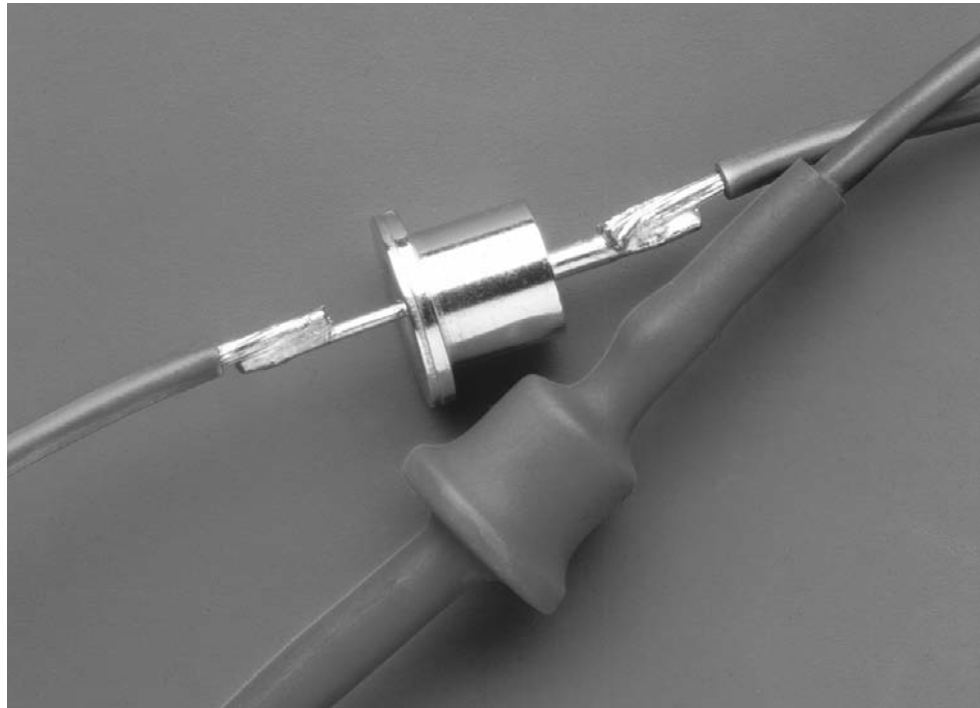
***Europe only. For supply to MIL, Def Stan and BS add -MS, -DS or -BS to ordering description.

RNF-3000

Flexible, High-Shrink-Ratio, Flame-Retardant, General Purpose, Polyolefin Tubing

Product Facts

- 3:1 shrink ratio easily accommodates awkward, irregular shapes
- Few sizes cover a wide range of diameters, allowing reduced inventory
- Excellent physical, chemical, and electrical properties meet industry standards for highly reliable, general purpose tubing
- Flame-retardant (colors only)
- RoHS compliant



Applications

Used for insulation and strain relief of wire terminations and electrical connections. Also suitable for light-duty harnessing, jacketing, and identification of wires, cables, and electrical and electronic components.



Installation

Minimum shrink temperature: 80°C [176°F]
Minimum full recovery temperature: 120°C [248°F]

Operating Temperature Range

-55°C to 135°C
[-67°F to 275°F]

Specifications/Approvals

Series	UL 	CSA 	Military	Industry	Raychem
RNF-3000	E35586 600 V, 125°C	LR31929 600 V, 125°C	Def. Stan. 59-97 Type 2B VG 95343 Pt 5 Type A (color) VG 95343 Pt 5 Type B (clear)	VDE 0341 Pt 9005 Type A and B	RW-2053

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RNF-3000 (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness*
	Minimum Expanded as Supplied	Maximum Recovered After Heating	After Heating
1.5/0.5	1.5 [0.060]	0.5 [0.019]	0.45 ± 0.10 [0.018 ± 0.003]
3/1	3 [0.118]	1 [0.039]	0.55 ± 0.10 [0.022 ± 0.003]
4.5/1.5	4.5 [0.177]	1.5 [0.059]	0.55 ± 0.10 [0.022 ± 0.003]
6/2	6 [0.236]	2 [0.079]	0.65 ± 0.10 [0.026 ± 0.003]
9/3	9 [0.354]	3 [0.118]	0.75 ± 0.12 [0.030 ± 0.004]
12/4	12 [0.472]	4 [0.157]	0.75 ± 0.12 [0.030 ± 0.004]
18/6	18 [0.709]	6 [0.236]	0.85 ± 0.12 [0.033 ± 0.004]
24/8	24 [0.944]	8 [0.315]	1.00 ± 0.18 [0.039 ± 0.007]
39/13	39 [1.534]	13 [0.512]	1.15 ± 0.20 [0.045 ± 0.008]

