



Splice Protection Products

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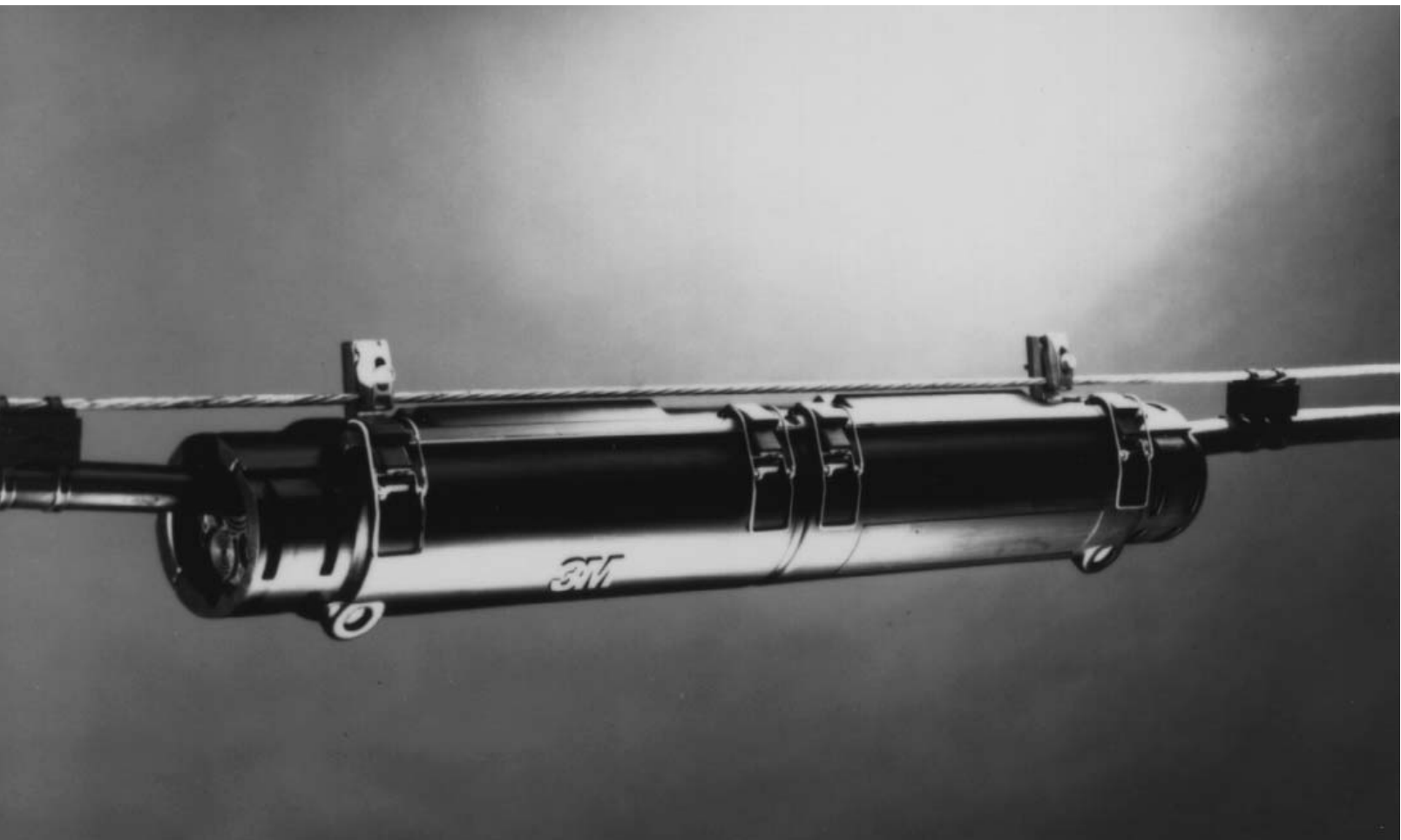
The solutions tool is designed to show you the breadth of the 3M product line and allow you to drill into specific categories to identify solutions. To use this free Internet support tool, visit: <http://www.3M.com/Telecom>.



Splice Protection Products

SLiC™ Aerial Closures and Terminals	36
Super Stretch Closures and Accessories GATM Series	45
Multi-Pair Terminating System ATS/TR	48
Termination Modules MX2000 Series	52
Dome Closures	56
Foam-Sealed Closures	58
Closures Better Buried	60
Scotchcast™ Closures 89 Series	65
Scotchcast™ PIC Encapsulating Closure Kits	66
Pressure Encapsulated Apparatus Kit (PEAK) 2-Type	69
Pressurized Closures 2-Type	71
Flame Retardant Closures 4-Type	81
Closure Accessories and Replacement Parts	89
Closure Installation Tools	92
Watertight Closure System Z Series	93
Pressurized Closure 50/51P Series	94
Tools, Accessories and Replacement Parts	95
Vault and Riser Closures K&B Series	96
Compounds and Sealing Kits	107
Pressure and Moisture Blocking Kits	109
Scotchcast™ Shield Bonding Products	111
Sheath Repair Products	114
Accessories	116

3M™ SLiC™ Aerial Closures and Terminals



Floating Bond, Rigid Bond, Spiral End Seal

Fewer parts and easier installation with the SLiC aerial closure.

- Superior seal
- Easily adaptable
- Single piece design
- Double wall molded construction
- Made from durable, rugged materials
- Easy to access and reenter



PRODUCT REFERRAL GENERATOR

Sheath Scuff	pg. 117	Cable Lubricants	pg. 406
3M™ Scotchlok™ Connectors . . .	pg. 2	MS™ Modules	pg. 10
Shield Bonding	pg. 111	Cable Ties	pg. 403
Tapes and Sealing	pg. 385		

3M™ SLiC™ AERIAL CLOSURES

The single-piece aerial closure is easily installed in construction or maintenance situations. The one-piece construction permits complete splice access after placement without removal of the closure or bonding from the cables. The closures are free breathing and suitable for straight, butt, and branch splices of non-pressurized communication cables.

The closure’s double-wall molded polyethylene construction will resist cracking or breaking even in the harshest environment. All components are attached to the closure; there are no parts to lose.

Because of its interlocking ends, the SLiC aerial closure can expand to meet any size sheath opening without special kits, eliminating excess inventory. The 2 x 29, 3 x 33, 5 x 33, and 7 x 33 closures can be extended while maintaining their initial strength.

The SLiC aerial closure does not require taping, bricking or any special labor-intensive practices. The end seals assure a snug fit on cables and eliminate the need for a drip collar. Sealing collars or tape are not required.

The two-, three-, five-, seven- and nine-inch diameter closures feature a universal end seal to handle any plant configuration. Six sizes accommodate splice openings from 254 to 635 mm (10 to 25 inches). **RUS Listed.**

FEATURES

BENEFITS

One piece construction	Provides easy installation; no loose parts
Double walled, molded construction	Resists breaking or cracking
Interlocking ends	Extendible for long sheath openings
Hanger/bonding system	No external or additional bonding material required
Quick release latch	Easy reentry
Attached sheath retention (SR) bracket (only for rigid bond)	Protects cable sheath pull-out or movement
Rubber and spiral end seal	One size fits multiple cable configurations

CLOSURE SELECTION GUIDE

To order SLiC aerial closures and terminals, follow these steps:	
1. What is your pair count?	
2. What is your cable size?	
3. What is your sheath opening?	
4. What type of connector are you using: module (3M™ MS™ Module or 3M™ 710 Module) or discrete (3M™ Scotchlok™ Connector)?	
Note: Bundles built with modular connectors are half the size of discrettes.	
5. What is your splice bundle diameter?	
These questions should guide you in choosing the correct closure. See pg.38 for additional ordering information.	

