



HEAT SHRINK TUBING INDUSTRIAL AND COMMERCIAL TRANSPORTATION

DESIGNED RIGHT TO KEEP IT TIGHT

Industrial and Commercial Transportation (ICT) manufacturers face countless design requirements to meet the most rugged of performance demands, as well as new challenges brought on by ever-changing market trends and evolving market needs. TE Connectivity's heat shrink tubing solutions are designed to help ICT manufacturers meet a wide range of needs and conditions. Operating in harsh environmental conditions requires proven product quality and durability. TE's products provide rugged reliability, saftey, and the ability to withstand extreme vibrations and mechanical shock. Through deep engineering capabilities and a commitment to testing, specific design requirements and certifications are achieved with reliability and dependability. With three major manufacturing sites to cover key regions globally, TE offers strong global sales services for heat shrink tubing solutions, including great channel partner support.



SINGLE WALL HEAT SHRINK TUBING

Reliable single wall tubing insulates, provides strain relief, and protects against mechanical damage and abrasion.



SWFR Heat Shrink Tubing

Low shrink temperature for fast installation. Environmentally friendly tubing with no added halogens emits minimal amounts of toxic or acid gasses during combustion. 600V rating. UL 224/CSA VW-1 flame rating.



CGPE-105 Heat Shrink Tubing

2:1 shrink ratio. Bright, shiny appearance; UV resistance; clear offers exceptional clarity. Easily hot stamped. Non-flameretardant polyolefin tubing



RNF-100 and RNF-3000 Heat Shrink Tubing Excellent physical, chemical and electrical properties. Abrasion and solvent resistance superior to that of many polyolefin tubings. Wide range of sizes and colors.



VERSAFIT Heat Shrink Tubing Meets AS23053/5, Cl. 3 as well as UL 224 and CSA C22.2 No. 198.1 standards. UL 224/CSA VW-1 flame rating. Low shrink temperature for fast installation.

DUAL WALL HEAT SHRINK TUBING

Dual wall tubing protects against moisture and corrosive environments, while providing electrical insulation and mechanical protection using engineered adhesives.



BATTU Heat Shrink Tubing

2:1 shrink ratio semi-rigid, flame retardant, dual wall heat shrink tubing optimized for power cable to terminal applications in harsh environments of industrial and commercial vehicles and equipment.



SCT Heat Shrink Tubing

4:1 shrink ratio allows a few sizes to cover a wide range of splice and component diameters. Flame-retardant and mechanically tough. Adhesive wall forms a barrier against fluids and moisture at an extended temperature range.



ES1000 and ES2000 Heat Shrink Tubing 4:1 shrink ratio allows a few sizes to cover a wide range of splice and component diameters. Flame-retardant and mechanically tough providing strain relief.



DWFR Heat Shrink Tubing UL 224 VW-1 flame rating. 3:1 and 4:1 shrink ratios allow for connector-to-cable sealing. Medium wall provides increased mechanical protection. DWFR adhesive bonds to a wide variety of materials.



AP-2000 Heat Shrink Tubing Sized for use on specific standard sizes of metal pipe. Provides environmental and mechanical protection for automotive brake and fuel lines. Flexibility allows pipes to be bent after tubing has been



RBK Heat Shrink Tubing 4:1 shrink ratio allows a few sizes to cover a wide range of splice and component diameters. Mechanically tough providing strain relief and abrasion protection.



ATUM Heat Shrink Tubing 3:1 and 4:1 shrink ratios allow for connector-to-cable sealing. Medium wall provides increased mechanical protection. ATUM adhesive bonds to a wide variety of materials.



retardant.

QSZH Heat Shrink Tubing 4:1 shrink ratio allows a few sizes to cover a wide range of splice and component diameters. Mechanically tough providing strain relief and abrasion protection. Seals quick for efficient installation. No added halogens. Flame

SPECIALTY HEAT SHRINK TUBING

Specialty tubing is designed to meet special purposes and the most demanding design requirements.



RayBlock Heat Shrink Tubing

Environmentally seals and provides strain relief to wire bundles of up to 20 wires. Withstands excursions to 120°C [248°F].



HFT5000 Heat Shrink Tubing

Highly flexible for easy installation on a variety of substrates. Outstanding abrasion resistance over a wide temperature range. Heat-shrinkable to grip tightly. Resistant to harsh environments. Halogen-free.