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

Ordering Information

Color	Standard**	Black (-0), white (-9), red (-2), blue (-6), yellow (-4), clear (-X)
	Nonstandard	Brown (-1), orange (-3), green (-5), violet (-7), gray (-8)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging***	On spools or in 1.2-meter [4-foot] lengths.	
Ordering description****	Specify product name, size and color (for example, RNF-3000 6/2-0).	

**Black is the only standard color in the Americas. All other colors are nonstandard.

***Only spools are standard in the Americas. 1.2 meter [4-foot] lengths are nonstandard.

****Europe only. For supply to Def Stan and BS add -DS or -BS to ordering description.

RP-4800

**High-Shrink-Ratio,
Flame-Retardant,
Polyolefin Tubing**

Product Facts

- 4:1 shrink ratio
- Conforms well to highly variable substrate dimensions
- Has excellent physical, chemical, and electrical properties that meet or exceed industrial and military standards
- Shows no significant degradation when exposed to common solvents and chemicals, including aviation fuel and hydraulic fluid
- RoHS compliant



Applications

Well-suited for repairing harnesses or cables; will pass over a large-diameter connector or transition, and then shrink down onto a smaller-diameter jacket. Can insulate or protect a substrate of varying dimensions. Also provides the abrasion and fluid resistance required in harnessing applications.


Installation

Minimum shrink temperature: 95°C [203°F]
Minimum full recovery temperature: 121°C [250°F]

Operating Temperature Range

-55°C to 135°C
[-67°F to 275°F]

Specifications/Approvals

Series	UL 	Military	Industry	Raychem
RP-4800	E35586 600V, 125°C (black only)	AMS-DTL-23053/5*, Class 1 Overexpanded VG 95343 Pt 5 Type A	VDE 0341 Pt 9005 Type A	RT-1122

*Formerly MIL-I-23053/5 and MIL-DTL-23053/5.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RP-4800 (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness**
	Minimum Expanded as Supplied	Maximum Recovered After Heating	After Heating
No. 1	25.4 [1.000]	7.0 [0.275]	1.14 ± 0.18 [0.045 ± 0.007]
No. 2	50.8 [2.000]	14.0 [0.550]	1.14 ± 0.18 [0.045 ± 0.007]
No. 3	76.2 [3.000]	20.6 [0.810]	1.14 ± 0.18 [0.045 ± 0.007]
No. 4	101.6 [4.000]	26.7 [1.050]	1.14 ± 0.18 [0.045 ± 0.007]
No. 5	25.4 [1.000]	11.7 [0.462]	1.14 ± 0.18 [0.045 ± 0.007]
No. 6	60.3 [2.375]	17.3 [0.680]	1.14 ± 0.18 [0.045 ± 0.007]
No. 7	76.2 [3.000]	21.3 [0.840]	1.14 ± 0.18 [0.045 ± 0.007]
No. 8	95.3 [3.750]	23.6 [0.930]	1.14 ± 0.18 [0.045 ± 0.007]
No. 9	114.3 [4.500]	36.8 [1.450]	1.14 ± 0.18 [0.045 ± 0.007]
No. 10	38.1 [1.500]	9.5 [0.375]	1.14 ± 0.18 [0.045 ± 0.007]
No. 11	19.1 [0.750]	4.6 [0.180]	1.14 ± 0.18 [0.045 ± 0.007]

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

Ordering Information

Color	Standard	Black (-0)
	Nonstandard	White (-9), red (-2), blue (-6), yellow (-4), green (-5), brown (-1), orange (-3), violet (-7), gray (-8)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging	On spools or in 1.2-meter [4-foot] lengths.	
Ordering description***	Specify product name, size and color (for example, RP-4800 NO.1-0).	