SPECIFICATIONS

3M™ SLiC™ AERIAL CLOSURES

	SLiC 2.2 X 19 MM (IN.)	SLiC 2.6 X 29 MM (IN.)	SLiC 3.6 X 19 MM (IN.)	SLiC 3.6 X 33 MM (IN.)	SLiC 5.6 X 33 MM (IN.)	SLiC 7.6 X 33 MM (IN.)	SLiC 9.6 X 36 MM (IN.)
Max. splice opening	356 (14)	432 (17)	356 (14)	533 (21)	533 (21)	533 (21)	635 (25)
Max. bundle diameter	55.9 (2.2)	66 (2.6)	91.4 (3.6)	91.4 (3.6)	142.2 (5.6)	193.0 (7.6)	244 (9.6)
Approx. cable range pair count	100-pair (26 or 24 AWG) 0.4 or 0.5	**200-pair (26 or 24 AWG) 0.4 or 0.5	200-pair (26 or 24 AWG) 0.4 or 0.5	*400-pair (26 or 24 AWG) 0.4 or 0.5	*1200-pair (26 AWG) 0.4	*2400-pair (26 AWG) 0.4	*3600-pair (26 AWG) 0.4
Spiral End Seal Port Capacity							
End seal dia. port #1	20-41 (0.8-1.6)	20-41 (0.8-1.6)	20-66 (0.8-2.6)	20-66 (0.8-2.6)	30-76 (1.2-3.0)	38-97 (1.5-3.8)	38-97 (1.5-3.8)
End seal dia. port #2	13-25 (0.5-1.0)	13-25 (0.5-1.0)	13-25 (0.5-1.0)	13-25 (0.5-1.0)	20-36 (0.8-1.4)	30-46 (1.2-1.8)	30-46 (1.2-1.8)
End seal dia. port #3	13-25 (0.5-1.0)	13-25 (0.5-1.0)	13-25 (0.5-1.0)	13-25 (0.5-1.0)	36-51 (1.4-2.0)	13-30 (0.5-1.2)	13-30 (0.5-1.2)
End seal dia. port #4	NA	NA	NA	NA	13-30 (0.5-1.2)	46-61 (1.8-2.4)	46-61 (1.8-2.4)
End seal dia. port #5	NA	NA	NA	NA	NA	13-30 (0.5-1.2)	13-30 (0.5-1.2)
Rubber End Seal Port Capacity							
1 Port end seal dia. port #1	5-41 (0.2-1.6)	5-41 (0.2-1.6)	5-66 (0.2-2.6)	5-66 (0.2-2.6)	NA	NA	NA
2 Port end seal dia. port #1	5-25 (0.2-1.0)	5-25 (0.2-1.0)	5-51 (0.2-2.0)	5-51 (0.2-2.0)	20-56 (0.8-2.2)	41-81 (1.6-3.2)	41-81 (1.6-3.2)
2 Port end seal dia. port #2	5-15 (0.2-0.6)	5-15 (0.2-0.6)	5-15 (0.2-0.6)	5-15 (0.2-0.6)	5-56 (0.2-2.2)	5-81 (0.2-3.2)	5-81 (0.2-3.2)
3 Port end seal dia. port #1	NA	NA	5-41 (0.2-1.6)	5-41 (0.2-1.6)	15-56 (0.6-2.2)	36-97 (1.4-3.8)	36-97 (1.4-3.8)
3 Port end seal dia. port #2	NA	NA	5-25 (0.2-1.0)	5-25 (0.2-1.0)	5-36 (0.2-1.4)	15-46 (0.6-1.8)	15-46 (0.6-1.8)
3 Port end seal dia. port #3	NA	NA	5-25 (0.2-1.0)	5-25 (0.2-1.0)	5-36 (0.2-1.4)	15-46 (0.6-1.8)	15-46 (0.6-1.8)
*Based on 2-bank straight splice using 25-pair modular connectors.							
**Based on more than one cable.							

ORDERING INFORMATION

3M SLiC AERIAL CLOSURES WITH FLOATING BOND

PRODUCT NUMBER	CONTAINS	PKG. (LBS.)	MIN. ORDER	UPC 054007-
SLiC Aerial Closure Kit with Spiral End Seal				
SLiC 2.2" x 19"-SES	Spiral end seal	1/cs. (2.30)	1 kit	92600
SLiC 2.6" x 29"-SES	Spiral end seal	1/cs. (3.70)	1 kit	92601
SLiC 3.6" x 19"-SES	Spiral end seal	1/cs. (4.40)	1 kit	75544*
SLiC 3.6" x 33"-SES	Spiral end seal	1/cs. (5.30)	1 kit	92602
SLiC 5.6" x 33"-SES	Spiral end seal	1/cs. (8.30)	1 kit	92603
SLiC 7.6" x 33"-SES	Spiral end seal	1/cs. (11.10)	1 kit	92604
SLiC 9.6" x 36"-SES	Spiral end seal	1/cs. (16.50)	1 kit	92605
SLiC Aerial Closure Kit with Rubber End Seal				
SLiC 2.2" x 19"	2 double port	1/cs. (2.40)	1 kit	71241
SLiC 2.6" x 29"	2 double port	1/cs. (3.70)	1 kit	68300
SLiC 3.6" x 19"	2 triple port	1/cs. (4.60)	1 kit	75546*
SLiC 3.6" x 33"	2 triple port	1/cs. (5.60)	1 kit	68299
SLiC 5.6" x 33"	2 triple port	1/cs. (8.00)	1 kit	68298
SLiC 7.6" x 33"	2 triple port	1/cs. (10.60)	1 kit	68297
SLiC 9.6" x 36"	2 triple port	1/cs. (16.00)	1 kit	57088

*UPC prefix 051138-

ORDERING INFORMATION**3M™ SLiC™ AERIAL CLOSURES WITH RIGID BOND/SHEATH RETENTION**

PRODUCT NUMBER	CONTAINS	PKG. (LBS.)	MIN. ORDER	UPC 054007-
Aerial Closure Kit with Spiral End Seal				
SLiC 2.2" x 19"-SR/SES	Spiral end seal	1/cs. (2.50)	1 kit	92612
SLiC 2.6" x 29"-SR/SES	Spiral end seal	1/cs. (3.70)	1 kit	92613
SLiC 3.6" x 33"-SR/SES	Spiral end seal	1/cs. (5.80)	1 kit	92614
SLiC 5.6" x 33"-SR/SES	Spiral end seal	1/cs. (8.60)	1 kit	92615
SLiC 7.6" x 33"-SR/SES	Spiral end seal	1/cs. (11.20)	1 kit	92616
SLiC 9.6" x 36"-SR/SES	Spiral end seal	1/cs. (16.30)	1 kit	92617

