



Cable Accessory Sealing Kits

8452, 8453 and 8454



Data Sheet

1. Product Description

3M™ Cable Accessory Sealing Kits provide a reliable means of sealing the jacket end of power cables where elbows or other cable accessories are installed. The seal is accomplished with the use of a tubular rubber sleeve and rubber base mastic sealing strips. The mastic strips seal around cable neutral wires or other ground attachment leads. The rubber sleeve is factory expanded and assembled onto a removable core. As supplied in this pre-stretched condition the tube is ready for field installation. With mastic in place, the expanded tube is positioned over the cable jacket end and the inner supporting core is removed. Removing the core allows the sealing tube to shrink and form a water-resistant seal. The sealing tube is made of EPDM rubber that contains no chlorides or sulfur. Both the sealing tube and mastic are compatible with commonly used power cable jacket and semi-conductive materials.

To extend the useful life of this product in applications which are continuously exposed to high levels of ultra-violet radiation, overwrap with Scotch™ Super 33+ Vinyl Tape or Scotch™ 70 Silicone Tape.

Kit Contents:

Each kit contains sufficient quantity of the following materials to seal one cable jacket end.

- 1 Cold Shrink™ Sealing Tube
- 6 Inch (150 mm) Mastic Sealing Strips
 - 3 Strips in 8452
 - 4 Strips in 8453
 - 6 Strips in 8454
- 1 Instruction Sheet

Features:

- Accommodates a wide range of cable sizes.
- No torch or heat required.
- Seals tight, retains its resiliency and pressure even after prolonged years of aging and exposure.
- Thick walled to resist puncture and damage.
- Water-resistant. Meets the water seal requirements of ANSI C119.1.
- Compatible with cable jackets and semi-conducting insulation shields.

Resists fungus.

Resists acids and alkalis.

Resists ozone and ultraviolet light.

2. Applications

Cable Accessory Sealing Kit's are used to seal the cable jacket end of high voltage power cables where the cables jacket has been removed for the installation of an elbow or other cable accessory. The Cable Accessory Sealing Kits can be installed at indoor and outdoor locations and are suitable for direct burial, aerial and submersible applications.

A. Typical Physical and Electrical Properties

EPDM Rubber

Physical Properties

Test Method	Typical Value*
• Color	Black
• 300% Modulus (ASTM D 412-75)	480 psi (3,3 MPa)
• Ultimate Tensile (ASTM D 412-75) Original	1400 psi (9,6 MPa)

- Ultimate Elongation (ASTM D 412-75) Original 750%
- Die C Tear (ASTM D 624C-73) Original 150 pli (26,3 KN/m)
- Fungus Resistance (ASTM G-21) 28 days exposure No Growth
- Moisture Absorption 7 days 90°C (194°F) H₂O wt. gain 1.8%

Electrical Properties

Test Method	Typical Value*
• Dielectric Strength (ASTM D 149-75) Original @ 1,78 mm	365 V/mil (14,3 MV/m)
• 7 days in H ₂ O at 90°C (194°F)	282 V/mil (11,1 MV/m)

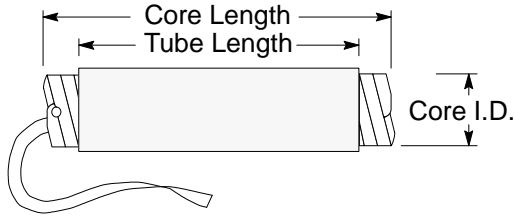
Mastic

Physical Properties

Test Method	Typical Value*
• Color	Black
• Adhesion to substrate (ASTM D-1000) @ 23°C (73°F)	
• Copper	>12 lb/in (2,1 Kg/cm)
• PVC	>12 lb/in (2,1 Kg/cm)
• Polyethylene	>12 lb/in (2,1 Kg/cm)
• EPR	>12 lb/in (2,1 Kg/cm)
• Water Absorption (ASTM D-570)	0.15%

* All values are averages and are not intended for specification purposes.

B. Typical Dimensions



Product Number	Dimensions Inches (mm)		
	Typical Expanded Tube Length	Typical Relaxed Tube Length	Expanded Tube Diameter
8452	4.50 (114 mm)	6.00 (150 mm)	2.12 (53 mm)
8453	6.50 (165 mm)	8.00 (200 mm)	2.85 (73 mm)
8454	7.50 (190 mm)	9.00 (225 mm)	3.87 (98 mm)

Table 1

C. Accessory Sealing Kit Selection Table

Kit Number	Minimal Seal Diameter	Maximum Installed Diameter	Cable Size / kV Class		
			15 kV	25 kV	35 kV
8452	0.95" (24 mm)	1.94" (49 mm)	2 – 4/0	2 – 2/0	1/0
8453	1.28" (33 mm)	2.67" (68 mm)	2/0 – 1000	1/0 – 750	1/0 – 500
8454	1.60" (41 mm)	3.50" (89 mm)	750 – 1500	600 – 1250	350 – 1000

Table 2

3. Maintenance

Components of the 3M 8450 Series Cable Accessory Sealing Kit are not impaired by freezing or overheating due

to temperatures found in storage or shipping. Normal stock rotation procedures are recommended. 3M Cold

Shrink™ removable core material is polypropylene and recyclable with other waste.



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Electrical Products Division

6801 River Place Blvd.
Austin, TX 78726-9000
800-245-3573



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