***Europe only. For supply to MIL, Def Stan and BS add -MS, -DS or -BS to ordering description.

**Flexible, Dual Wall,
Moisture-Proof,
Heat-Shrinkable Tubing**

Product Facts

- Environmental sealing
- Excellent mechanical strength
- Abrasion resistance
- 4:1 shrink ratio
- RoHS compliant

RPPM



Applications

RPPM is a flexible, heat-shrinkable, dual wall tubing with an integrally bonded meltable adhesive liner. Available in clear and black, the tough outer jacket offers excellent mechanical strength. RPPM is used for moisture-proof encapsulation of a wide variety of components. In particular, it adheres well to PVC. The high-shrink-ratio allows RPPM to be used

with a range of dimensions. Clear RPPM offers excellent clarity for protection of substrates that may need to be inspected during service. Black RPPM has a high gloss finish suitable for cosmetic applications.

Installation

Minimum shrink temperature: 60°C [140°F]
Minimum full recovery temperature: 80°C [176°F]

Operating Temperature Range

-40°C to 85°C
[-40°F to 185°F]

Specifications/Approvals

Series	Raychem
RPPM	RK-6214

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RPPM (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness*	
	Minimum Expanded as Supplied	Maximum Recovered After Heating	Nominal Total Wall After Heating	Nominal Adhesive Wall After Heating
4/1	4.0 [0.158]	1.0 [0.039]	0.8 [0.032]	0.3 [0.012]
8/2	8.0 [0.315]	2.0 [0.079]	0.9 [0.035]	0.3 [0.012]
12/3	12.0 [0.472]	3.0 [0.118]	1.2 [0.047]	0.4 [0.016]
16/4	16.0 [0.630]	4.0 [0.158]	1.5 [0.059]	0.5 [0.020]

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

Ordering Information

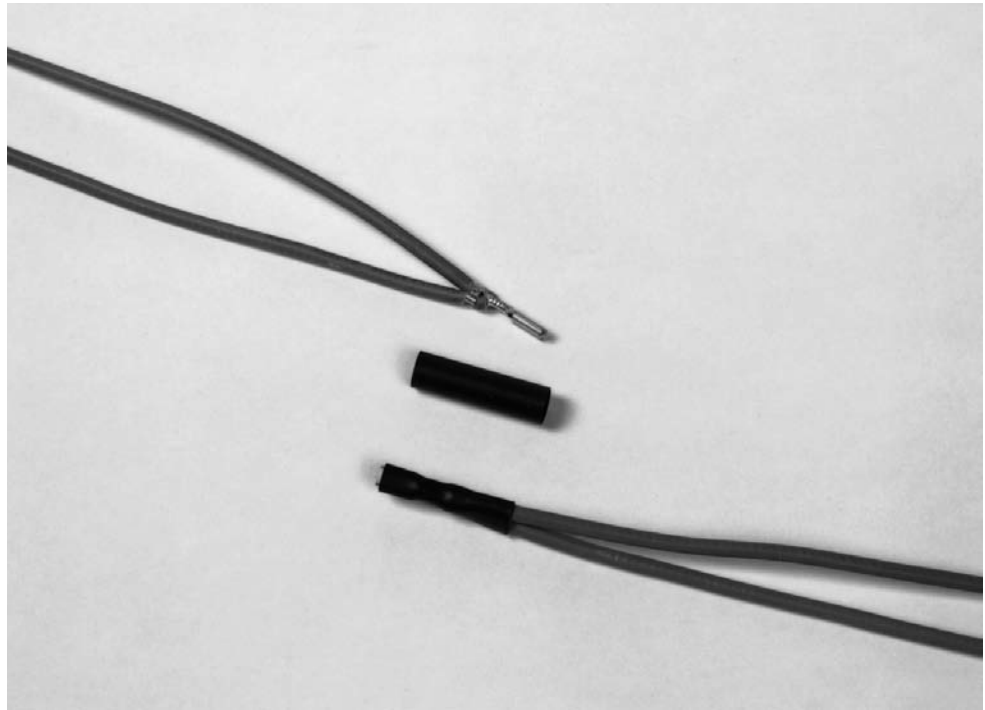
Color	Standard	Clear (-X)
	Nonstandard	Black (-0)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging	On spools, in 1.2 meter [4-foot] lengths or cut pieces.	
Ordering description	Specify product name, size and color (for example, RPPM 4/1-X).	