ORDERING INFORMATION**3M SLiC AERIAL CLOSURES WITH BOND ASSEMBLY INCLUDED (4460-S)**

PRODUCT NUMBER	CONTAINS	PKG. (LBS.)	MIN. ORDER	UPC 054007-
Aerial Closure Kit with Spiral End Seal				
SLiC 2.2" x 19" 4460S/SES	Spiral end seal	1/cs. (2.40)	1 kit	92618
SLiC 2.6" x 29" 4460S/SES	Spiral end seal	1/cs. (3.80)	1 kit	92619
SLiC 3.6" x 33" 4460S/SES	Spiral end seal	1/cs. (5.20)	1 kit	92620
SLiC 5.6" x 33" 4460S/SES	Spiral end seal	1/cs. (8.10)	1 kit	92621
SLiC 7.6" x 33" 4460S/SES	Spiral end seal	1/cs. (11.10)	1 kit	92622
SLiC 9.6" x 36" 4460S/SES	Spiral end seal	1/cs. (15.90)	1 kit	92623
Aerial Closure Kit with Rubber End Seal				
SLiC 2.2" x 19" 4460S	Double port/double port	1/cs. (2.50)	1 kit	71564
SLiC 2.6" x 29" 4460S	Double port/double port	1/cs. (3.90)	1 kit	71565
SLiC 3.6" x 33" 4460S	Double port/triple port	1/cs. (5.20)	1 kit	71566
SLiC 5.6" x 33" 4460S	Double port/triple port	1/cs. (7.80)	1 kit	71567
SLiC 7.6" x 33" 4460S	Double port/triple port	1/cs. (10.60)	1 kit	71568
SLiC 9.6" x 36" 4460S	Double port/triple port	1/cs. (15.40)	1 kit	57091



3M™ SLiC™ Aerial Terminal with Spiral/Rubber End Seal

SLiC aerial terminals with spiral/rubber end seal are distribution terminals and closures contained within a lightweight, double-wall molded-plastic housing designed for fixed-count termination of aerial drop wires. Special block configurations required by the individual customer are also available and may be completed either at the factory or by the customer.

End seals of the SLiC terminal are designed to assure proper sizing and a snug fit around the cable sheath. This eliminates the need for drip collars to prohibit water from entering the splice chamber. The SLiC terminal with rubber end seal comes packaged with single-port end seals; however, customers may use double-port or triple-port end seals as their applications require. The SLiC terminal with spiral end seal comes packaged with three port end seals.

FEATURES

BENEFITS

Two-closure-in-one housing design	Separates splice and drop chamber
One piece construction	Easy installation
Self-healing drop wire ports	Minimizes weather and insect problems
Sleeves extend in either or both directions	Eliminates need for separate rehabilitation and distribution splices; accommodates long sheath openings
Accommodates a variety of terminating blocks	Adaptable to user requirements
Multiple distribution counts	Counts range in multiples of 5, from 5 to 50
Rubber and spiral end seal	One size fits multiple cable configurations

ORDERING INFORMATION

EMPTY SLIC AERIAL TERMINALS

PRODUCT NUMBER	BLOCK TYPE	INITIAL PAIR CAPACITY	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Empty Terminals with Spiral End Seals					
328-MTPI-TR/SES	ATS/IDC	5 - 25	4 each (27.00)	4 each	58545
530-MTPI-TR/SES	ATS/IDC	5 - 25	1 each (10.40)	1 each	58776
530-MT/SES		-	1 each	1 each	92367**
530-MTA/SES		-	1 each (10.00)	1 each	92686**
530-MTC/SES		-	1 each	1 each	14733***
Empty Terminals with Rubber End Seals					
530-MTC/RES		-	1 each	1 each	15060***
530-MTPI-TR/RES		-	1 each	1 each	18572***
530-MT		-	1 each (9.69)	1 each	91118**
328 and 530 MT housing will accommodate other manufacturer's blocks.					
*Blocks must be purchased from manufacturer or through your distributor.					
**UPC prefix 054007-					
***UPC prefix 051115-					



PRODUCT REFERRAL GENERATOR

Shield Bonding pg. 111	3M™ Scotchllok™ Connectors. . . pg. 2
Sheath Scuff pg. 117	3M™ MS™ Modules. pg. 10
Tapes and Sealing pg. 385	

ORDERING INFORMATION

3M™ SLiC™ AERIAL TERMINALS FILLED

PRODUCT NUMBER	BLOCK TYPE	INITIAL PAIR CAPACITY	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Filled Terminals with Spiral End Seals					
319-PI-10-TR/SES	ATS/IDC	10	4 each	4 each	19474**
319-MX-10/SES	MX	10	4 each	4 each	19476**
319-MXP-10/SES	MX-P	10	4 each	4 each	19478**
328-PI-5-TR/SES	ATS/IDC	5, 10, 15, 25	4 each (35.00)	4 each	75416
328-PI-10-TR/SES	ATS/IDC	5, 10, 15, 25	4 each (30.00)	4 each	58546
328-PI-20-TR/SES	ATS/IDC	5, 10, 15, 25	4 each	4 each	58547
328-PI-25-TR/SES	ATS/IDC	5, 10, 15, 25	4 each (34.00)	4 each	58548
328-PI-50-TR/SES	ATS/IDC	50	1 each	1 each	14737*
530-PI-5-TR/SES	ATS/IDC	5, 10, 15, 25	1 each	1 each	75417
530-PI-10-TR/SES	ATS/IDC	5, 10, 15, 25	1 each (10.80)	1 each	58777
530-PI-20-TR/SES	ATS/IDC	5, 10, 15, 25	1 each	1 each	58778
530-PI-25-TR/SES	ATS/IDC	5, 10, 15, 25	1 each (12.86)	1 each	58779
328-DSL/SES	DSL/INK	25	4 each	4 each	18554**
328-G-10/SES	TXCO	10	4 each (32.58)	4 each	92851*
328-G-25/SES	TXCO	25	4 each (35.47)	4 each	92852*
328-R-10/SES	Binding Post	10	4 each	4 each	14976**
328-R-25/SES	Binding Post	25	4 each	4 each	15066**
530-R-10/SES	Binding Post	10	1 each	1 each	15065**
530-R-25/SES	Binding Post	25	1 each	1 each	92633*
Filled Terminals with Rubber End Seals					
319-PI-10-TR/RES	ATS/IDC	10	4 each	4 each	19473**
319-MX-10/RES	MX	10	4 each	4 each	19475**
319-MXP-10/RES	MX-P	10	4 each	4 each	19477**
328-DSL/RES	DSL/INK	25	4 each	4 each	18523**
328-PI-10-TR/RES	ATS/IDC	10	4 each	4 each	16136**
328-PI-20-SR/RES	ATS/IDC	20	4 each	4 each	18398**
328-PI-25-TR/RES	ATS/IDC	25	4 each	4 each	16137**
328-PI-50-TR/RES	ATS/IDC	50	1 each	1 each	16139**
328-PI-5-TR/RES	ATS/IDC	5	4 each	4 each	18570**
328-R-10/RES	Binding Post	10	4 each	4 each	18577**
328-R-25/RES	Binding Post	25	4 each	4 each	18578**
530-R-10	Binding Post	10	1 each	1 each	11625
530-R-25	Binding Post	5, 10, 25	1 each (11.31)	1 each	11626
NOTE: 3" SLiC terminals have an approximate splice bundle capacity of 78.7 mm (3.1"). Based on 24 AWG (.5 mm) 2 bank straight splices using MS ² 4000DWP modules; splice capacity is approximately 300 pair. 5" SLiC terminals have an approximate splice bundle capacity of 129.5 mm (5.1"). Based on 26 AWG (.4 mm) 2 bank straight splices using 3M™ MS ² Modules 4000DWP; splice capacity is approximately 900 pair.					
* UPC prefix 054007-					
** UPC prefix 051115-					

