



## HEAT SHRINK TUBING FCSM

### THICK-WALL LOW VOLTAGE FLAME-RETARDANT, INSULATION TUBING (UP TO 2000V)

#### KEY FEATURES

- High electrical characteristics and mechanical strength for low voltage applications
- Provides mechanical flexibility and abrasion resistance
- Thick-wall, cross-linked polyolefin. UV Stabilized against irradiation and weathering
- Flame-retardant in accordance with IEC 60332-1
- Sealant-coated or uncoated tubing
- Color black,  $\geq 3:1$  shrink ratio
- Unlimited shelf-life

TE Connectivity's (TE) Raychem FCSM thick-wall, flame-retardant tubing is used for insulation purposes and as mechanical protection on low voltage cable accessories, including for jointing cables in mining, power plants, construction, transportation industries, railway and rolling stock applications and for many other operational purposes, where flame retardancy and flexibility are required.

TE's Raychem FCSM tubing is available with or without adhesive coating and provide a high mechanical strength and cut-through resistance equal to, or surpassing, the properties of low voltage cable jackets due to their material composition.

The FCSM tubing is produced from a material, combining flame-retardant characteristics with mechanical flexibility and abrasion resistance. This combination of features has led the FCSM tubing to be used in a wide range of demanding applications, in particular to insulate, to protect and to seal flexible cables and cable accessories.

The FCSM tubing is applicable on the most substrate materials, as standard poly or elastomeric insulated or jacketed cables or lead-jacketed cables, which may also include aluminium or steel armouring. The material of the FCSM tubing is stabilized against UV irradiation.

The FCSM tubing has an unlimited shelf-life when stored under normal conditions. The FCSM tubing is MSHA approved (No. 07-KA090013-MSHA).

**Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.**

## Heat Shrink Tubing FCSM



Connectors up to 6 inches: Recommended cut length = connector length + 4 inches. Connectors over 6 inches: Recommended cut length = connector length + 5 inches. The FCSM tubing is MSHA approved.

### PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (MM)

Description	2000V Cable Nominal Use Range (AWG/kcmil)	General Use Range	Tube Length*	Standard Ft. (m)/Roll	Pack PCs/Box	Bulk Option Ft. (m)/Roll
<b>In-Line Splice or Terminal Lug Seal (With Sealant)</b>						
FCSM-9/3-1200-S	#14 - #6	0.15 - 0.30 (4 - 8)	48 (1200)	-	25	-
FCSM-19/6-150-S	#6 - #2	0.25 - 0.65 (6 - 17)	6 (150)	-	50	-
FCSM-19/6-1200-S	#6 - #2	0.25 - 0.65 (6 - 17)	48 (1200)	-	25	-
FCSM-28/9-225-S	#2 - 4/0	0.40 - 0.95 (10 - 24)	9 (225)	-	50	-
FCSM-28/9-1200-S	#2 - 4/0	0.40 - 0.95 (10 - 24)	48 (1200)	-	25	-
FCSM-38/12-300-S	1/0 - 350	0.50 - 1.30 (13 - 33)	12 (300)	-	40	-
FCSM-38/12-1200-S	1/0 - 350	0.50 - 1.30 (13 - 33)	48 (1200)	-	10	-
FCSM-51/16-300-S	250 - 500	0.70 - 1.75 (18 - 44)	12 (300)	-	30	-
FCSM-51/16-1200-S	250 - 500	0.70 - 1.75 (18 - 44)	48 (1200)	-	10	-
FCSM-68/22-1200-S	600 - 1000	0.95 - 2.30 (25 - 58)	48 (1200)	-	10	-
FCSM-90/30-1200-S	800 - 1200	1.30 - 3.10 (33 - 79)	48 (1200)	-	5	-
FCSM-120/40-1200-S	1500 - 2500	1.75 - 4.10 (44 - 104)	48 (1200)	-	5	-
FCSM-177/63-600-S		2.75 - 6.05 (70 - 154)	24 (600)	-	6	-
FCSM-177/63-1200-S		2.75 - 6.05 (70 - 154)	48 (1200)	-	5	-
<b>Cable Rejacketing (Without Sealant)</b>						
FCSM-9/3-A/U	#14 - #8	0.15 - 0.30 (4 - 8)	-	100 (30)	-	-
FCSM-19/6-A/U	#6 - #2	0.25 - 0.65 (6 - 17)	-	100 (30)	-	825 (250)
FCSM-28/9-A/U	#2 - 4/0	0.40 - 0.95 (10 - 24)	-	65 (20)	-	495 (150)
FCSM-38/12-A/U	1/0 - 350	0.50 - 1.30 (13 - 33)	-	50(15)	-	395 (120)
FCSM-51/16-A/U	250 - 500	0.70 - 1.75 (18 - 44)	-	40 (12)	-	330 (100)
FCSM-68/22-A/U	600 - 1000	0.95 - 2.30 (25 - 58)	-	80 (24)	-	-
FCSM-90/30-1500/U	800 - 1200	1.30 - 3.10 (33 - 79)	60 (1500)	-	5	-
FCSM-120/40-1500/U	1500 - 2500	1.75 - 4.10 (44 - 104)	60 (1500)	-	5	-
FCSM-177/63-1500/U	-	2.75 - 6.05 (70 - 154)	60 (1500)	-	5	-

\* Dimension values provided are typical. Related test reports: EDR-5133, EDR-5134, EDR-5141

### ORDERING INFORMATION

1. Select the appropriate catalog number based on typical dimensions for low voltage insulated cable. Confirm selection with cable dimensions to assure proper sizing.
2. Connectors or lugs not included.
3. If sealing is needed with uncoated FCSM tubing (-/U), order S-1052 separately.
4. Tubing may be field-cut for shorter requirements.
5. Bulk packaging is available for cut-lengths Contact your TE Connectivity representative for additional information.

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### FOR MORE INFORMATION: TE Technical Support Centers

USA:	+ 1 800 327 6996
Canada:	+ 1 (905) 475-6222
Mexico:	+ 52 (0) 55-1106-0800
Latin/S. America:	+ 54 (0) 11-4733-2200
France:	+ 33 380 583 200
UK:	+ 44 0870 870 7500
Germany:	+ 49 896 089 903
Spain:	+ 34 916 630 400
Italy:	+ 39 333 250 0915
Benelux:	+ 32 16 508 695
Russia:	+ 7 495-790 790 2-200
China:	+ 86 (0) 400-820-6015