Semirigid, Flame-Retardant, Polyolefin Tubing

Product Facts

- 2.5:1 shrink ratio
- Tightly controlled expanded diameters
- High abrasion resistance
- Semirigidity that transfers flex stress away from typically weak points such as solder and crimp joints, helping to ensure a reliable connection
- Excellent chemical and solvent resistance
- Outstanding physical and electrical performance
- RoHS compliant

RT-3



Applications

Suitable for wire strain-relief applications — soldered or crimped connections, wire splices, terminations. Well-suited for use with semiautomated production equipment requiring tubing with a tightly controlled expanded diameter. Acts as a tough covering for delicate components; provides mechanical protection.



Installation

Minimum shrink temperature: 110°C [230°F]
Minimum full recovery temperature: 135°C [275°F]

Operating Temperature Range

-55°C to 135°C
[-67°F to 275°F]

Specifications/Approvals

Series	UL 	CSA 	Raychem
RT-3	E35586 600 V, 125°C	LR31929 (black only) 600 V, 125°C	RT-360*

*Except dimensions and longitudinal change.

Available in:	Americas	Europe	Asia Pacific
	■		■

RT-3 (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness**
	Minimum Expanded as Supplied	Maximum Recovered After Heating	After Heating
No. 1	6.1 ± 0.4 [0.240 ± 0.015]	2.4 [0.095]	0.79 ± 0.08 [0.031 ± 0.003]
No. 2	8.1 ± 0.4 [0.320 ± 0.015]	3.2 [0.125]	0.79 ± 0.08 [0.031 ± 0.003]
No. 3	9.5 ± 0.5 [0.375 ± 0.020]	3.8 [0.150]	0.79 ± 0.08 [0.031 ± 0.003]
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

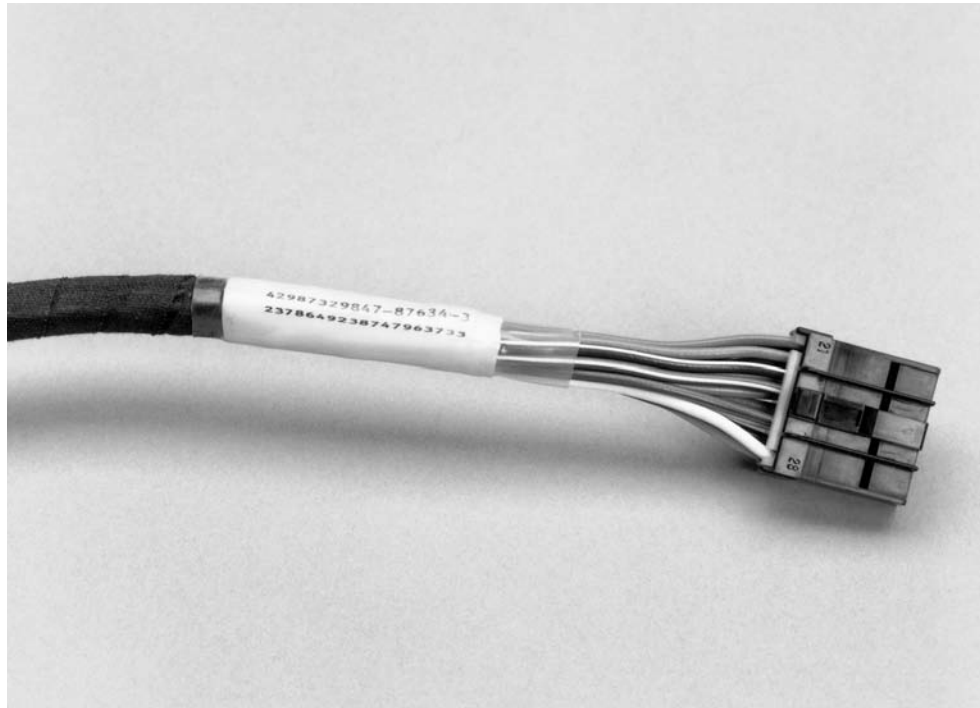
Color	Black (-0) only
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.
Standard packaging	In 1-inch cut pieces or in 1.2-meter [4-foot] lengths.
Ordering description	Specify product name, size and color (for example, RT-3 No. 1-0).