3M™ SLiC™ AERIAL CLOSURE AND TERMINAL ACCESSORIES



PRODUCT NUMBER/ PACKAGING INFO	DESCRIPTION
SLiC-AC-HB1 PKG. (LBS.): 10 SETS (3.60) MIN. ORDER: 10 SETS UPC: 054007-34416	Offset Hanger Brackets
SLiC-AC-HB2 PKG. (LBS.): 10 SETS (2.10) MIN. ORDER: 10 SETS UPC: 054007-92926	Extended Hanger Brackets
SLiC/GATM AC-HB3 PKG.: 10 SETS MIN. ORDER: 10 SETS UPC: 051115-15063	Extended Hanger Bracket
SLiC-ES/2SC PKG. (LBS.): 10 EACH (1.43) MIN. ORDER: 10 EACH UPC: 054007-57092	SLiC Closure Rubber End Seal Single Port 2" single port rubber end seal.
SLiC-ES/2DC PKG. (LBS.): 10 EACH (2.10) MIN. ORDER: 10 EACH UPC: 054007-71218	SLiC Closure Rubber End Seal Double Port 2" double port rubber end seal.
SLiC-ES/3SC PKG. (LBS.): 10 EACH (2.14) MIN. ORDER: 10 EACH UPC: 054007-57093	SLiC Closure Rubber End Seal Single Port 3" single port rubber end seal.
SLiC-ES/3DC PKG. (LBS.): 10 EACH (2.94) MIN. ORDER: 10 EACH UPC: 054007-57094	SLiC Closure Rubber End Seal Double Port 3" double port rubber end seal.
SLiC-ES/3TC PKG. (LBS.): 10 EACH (2.50) MIN. ORDER: 10 EACH UPC: 054007-71221	SLiC Closure Rubber End Seal Triple Port 3" triple port rubber end seal.

3M™ SLiC™ AERIAL CLOSURE AND TERMINAL ACCESSORIES

PRODUCT NUMBER/ PACKAGING INFO	DESCRIPTION
SLiC-ES/5SC PKG. (LBS.): 5 EACH (2.47) MIN. ORDER: 10 EACH UPC: 054007-91694	SLiC Closure Rubber End Seal Single Port 5" single port rubber end seal.
SLiC-ES/5DC PKG. (LBS.): 5 EACH (2.77) MIN. ORDER: 5 EACH UPC: 054007-71458	SLiC Closure Rubber End Seal Double Port 5" double port rubber end seal.
SLiC-ES/5TC PKG. (LBS.): 5 EACH (2.91) MIN. ORDER: 5 EACH UPC: 054007-71220	SLiC Closure Rubber End Seal Triple Port 5" triple port rubber end seal.
SLiC-ES/7DC PKG. (LBS.): 5 EACH (5.33) MIN. ORDER: 5 EACH UPC: 054007-71457	SLiC Closure Rubber End Seal Double Port 7" double port rubber end seal. Also fits in a 9" closure.
SLiC-ES/7TC PKG. (LBS.): 5 EACH (5.25) MIN. ORDER: 5 EACH UPC: 054007-71219	SLiC Closure Rubber End Seal Triple Port 7" triple port rubber end seal. Also fits in a 9" closure.
SLiC-2-SES PKG. (LBS.): 10 EACH (1.34) MIN. ORDER: 10 EACH UPC: 054007-92648	Spiral End Seal for 2" SLiC Closures 2" triple port spiral end seal.
SLiC-3-SES PKG. (LBS.): 10 EACH (2.79) MIN. ORDER: 10 EACH UPC: 054007-92649	Spiral End Seal for 3" SLiC Closures and Terminals 3" triple port spiral end seal.
SLiC-5-SES PKG. (LBS.): 10 EACH (5.00) MIN. ORDER: 5 EACH UPC: 054007-92650	Spiral End Seal for 5" SLiC Closures and Terminals 5" four port spiral end seal.



3M™ SLiC™ AERIAL CLOSURE AND TERMINAL ACCESSORIES



PRODUCT NUMBER/ PACKAGING INFO

DESCRIPTION

SLiC-7-SES

PKG. (LBS.):
5 EACH (8.00)
MIN. ORDER: 5 EACH
UPC: 054007-92651

Spiral End Seal for 7" SLiC Closures

7" five port spiral end seal. Also fits in a 9" closure.



SLiC-SR-3

PKG. (LBS.):
10 KITS (2.70)
MIN. ORDER: 10 KITS
UPC: 051138-57641

Sheath Retention Kit

Adds sheath retention to 3" SLiC terminals and closures.



SLiC-SR-5

PKG. (LBS.):
10 KITS (3.60)
MIN. ORDER: 10 KITS
UPC: 051138-57642

Sheath Retention Kit

Adds sheath retention to 5" SLiC terminals and closures.



Aerial Service Wire Closure Kit 3900-A

PKG. (LBS.): 100 EACH (6.70) MIN. ORDER: 100 EACH UNITS UPC: 054007-92321

FEATURES

Butt splicing 2-pair aerial drop wire

Pole and wall mount applications

Wire gauges ranging from 18 to 24 AWG

Utilizes available connectors (i.e. 3M Scotchlok™ Connectors UY2 and UR2)

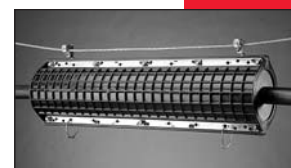
Provides primary physical protection

Free breathing

Resistant to UV rays

3M™ AERIAL SUPER STRETCH CLOSURES GATM SERIES

GATM super stretch closures are designed to protect aerial splices and to repair sheath damages. This closure body is made of impact-resistant plastic. The closure can be used for straight or multiple branch splices and is offered in different lengths and diameters to accommodate up to 4800 pair copper splice.



ORDERING INFORMATION

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	MAX. SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS (24 GAUGE)*	NUMBER OF CABLE OPENINGS	OVERALL LENGTH MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
GATM9S7361111GT	178 (7)	635 (25)	2100	1 in / 1 out	914 (36)	1 each (22.81)	1 each	78325
GATM9S7441111GT	178 (7)	851 (33.5)	2700	1 in / 1 out	1130 (44.5)	1 each (24.50)	1 each	78328
GATM9S9362211GT	241 (9.5)	635 (25)	4200	2 in / 2 out	914 (36)	1 each (33.31)	1 each	78331
GATM9S9442211GT	241 (9.5)	851 (33.5)	4800	2 in / 2 out	1130 (44.5)	1 each (39.31)	1 each	78334

*Using 25-pair modular connectors.
Standard package = kit. Minimum order/ordering multiple = 1 kit.

