

Polyolefin Heat-Shrink Tubing

FITCOTUBE® FT101

Flexible, flame resistant, bicolored extruded heat-shrink tubing. Use as insulation and marking of cables, wires and ground conductors.

Operating temperature: -55°C to +135°C, short time up to +250°C

Shrink temperature: + 90°C

Shrink ratio: 2:1

3:1

Standard color: Yellow-Green

Specification: 224 125°C 600V VW-1 (File No. E191514)



Description	Inner diameter (mm)		Wall thickness (mm)
	as supplied (min.)	after shrinkage (max.)	after shrinkage (nom.)
2:1			
FT101-320	3.20	1.60	0.51
FT101-480	4.80	2.40	0.51
FT101-640	6.40	3.20	0.64
FT101-950	9.50	4.80	0.64
FT101-1270	1.70	6.40	0.64
FT101-1910	19.10	9.50	0.76
FT101-2540	25.40	12.70	0.89
FT101-3810	38.10	19.10	1.02
FT101-5080	50.80	25.40	1.14



Description	Inner diameter (mm)		Wall thickness (mm)
	as supplied (min.)	after shrinkage (max.)	after shrinkage (nom.)
3:1			
FT101-1,5/0,5	1.50	0.50	0.50
FT101-3/1	3.00	1.00	0.60
FT101-4,8/1,6	4.80	1.60	0.51
FT101-6/2	6.00	2.00	0.70
FT101-9/3	9.00	3.00	0.80
FT101-9,5/3,2	9.50	3.20	0.64
FT101-12/4	12.00	4.00	0.85
FT101-12,7/4,7	12.70	4.70	0.71
FT101-18/6	18.00	6.00	1.00
FT101-24/8	24.00	8.00	1.20
FT101-40/13	40.00	10.00	1.25

Packaging: On spools, cut lengths or printed tubing on request.



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Properties	Test Method	Requirements	Typical Value
Mechanical			
Tensile strength	ASTM D 638	Min. 10.4 MPa	≥ 12 MPa
Ultimate elongation	ASTM D 638	Min. 200%	≥ 400%
Longitudinal change	SAE-AMS-DTL-23053	-5% ± 10%	- 7% bis 0%
Specific density - 2:1	ASTM D 792	-	1.34
Elastic modulus	ASTM D 882	Max. 173 MPa	65 MPa

Thermal

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Low temperature flexibility (4h x - 55°C)	SAE-AMS-DTL-23053	No cracking	Pass
Elongation after long term aging (168h x 175°C)	SAE-AMS-DTL-23053	Min. 100% Elongation	≥ 400 %
Short term aging (4h x 250°C)	SAE-AMS-DTL-23053	No cracking, flowing or dripping	Pass
Flammability	UL 224	VW-1	Self-extinguishing
Copper corrosion - 2:1 (16h x 175°C)	SAE-AS23053	No corrosion	Pass
Copper corrosion - 3:1 (168h x 158°C)	SAE-AS23053	No corrosion	Pass
Stability against copper - 3:1 (168h x 158°C)	SAE-AS23053	Elongation: Min. 100%	Pass
Color stability – 2:1 (24h x 158°C)	SAE-AS23053	MIL-STD-104	Pass

Electrical

Dielectric strength	ASTM D 876	Min. 19.7 kV/mm	≥ 37 kV/mm
Volume resistance	ASTM D 876	Min. 10 ¹⁴ Ωxcm	3,1 x 10 ¹⁴ Ωxcm
Nominal voltage	UL 224	600V	Pass
Breakdown test (60s x 2,5kV)	UL 224	No breakthrough	Pass

Chemical

Water absorption	ASTM D 570	Max. 0,5%	0,25%
Fluid resistance (24°C x 24h)	SAE-AS23053	Min. 6,9 MPa (Tensile strength)	7,25 bis 14 MPa
Fungus resistance	SAE-AS23053	ASTM G 21	Pass
Ozone resistance	NF F 00-608	No cracking or sweating	Pass

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