RT-375

**Clear, Flame-Resistant,
Flexible, Fluoropolymer
Tubing**

Product Facts

- 2:1 shrink ratio
- Exceptional clarity and clarity stability
- Toughness, chemical resistance, and high-temperature performance
- High flame-resistance
- Approximately 40 percent thinner walls than most general purpose polyolefin tubings
- Recommended maximum temperature for use as a primary insulator: 135°C [275°F]
- RoHS compliant



Applications

Protects wire and cable markers subject to extreme abuse, while permitting full inspectability of each item covered. Provides bundling and jacketing of wires and cables, protecting them from mechanical and chemical abuse. Protects electronic components while permitting their identification and inspection.



Installation

Minimum shrink temperature: 125°C [257°F]
Minimum full recovery temperature: 150°C [302°F]

Operating Temperature Range

-55°C to 150°C
[-67°F to 302°F]

Specifications/Approvals

Series	UL 	CSA 	Military	Raychem
RT-375	E35586 VW-1 600 V, 150°C	LR31929 VW-1 600 V, 150°C	AMS-DTL-23053/18*, Class 2	RT-375

*Formerly MIL-I-23053/18 and MIL-DTL-23053/18.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RT-375 (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness**
	Minimum Expanded as Supplied	Maximum Recovered After Heating	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	Standard	Clear (-X)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging	On spools.	
Ordering description***	Specify product name, size and color (for example, RT-375 1/4-X).	

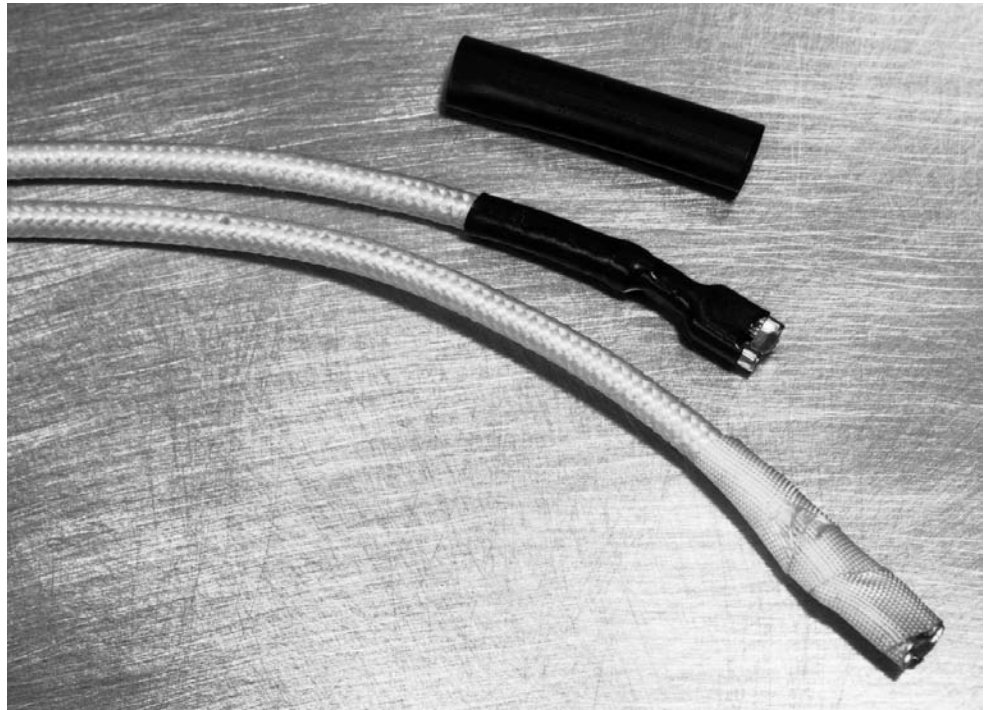
***Europe only. For supply to MIL, Def Stan and BS add -MS, -DS or -BS to ordering description.