ORDERING INFORMATION

SEALING WASHER SELECTION CHART FOR AERIAL SUPER STRETCH CLOSURES GATM						
PRODUCT NUMBER	SEALING WASHER ENTRY CONFIG.	SEALING WASHER DIA. MM (IN.)	CABLE DIA. RANGE MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
GATM9S71E	Single entry	718 (7) (0.72 - 4.0)	1 at 18.3 - 101.6	1 each (3.56)	1 each	78323
GATM9S72E	Double entry	718 (7) (0.55 - 2.5)	2 at 14.0 - 63.5	1 each (2.63)	1 each	78324
GATM9S73E	Triple entry	718 (7) (0.55 - 2.5)	3 at 14.0 - 63.5	1 each (2.62)	1 each	78327
GATM9S92E	Double entry	241 (9.5) (0.55 - 4.0)	2 at 14.0 - 101.6	1 each (5.06)	1 each	78330
GATM9S93E	Triple entry	241 (9.5) (0.55 - 3.5) 2 at 14.0 - 63.5 (0.55 - 2.5)	1 at 14.0 - 88.9	1 each (5.85)	1 each	78333
GATM9S94E	Quadruple entry	241 (9.5) (0.55 - 3.5) 2 at 14.0 - 53.3 (0.55 - 2.1)	2 at 14.0 - 88.9	1 each (5.02)	1 each	78336



PRODUCT REFERRAL GENERATOR

Shield Bonding pg. 111
Tapes and Sealing pg. 385
710 Modules pg. 26

3M™ MS™ Modules pg. 10
3M™ Scotchlok™ Connectors . . pg. 2

3M™ CLOSURE ACCESSORIES GATM SERIES

PRODUCT NUMBER/ PACKAGING INFO	DESCRIPTION
GATM92960 PKG. (LBS.): 1 EACH (1.48) MIN. ORDER: 1 EACH UPC: 051138-77831	GATM Case Connector Kit 2000 For connecting two closures together or covering sections of damaged cable. For 2000 series closure.
GATM95960 PKG. (LBS.): 1 EACH (1.78) MIN. ORDER: 1 EACH UPC: 051138-77860	GATM Case Connector Kit 5000 For connecting two closures together or covering sections of damaged cable. For 5000 series closure.
GATM97960 PKG. (LBS.): 1 EACH (3.13) MIN. ORDER: 1 EACH UPC: 051138-77894	GATM Case Connector Kit 7000 For connecting two closures together or covering sections of damaged cable. For 7000 series closure.
GATM92961 PKG. (LBS.): 1 EACH (1.61) MIN. ORDER: 1 EACH UPC: 051138-77832	GATM Washer Housing Kit 2000 Used in conjunction with splice closure extender kit to lengthen a closure. For 2000 series closure.
GATM95961 PKG. (LBS.): 1 EACH (1.68) MIN. ORDER: 1 EACH UPC: 051138-77861	GATM Washer Housing Kit 5000 Used in conjunction with splice closure extender kit to lengthen a closure. For 5000 series closure.
GATM97961 PKG. (LBS.): 1 EACH (3.27) MIN. ORDER: 1 EACH UPC: 051138-77895	GATM Washer Housing Kit 7000 Used in conjunction with splice closure extender kit to lengthen a closure. For 7000 series closure.

ORDERING INFORMATION

3M™ CLOSURE WASHERS AND END SEALING GATM SERIES

PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	MIN. ORDER/ ORDERING MULTIPLE	UPC 051138-
2000 Washers					
GATM92911	Single entry washer	1 each (0.83)	1 each	50 pkgs.	77828
GATM92922	Double entry washer	1 each (0.86)	1 each	50 pkgs.	77829
5000 Washers					
GATM95911	Single entry washer	1 each (1.00)	1 each	25 pkgs.	77855
GATM95922	Double entry washer	1 each (1.02)	1 each	25 pkgs.	77856
GATM95933	Triple entry washer	1 each (1.02)	1 each	25 pkgs.	77858
7000 Washers					
GATM97911	Single entry washer	1 each (3.06)	1 each	10 pkgs.	77890
GATM97922	Double entry washer	1 each (3.04)	1 each	10 pkgs.	77891
GATM97933	Triple entry washer	1 each (2.90)	1 each	10 pkgs.	77893
For sealing the ends of splice and terminal closures.					

CONVERSION CHART

GATM CLOSURE OR TERMINAL	RECOMMENDED 3M™ SLIC™ REPLACEMENT PRODUCT NUMBER	DESCRIPTION
GATM92000 GATM CLOSURE 2000	SLIC-2X29	Aerial closure kit with floating bond and rubber end seal
GATM95000 GATM CLOSURE 5000	SLIC-3x33	Aerial closure kit with floating bond and rubber end seal
GATM97000 GATM CLOSURE 7000	SLIC-5x33	Aerial closure kit with floating bond and rubber end seal
GATM92H101112SD GATM IDC TERM2000 10PR/NP	328-PI-10-TR/RES	Aerial terminal with 10-pair ATS/TR block
GATM95H101112SD GATM IDC TERM5000 10PR/NP	530-PI-10-TR/RES	Aerial terminal 5x30 with 10-pair ATS/TR block*
GATM97H101112SD GATM IDC TERM7000 10PR/NP	530-PI-10-TR/RES	Aerial terminal 5x30 with 10-pair ATS/TR block
*For some applications with larger splice bundles a 5" SLIC terminal (530-PI-10) will be required to replace the GATM 95 terminal.		

3M™ Multi-Pair Terminating System ATS/TR



To make connections that last, turn to 3M first

ATS/TR multi-pair termination system products are on the job in millions of terminations all over the world, providing superior connection capabilities in all types of applications.

Dual-IDC design makes a better connection

3M's unique dual-IDC (insulation displacement connector) approach promotes a gas-tight connection no matter what size wire is being terminated. With two connectors instead of just one, the system terminal easily accommodates 18 to 24 AWG (1.0-0.5mm) — a significantly wider range than any ordinary single connector design.

Ready-to-terminate terminal block makes installation a snap

If you're accustomed to terminal blocks that take turn after turn of the wrench to complete a termination, you'll like 3M's ready-to-terminate design: just one full turn, and it's done. The terminating drivers are provided in the open, ready-to-terminate position. Ready-to-terminate terminal blocks are designed to save time and trouble in the field, in an effort to keep installer productivity up and installation costs down.

3M™ MULTI-PAIR TERMINATING SYSTEM ATS/TR

Access ports make testing easier

Tee-in access ports on ATS/TR terminal blocks make troubleshooting a snap. They're designed to hold test clips securely in place, whether in vertical or horizontal mode.

3M makes it a natural in the field

All wire connection points are sealed against environmental exposure, and drop wires or service wires can be removed and replaced repeatedly without materially compromising the integrity of that seal.

Whether your termination applications are in the air or on the ground, you can handle them with ATS/TR system products. It's a complete family of products for aerial, pole-mount and pedestal applications.

Products for Aerial Applications

Designed for free-breathing, integrated aerial applications, these products can terminate up to 50 pairs in a single aerial terminal.

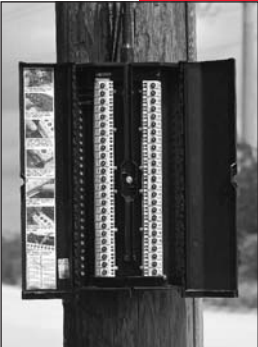
Products for Pole-Mount Applications

3M pole-mount termination products include 25- and 50-pair pole-mount stubbed terminals, with stubs in 12-foot lengths of aircore shielded cable. They're designed to provide fixed-count termination for aerial drop wires in pole-mount applications.

Products for Pedestal Applications

3M ATS/TR 5, 10, and 25-pair terminal blocks with four-foot aircore stubs are designed to fit pedestals from a variety of manufacturers, where they can be used to terminate underground wires.

Other lengths may be available upon request.