ES Caps 4:1 shrink ratio allows a few sizes to cover a wide range of splice diameters. Mechanically tough jacket provides strain relief and abrasion protection. Flame-retardant jacket (black



only).

Versaflex Heat Shrink Tubing

Suitable for mechanical protection of wire harnesses where exceptional flexibility combined with superior abrasion and cutthrough resistance is required. Will not trap heat or moisture. Expands easily over irregular shapes. Available in non-flameretardant or flame-retardant versions.



Product Category	Product Name	Operating Temperature °C[°F]	Minimum Full Recovery Temperature °C[°F]	Shrink Ratio	Product Description	Standard Size Range (Inside Diameter as supplied) mm [In.]	Colors	Flammability Rating
	RNF-100	-55 to 135 [-67 to 275]	121 [250]	2:1	Flexible, flame-retardant, general purpose polyolefin tubing	1.2 to 127.0 [0.046 to 5.000]	Standard: Black (all sizes); White, blue, yellow, and clear (sizes 3/64" through 3"); Nonstandard: White, red, blue, yellow, and clear (sizes 4" and 5"); Brown, green, violet, orange and gray (all sizes)	ASTM D2671, Proc. B (Colors only); UL 224/CSA All Tubing Flame Test (Colors only)
	RNF-3000	-55 to 135 [-67 to 275]	120 [248]	3:1	Flexible, high-shrink-ratio, flame-retardant, general purpose polyolefin tubing	1.5 to 39.0 [0.060 to 1.534]	Standard: Black (All Regions); White, red, blue, yellow, and clear (non-flame-retardant) (EMEA only); Nonstandard: Green, violet, and gray (all Regions)	UL 224/CSA All Tubing Flame Test (Colors only)
Single Wall Heat Shrink Tubing	VERSAFIT	-55 to 135 [-67 to 275]	90 [194]	2:1	Highly flame-retardant, very flexible, low-shrink-tempera- ture polyolefin tubing	1.2 to 101.6 [0.046 to 4.000]	Standard: Black, white, red, blue, and yellow; Nonstandard: Brown, orange, green, violet and gray	ASTM D2671, Proc. C; UL 224/ CSA VW-1
	VERSAFIT 3X	-55 to 135 [-67 to 275]	90 [194]	3:1	Highly flame-retardant, very flexible, high-shrink-ratio, low-shrink-temperature over- expanded polyolefin tubing	3.2 to 25.4 [0.125 to 1.00]	Standard: Black; Nonstandard: White, red, blue, yellow, green, brown, orange, violet, and gray	UL 224/CSA VW-1
	VERSAFIT V2	-30 to 125 [-22 to 257]	90 [194]	2:1	Highly flame-retardant, very flexible, low-shrink-tempera- ture metric-sized polyolefin tubing	0.8 to 30.0 [0.032 to 1.181]	Standard: Black; Nonstandard: White, red, blue, yellow, green, brown, orange, violet, and gray	UL 224/CSA VW-1
	VERSAFIT V4	-30 to 125 [-22 to 257]	90 [194]	2:1	Very-thin-wall, very flexible, highly flame-retardant, low-shrink-temperature imperial and metric-sized polyolefin tubing	Imperial: 1.2 to 25.4 [0.046 to 1.000]; Metric: 1.0 to 10.0 [0.039 to 0.394]	Standard: Black; other colors avail- able upon request	UL 224/CSA VW-1
	CGPE-105	-70 to 105 [-40 to 257]	Black 110 [230]; All Others 100 [212]	2:1	Flexible, brightly colored, non-flame-retardant polyole- fin tubing	1.2 to 50.8 [0.046 to 2.000]	Black, white, clear, red, blue, yellow, green and violet	N/A
	AP-2000	-40 to 80 [-40 to 176]	110 [230]	1.3:1 to 2.9:1	Flexible, adhesive-lined non-flame-retardant	6.0 to 30.0 [0.236 to 1.182]	Black	N/A
	QSZH	-40 to 125 [-40 to 257]	135 [275]	4:1	High-shrink-ratio, adhesive- lined semirigid polyolefin tubing	5.75 to 18.3 [0.226 to 0.720]	Clear jacket, Black adhesive	N/A
	ATUM	-55 to 110 [-67 to 230]	110 [230]	3:1 & 4:1	High-shrink-ratio, adhe- sive-lined polyolefin tubing	3:1: 3.0 to 40.0 [0.118 to 1.570]; 4:1: 4.0 to 52.0 [0.158 to 2.050]	Standard: Black; Nonstandard: Clear (non-flame-re- tardant); other colors available upon request	ASTM D2671, Proc. B (Black only)
Dual Wall Heat Shrink Tubing	ES1000	-40 to 130 [-40 to 266]	135 [275]	4:1	Clear, high-shrink-ratio, adhe- sive-lined semirigid polyolefin tubing	5.72 to 17.78 [0.225 to 0.700]	Clear	N/A
	ES2000	-40 to 130 [-40 to 266]	135 [275]	4:1	Flame-retardant, high-shrink- ratio, adhesive-lined semirig- id polyolefin tubing	5.72 to 17.78 [0.225 to 0.700]	Black	ASTM D2671, Procedure B
	RBK-ILS	-40 to 125 [-40 to 257]	135 [275]	4:1	Flame-retardant, high-shrink- ratio, adhesive-lined semirig- id polyolefin tubing	5.75 to 18.3 [0.226 to 0.720]	Black	ISO6722, Clause 4.5