Fluid-Resistant, Chemical-Resistant, Crosslinked Fluoropolymer Tubing with Extended Temperature Range

Product Facts

- Resistance to high temperatures, solvents, corrosive chemicals, and radiation
- Extreme resistance to hydrocarbons
- Low outgassing (successfully tested for NASA outgassing requirements)
- Highly flame-retardant
- 40 percent lighter weight than tubing made with Viton® fluoroelastomer
- System 300 tubing
- RoHS compliant

RT555



Applications

Suitable for commercial applications requiring heat resistance (electrical and hydraulic systems near aircraft or automotive engines or in fuel tanks), applications in chemically exposed environments (industrial process equipment in the pulp and paper, steel, and chemical industries), and equipment for handling caustic or dangerous chemicals or

inks. Use for insulation and strain relief on appliances (electric ranges, microwave ovens, gas grills, and industrial paint-drying equipment) and for protection of delicate electronic instruments in down-hole applications.


Installation

Minimum shrink temperature: 150°C [302°F]
Minimum full recovery temperature: 220°C [428°F]

Operating Temperature Range

-65°C to 200°C
[-85°F to 392°F]

Specifications/Approvals

Series	UL 	Raychem
RT555	Listed for 185°C for 100,000-hr continuous use (File E85381) Listed for 200°C for 40,000-hr cumulative intermittent exposure	RT-555

Viton is a trademark of Dupont Performance Elastomers LLC.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RT555 (Continued)

Product Dimensions

Size	Inside diameter		Recovered wall thickness*		
	Minimum expanded as supplied	Maximum recovered after heating	After heating		
			Minimum	Maximum	Nominal
1/8	3.18 [0.125]	1.57 [0.062]	0.25 [0.010]	0.41 [0.016]	0.30 [0.012]
3/16	4.75 [0.187]	2.36 [0.093]	0.28 [0.011]	0.46 [0.018]	0.36 [0.014]
1/4	6.35 [0.250]	3.18 [0.125]	0.33 [0.013]	0.51 [0.020]	0.41 [0.016]
3/8	9.53 [0.375]	4.75 [0.187]	0.41 [0.016]	0.58 [0.023]	0.48 [0.019]
1/2	12.70 [0.500]	6.35 [0.250]	0.41 [0.016]	0.58 [0.023]	0.48 [0.019]
5/8	15.88 [0.625]	7.95 [0.313]	0.48 [0.019]	0.66 [0.026]	0.56 [0.022]
3/4	19.05 [0.750]	9.53 [0.375]	0.61 [0.024]	0.79 [0.031]	0.69 [0.027]
1	25.40 [1.000]	12.70 [0.500]	0.71 [0.028]	0.89 [0.035]	0.79 [0.031]
1 1/4	31.75 [1.250]	15.88 [0.625]	0.76 [0.030]	0.94 [0.037]	0.84 [0.033]
1 1/2	38.10 [1.500]	19.05 [0.750]	0.86 [0.034]	1.04 [0.041]	0.94 [0.037]
2	50.80 [2.000]	25.40 [1.000]	0.94 [0.037]	1.12 [0.044]	1.02 [0.040]

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

Ordering Information

Color	Standard	Black (-0)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging	On spools.	
Ordering description	Specify product name, size and color (for example, RT555 1/8-0).	

RW-175

**High-temperature,
Chemical-Resistant,
Polyvinylidene Fluoride
Tubing**

Product Facts

- 2:1 shrink ratio
- Tough, semirigid, very-thin-wall insulation
- High flame-resistance, meeting the requirements of AMS-DTL-23053*, Test C, with UL and CSA VW-1 rating
- High-temperature performance that meets or exceeds military and industrial standards
- Protection from most industrial solvents, fuels, and chemicals
- Recommended maximum temperature for use as a primary insulator: 135°C [275°F]
- RoHS compliant



Applications

Especially suitable for applications requiring high-temperature performance, outstanding abrasion resistance and cut-through resistance, or superior chemical and solvent properties. Provides electrical insulation and strain relief of multipin connectors and solder joints. Well-suited for applications that require dense packing of components or visual inspection of covered components.