FEATURES

- Dual IDC connections
- No wire stripping
- No special tools needed
- Ready to terminate
- One-turn termination
- Tee-access ports
- Totally sealed connections
- Constant-volume gel chamber

BENEFITS

- Enable tight connections with any size wire (18-24 AWG)
- Improves productivity and lessens risk of wire damage
- Minimizes installation hassle
- Reduces installer time and expense
- Speeds installation
- Promotes solid connection for remote testing
- Provide maximum environmental protection
- Allows repeated re-termination with virtually no sealant-gel loss

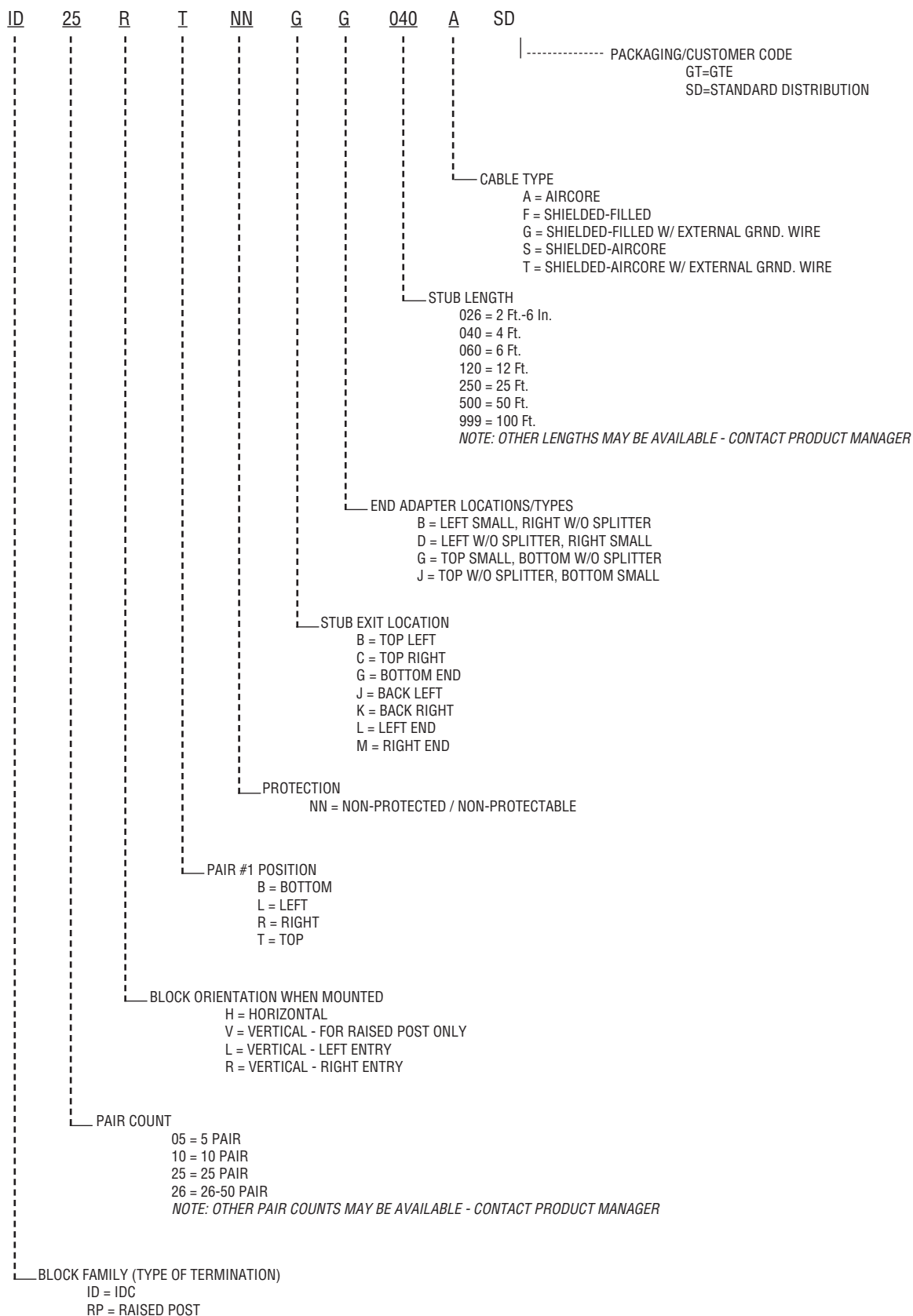
ORDERING INFORMATION

3M™ MULTI-PAIR TERMINATING SYSTEM ATS/TR

PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Aerial Terminal Blocks for Field Installation in SLIC				
ID05HLNND026ASD-TR	ATS/TR block- 5 PR non-prot 2 ft 6 in aircore stub	24 each	24 each	78164
ID10HLNND026ASD-TR	ATS/TR block- 10 PR non-prot 2 ft 6 in aircore stub	24 each (26.32)	24 each	77608
ID25HLNND026ASD-TR	ATS/TR block- 25 PR non-prot 2 ft 6 in aircore stub	12 each (29.32)	12 each	78294
Pedestal Terminal Blocks				
ID05LTNNGG040AGT-TR	ATS/TR block- 5 PR left entry non-prot 4 ft aircore stub	24 each (19.21)	24 each	77928
ID05LTNNGG040ASD-TR	ATS/TR block 5 PR left entry non-prot 4 ft aircore stub	24 each	24 each	87941
ID05RTNNGG040ASD-TR	ATS/TR block 5 PR right entry non-prot 4 ft aircore stub	24 each (20.24)	24 each	78562
ID10HLNNMB040AGT-TR	ATS/TR block- 10 PR non-prot 4 ft aircore stub	24 each (30.50)	24 each	77934
ID10LTNNGG040ASD-TR	ATS/TR block 10 PR left entry non-prot 4 ft aircore stub	24 each (30.50)	24 each	78564
ID10LTNNGG120FSD-TR	ATS/TR block 10 PR left entry non-prot 12 ft filled shld stub	12 each (35.00)	12 each	78282
ID10LTNNGG120SSD-TR	ATS/TR block 10 PR left entry non-prot 12 ft aircore shld stub	24 each (33.00)	24 each	78285
ID10RTNNGG040ASD-TR	ATS/TR block 10 PR right entry non-prot 4 ft aircore stub	24 each (30.77)	24 each	78566
ID10RTNNGG120FSD-TR	ATS/TR block 10 PR right entry non-prot 12 ft filled shld stub	6 each (30.00)	6 each	78568
ID25LTNNGG040AGT-TR	ATS/TR block- 25 PR left entry non-prot 4 ft aircore stub	12 each (32.99)	12 each	77942
ID25LTNNGG040ASD-TR	ATS/TR block 25 PR left entry non-prot 4 ft aircore stub	24 each	24 each	78283
ID25LTNNGG120FGT-TR	ATS/TR block- 25 PR left entry non-prot 12 ft filled shld stub	6 each (28.36)	6 each	77943
ID25RTNNGG040ASD-TR	ATS/TR block 25 PR right entry non-prot 4 ft aircore stub	12 each (32.48)	12 each	78576
ID25RTNNGG120FSD-TR	ATS/TR block 25 PR right entry non-prot 12 ft filled shld stub	12 each (37.00)	12 each	78578
Aerial Terminals				
328-MTPI-TR/SES	Aerial terminal empty for ATS/TR block w/ spiral end seal	4 each (27.00)	4 each	58545
328-PI-5-TR/SES	Aerial terminal 3x28 w/ 5 PR ATS/TR block spiral end seal	4 each (35.00)	4 each	75416
328-PI-10-TR/SES	Aerial terminal 3x28 w/ 10 PR ATS/TR block spiral end seal	4 each (30.00)	4 each	58546
328-PI-20-TR/SES	Aerial terminal 3x28 w/ 20 PR ATS/TR block spiral end seal	4 each	4 each	58547
328-PI-25-TR/SES	Aerial terminal 3x28 w/ 25 PR ATS/TR block spiral end seal	4 each (34.00)	4 each	58548
328-PI-50-TR/SES	Aerial terminal 3x28 w/ 50 PR ATS/TR block spiral end seal	1 each	1 each	14737*
328-MTPI-TR/RES	Aerial terminal empty for ATS/TR block w/ spiral end seal	4 each	4 each	18571*
328-PI-5-TR/RES	Aerial terminal 3x28 w/ 5 PR ATS/TR block spiral end seal	4 each	4 each	18570*
328-PI-10-TR/RES	Aerial terminal 3x28 w/ 10 PR ATS/TR block spiral end seal	4 each	4 each	16136*
328-PI-20-SR/RES	Aerial terminal w/20 PR ATS/TR block w/sheath retention and 1/3 RES	4 each	4 each	18398*
328-PI-25-TR/RES	Aerial terminal 3x28 w/ 25 PR ATS/TR block spiral end seal	4 each	4 each	16137*
328-PI-50-TR/RES	Aerial terminal 3x28 w/ 50 PR ATS/TR block spiral end seal	1 each	1 each	16139*
530-MTPI-TR/SES	Aerial terminal empty for ATS/TR block w/ spiral end seal	1 each (10.40)	1 each	58776
530-PI-5-TR/SES	Aerial terminal 5x30 w/ 5 PR ATS/TR block spiral end seal	1 each	1 each	75417
530-PI-10-TR/SES	Aerial terminal 5x30 w/ 10 PR ATS/TR block spiral end seal	1 each (10.80)	1 each	58777
530-PI-20-TR/SES	Aerial terminal 5x30 w/ 20 PR ATS/TR block spiral end seal	1 each	1 each	58778
530-PI-25-TR/SES	Aerial terminal 5x30 w/ 25 PR ATS/TR block spiral end seal	1 each (12.86)	1 each	58779
530-PI-50-TR/SES	Aerial terminal 5x30 w/ 50 PR ATS/TR block spiral end seal	1 each	1 each	14734*
530-MTPI-TR/RES	Aerial terminal empty for ATS/TR block w/ spiral end seal	1 each	1 each	18572*
530-PI-5-TR/RES	Aerial terminal 5x30 w/ 5 PR ATS/TR block spiral end seal	1 each	1 each	18573*
530-PI-10-TR/RES	Aerial terminal 5x30 w/ 10 PR ATS/TR block spiral end seal	1 each	1 each	18574*
530-PI-20-SR/RES	Aerial terminal w/20 PR ATS/TR block w/ sheath retention and 1/3 RES	1 each	1 each	18401*
530-PI-25-TR/RES	Aerial terminal 5x30 w/ 25 PR ATS/TR block spiral end seal	1 each	1 each	18575*
530-PI-50-TR/RES	Aerial terminal 5x30 w/ 50 PR ATS/TR block spiral end seal	1 each	1 each	18576*