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Product Category	Product Name	Operating Temperature °C[°F]	Minimum Full Recovery Temperature °C[°F]	Shrink Ratio	Product Description	Standard Size Range (Inside Diameter as supplied) mm [In.]	Colors	Flammability Rating
	RBK-VWS	-40 to 125 [-40 to 257]	135 [275]	4:1	Clear, high-shrink-ratio, adhe- sive-lined semirigid polyolefin tubing	5.70 to 17.78 [0.224 to 0.700]	Clear	N/A
Dual Wall Heat Shrink Tubing (continued)	SCT	-40 to 150 [-40 to 302]	135 [275]	4:1	Flame-retardant, adhe- sive-lined semirigid polyolefin tubing (extended temperature range)	7.6 to 17.8 [0.300 to 0.700]	Black	ASTM D2671, Procedure B
	DWFR	-40 to 110 [-40 to 230]	110 [230]	3:1 & 4:1	Highly flame-retardant, high- shrink-ratio, adhesive-lined polyolefin tubing	3:1: 3.0 to 40.0 [0.118 to 1.570]; 4:1: 4.0 to 52.0 [0.158 to 2.050]	Black	UL 224 VW-1
	HFT5000	-40 to 125 [-40 to 257] for 3,000 hours; -40 to 150 [-40 to 302] for 1,000 hours	110 [230]	2:1	Heat-shrinkable fabric tubing	12.0 to 100.0 [0.472 to 3.937]	Black	FMVSS 302
	RayBlock 85	-40 to 85 [-40 to 185]	110 [230]	4:1	Heat-shrinkable water blocking system	12.0 to 32.0 [0.472 to 1.260]	Black	N/A
Special Purpose Heat Shrink Tubing	RayBlock 105	-40 to 105 [-40 to 221]	110 [230]	4:1	High-temperature heat-shrinkable water blocking system	12.0 to 32.0 [0.472 to 1.260	Black	N/A
	ES Caps	-40 to 105 [-40 to 221]	135 [275]	4:1	High-shrink-ratio, adhe- sive-lined semirigid polyolefin caps	5.72 to 10.85 [0.225 to 0.427]	Black and Clear (non-flame-retardant)	ASTM D2671, Procedure B (Black only)
	SWFR X2	-30 to 125 [-22 to 257]	90 [194]	2:1	Very flexible, low-shrink temperature, highly flame- retardant, polyolefin tubing with no added halogens	1.0 to 30.0 [0.039 to 1.181]	Black	UL 224/CSA VW-1
	SWFR X4	-30 to 125 [-22 to 257]	90 [194]	2:1	Very-thin-wall, very flexible, low-shrink-temperature, highly flame-retardant, poly- olefin tubing with no added halogens	0.8 to 25.0 [0.032 to 0.984]	Black	UL 224/CSA VW-1
	Versaflex Versaflex-FR	-50 to 150 [-58 to 302]	N/A	N/A	Expandable, Braided Polyester Tubing	3.0 to 50.0 [0.118 to 2.000] Nominal	Black & Gray. Flame-retardant version has white tracer.	N/A

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