Installation

Minimum shrink temperature: 155°C [311°F]
Minimum full recovery temperature: 175°C [347°F]

Operating Temperature Range

-55°C to 175°C
[-67°F to 347°F]

Specifications/Approvals

Series	UL 	CSA 	Military	Industry	Raychem
RW-175	E35586 VW-1 600 V, 150°C	LR31929 VW-1 600 V, 150°C	AMS-DTL-23053/8* Def. Stan. 59-97 Type 3 VG 95343 Pt 5 Type F BS 3G 198 Pt4	VDE 0341 Pt 9005	RW-3029/1 RW-3029/2

*Formerly MIL-I-23053 and MIL-DTL-23053/8.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RW-175 (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness**
	Minimum Expanded as Supplied	Maximum Recovered After Heating	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]	0.33 ± 0.05 [0.013 ± 0.002]
3/8	9.5 [0.375]	4.8 [0.187]	0.33 ± 0.05 [0.013 ± 0.002]
1/2	12.7 [0.500]	6.4 [0.250]	0.33 ± 0.05 [0.013 ± 0.002]
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]
1 1/2	38.1 [1.500]	19.1 [0.750]	0.51 ± 0.08 [0.020 ± 0.003]

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

Ordering Information

Color	Standard	Clear (-X)
	Nonstandard	Black (-0)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging	In 1.2-meter [4-foot] lengths.	
Ordering description***	Specify product name, size and color (for example, RW-175 3/64-X).	

***Europe only. For supply to MIL spec., Def Stan and BS add -MS, -DS or -BS to ordering description.

**Heat-Shrinkable,
Chemical-Resistant,
High-Temperature Tubing**

Product Facts

- High resistance to impact and abrasion
- Resistance to a wide variety of fuels, lubricants, acids, and solvents at elevated temperatures
- Flexibility at low temperatures without cracking
- RoHS compliant

RW-200/RW-200-E



Applications

Raychem premium heat-shrinkable tubing is fabricated from Viton® fluoroelastomers – a crosslinked material designed for a wide range of applications. It is available in two configurations. RW-200-E is the thickest wall version. RW-200 has the thinnest wall for lighter weight applications.

Offering fluid resistance, RW-200 tubing can be used in applications up to 200°C [392°F].

Installation

Minimum shrink temperature: 100°C [212°F]
Minimum full recovery temperature: 175°C [347°F]

Operating Temperature Range

RW-200: -40°C* to 200°C [-40°F to 392°F]
RW-200-E: -55°C to 200°C [-67°F to 392°F]

Specifications/Approvals

Series	Military	Raychem
RW-200	AMS-DTL 23053/13*	RW-3037
RW-200-E	Def. Stan. 59-97 Issue 3 Type 4A VG 95343 Part 5 Type E VDE 0341/Pt9005 BS 4G-198 Part 3 12A	RW-3037

*Formerly MIL-I-23053/13 and MIL-DTL-23053/13.

Viton is a trademark of Dupont Performance Elastomers LLC.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

RW-200/RW-200-E (Continued)

Product Dimensions

Size	Inside Diameter		Recovered Wall Thickness**	
	Minimum Expanded as Supplied	Maximum Recovered After Heating	After Heating (Nominal)	
			RW-200-E	RW-200
1/8	3.2 [0.125]	1.6 [0.062]	0.76 [0.030]	0.76 [0.030]
3/16	4.8 [0.187]	2.4 [0.093]	0.84 [0.033]	0.89 [0.035]
1/4	6.4 [0.250]	3.2 [0.125]	0.89 [0.035]	0.89 [0.035]
3/8	9.5 [0.375]	4.8 [0.187]	1.02 [0.040]	0.89 [0.035]
1/2	12.7 [0.500]	6.4 [0.250]	1.22 [0.048]	0.89 [0.035]
5/8	15.9 [0.625]	7.9 [0.312]	—	1.07 [0.042]
3/4	19.1 [0.750]	9.5 [0.375]	1.45 [0.057]	1.07 [0.042]
7/8	22.2 [0.875]	11.1 [0.437]	—	1.25 [0.049]
1	25.4 [1.000]	12.7 [0.500]	1.78 [0.070]	1.25 [0.049]
1 1/4	31.8 [1.250]	15.9 [0.625]	—	1.40 [0.055]
1 1/2	38.1 [1.500]	19.1 [0.750]	2.41 [0.095]	1.40 [0.055]
2	50.8 [2.000]	25.4 [1.000]	2.79 [0.110]	1.65 [0.065]

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

Ordering Information

Color	Standard	Black (-0)
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.	
Standard packaging	On spools.	
Ordering description***	Specify product name, size and color (for example, Viton 1/4-0).	

***Europe only. For supply to MIL, Def Stan and BS add -MS, -DS or -BS to ordering description.