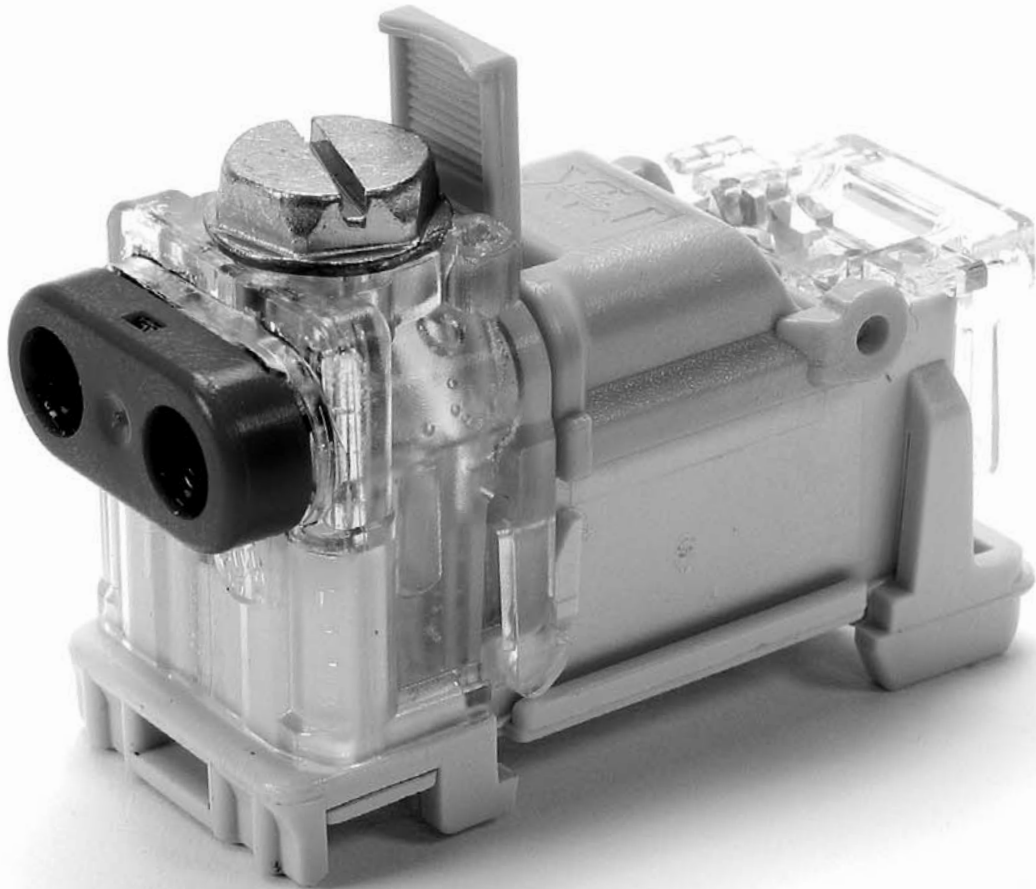
*UPC prefix 051115-

3M™ TERMINAL BLOCK ATS/TR NUMBERING AND SELECTION GUIDE*



* For multiple pair blocks only.

3M™ Termination Modules MX2000 Series



MX2000 dropwire connectors are in use worldwide to build and upgrade overhead networks with fully watertight connection technology. Since the highest fault rates occur in overhead networks, it's essential to use a high reliability technology like MX2000 connectors.

MX2000 connectors are designed to operate under the harshest environmental conditions, and are suitable for distribution, protection and customer termination in overhead lines. This new generation module fits all existing networks and can accommodate a full range of dropwire sizes.

3M™ TERMINATION MODULES MX2000 SERIES

No special tools are required to perform IDC termination; a simple screwdriver/canwrench eases the dropwire termination. Both sides of this connector can be re-terminated multiple times with different conductor sizes.

A central disconnection area offers test ports for both sides, multi-pair testing, as well as disconnection and overvoltage protection. The overvoltage protected version is able to drain currents as high as 10kA.

The very flexible built-in protection allows unprotected distribution points to easily be upgraded to protected ones. The unique MX2000 design allows the user to snap the module on both IEC 715 25 mm and 35 mm profiles. Grounding (10kA) is automatically completed through the mounting rail. The MX2000 one-pair module offers a very high flexibility compared to most multi-pair systems.

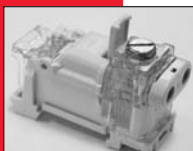
FEATURES	BENEFITS
Upgradeable to over-voltage protection version module just by adding a surge arrester	Future looking design, suitable for upgrade
Fully watertight encapsulated contact	Full protection even in harsh environments
Screwdriver operated IDC	No special termination tool required
Accommodates steel, copper weld, copper cadmium, bronze drop wires from 0.4 mm to 1.1 mm conductors	Applicable on all wire diameter possibilities
Overall insulation diameter is 5 mm maximum	Multiple re-terminations possible
Drop wire side protected during disconnection	No disturbance from other side during termination
Tool free IDC	Suitable to use in different climates
4 access points for testing	Service interruption free testing
Solid copper from 0.4 mm to 0.8 mm conductors	Provides test facility for both directions
Overall insulation diameter is 1.8 mm maximum	No need for special mounting rail profiles.

3M™ TERMINATION MODULES MX2000 SERIES



MX2000

Disconnection module with protection facility



MX2000 C

Disconnection module meets Cat. 5 performance @ 100MHz when installed with space of at least 3 mm between modules



MX2000 T

Disconnection module with protection and test facility without interrupting the service (only available outside the U.S)



MX2000 PP

Protection module equipped with 250V surge arrester with fail-safe and PTCR



MX2000 P 250V

Protection module equipped with 250V surge arrester with fail-safe



MX2000 P 350V

Protection module equipped with 350V surge arrester with fail-safe

ORDERING INFORMATION

PRODUCT NUMBER	DESCRIPTION	MIN. ORDER
MX2000	Disconnection module with protection facility	10 each
MX2000 C	Disconnection module	10 each
MX2000 T	Disconnection module with over-voltage protection with test facility	1000 each
MX2000 PP 250 V	Protection module equipped with 250 V surge arrester with fail safe and PTCR	10 each
MX2000 P 250 V	Protection module	10 each
MX2000 P 350 V	Protection module	10 each

ACCESSORIES

DESCRIPTION	MIN. ORDER
250V three pole surge arrester with fail-safe	500 each
350V three pole surge arrester with fail-safe	500 each

For ordering information, please contact your local 3M representative.

SPECIFICATIONS

3M™ TERMINATION MODULES MX2000 SERIES

CAPACITY	SINGLE PAIR	DIMENSIONS OF THE MODULE
Length		50 mm
Height		36 mm
Width		20 mm
Cat. 5 applicable	@100MHz	
Electrical performances		
Contact resistance		
MX2000, T, C	< 3 mΩ	
MX2000 P 250 V, 350 V and PP 250 V	< 1 mΩ	
Leading through resistance	< 10 mΩ	
MX2000 C only	< 20 mΩ	
Insulation resistance under 500 V	> 10 GΩ	
Dielectric strength under 50 Hz	5 kV RMS-50Hz	
Protection (to be ordered separately)		
Over-voltage	250 V	350 V
DC breakdown voltage	250 V +/- 20%	350 V +/- 20 %
Impulse spark over voltage (1kV/μs)	< 600 V	< 900 V
Impulse discharge current 8/20μs	10 kA	10 kA
Alternative discharge current 50Hz	< 10 A	< 10 A
Fail-safe response time	< 20s I=1A	< 20s I=1A
For MX2000 PP 250 V only		
Over-current	with 2 PTCR	
Interrupt current	3 A	
Materials		
Plastic materials	Polycarbonate	
Contact material	Phosphor bronze	
Contact plating	Tin/lead	
Self extinguishing plastic	UL 94 V0	
Color		
MX2000, T	Clear, gray and dark gray plastic	
C	Clear and light gray plastic	
P 250 V and PP 250 V	Clear, gray and red plastic	
P 350 V	Clear, gray and orange plastic	
Drop wire termination side		
Screwdriver operated IDC/canwrench		
Wire type	Steel, copper weld, copper cadmium, bronze drop wires	
Wire dimensions	0.4 mm to 1.1 mm conductors	
	O.D is 5 mm maximum	
Cable termination side		
Tool free IDC		
Wire type	Solid copper	
Wire dimensions	0.4 mm to 0.8 mm conductors	
O.D. is 1.8 mm maximum		
Operating temperature	- 30°C to + 115°C	
Mounting	Snap on IEC 715 25 mm and 35 mm DIN profiles	

3M™ DOME CLOSURES



Reenterable dome closures with pull and shrink tubing (PST) offer fast, rugged splice protection with easy reentry.

An economical method of protecting butt splices for pedestal, hand hole or pole mount applications is provided by the reenterable PST dome closures. The closure provides protection from the harmful effects of moisture, insects, and ultraviolet light, while providing easy reentry.

The dome closure is an easily reenterable closure that protects the splice without special tools or flame for installation.

The splice is enclosed in a split polypropylene dome clamped together with a steel latch and sealed with an O-ring. An expanded ethylene propylene rubber tube (PST) is slipped over the base of the enclosure and onto a gel sealing collar. Pulling a plastic rip cord on the PST allows it to shrink to the minimum outside diameter necessary to form a tight seal. The flexible tubing material conforms to the shape of the collar, sealing out both air and water.

The kit is available in four sizes, which accommodate splices from 25- to 900-pair. For encapsulated plant, three sizes are available which accommodate splices from 25- to 600-pair. **RUS Listed.**

FEATURES

BENEFITS

Unique latching system to secure dome to the sealed base	Easily reenterable, no reentry kit, seal undisturbed at reentry, no tools needed to reenter
Gel end seal	Air tight seal over multiple cable diameters and configurations
Retrofits existing PST	Multiple applications

SPECIFICATIONS

REENTERABLE PST DOME CLOSURE KITS			
	4604	4606	4608
Closure Outside Dimension W x D mm (in.)	97 x 71 (3.8 x 2.8)	142 x 99 (5.6 x 3.9)	178 x 137 (7.0 x 5.4)
Closure Height (H) mm (in.)	572 (22.5)	572 (22.5)	597 (23.5)
Approx. Bundle Diameter mm (in.)	64 (2.5)	99 (3.9)	135 (5.3)
Minimum Reliable CAD Pedestal	CAD 4	CAD 6	CAD 8
Main Cables mm (in.)	13-28 (0.5-1.1)	23-41 (0.9-1.6)	36-64 (1.4-2.5)
Terminal Cables mm (in.)	10-15 (0.4-0.6)	10-15 (0.4-0.6)	10-20 (0.4-0.8)
Branch Cables mm (in.)	—	18-25 (0.7-1.0)	23-33 (0.9-1.3)
Drop Cables mm (in.) 2 cable max.	9 max. (0.35 max.) 2 cable max.	9 max. (0.35 max.) 2 cable max.	9 max. (0.35 max.)
*Approx. Splice Range	100 pr.-MS ² 50 pr.-UR2	300 pr.-MS ² 100 pr.-UR2	600 pr.-MS ² 300 pr.-UR2

*NOTE: Based on 2 bank 25-pair modular connectors and 3M™ Scotchlok™ Connectors installed per 3M practices. Examples: 100-pair means 100-pair In and 100-pair out or a 100 pair straight splice.

Kit components included: closure assembly, dome, base, O-ring, latch, gel end seal, ground wires, PST sheath scuff, desiccant bag.

Companion products needed: Scotch® 88T 38 mm (1-1/2") Wide Vinyl Tape, Scotch® Rubber Tape 130C LR, 3M™ Scotchlok™ Shield Bond Connectors 4460 Series, 3M™ Scotchlok™ UR2 or 3M™ MS² Splice Connectors, 3M™ Cable Ties 6228, 381 mm (15") and 3M™ Pole-Mount Bracket FD120.



PRODUCT REFERRAL GENERATOR

Compounds/Encapsulants . . . pg. 107
Shield Bonding pg. 111
Cable Lubricants pg. 406
3M™ Scotchlok™ Connectors . . . pg. 2
3M™ MS² Modules pg. 10

Tapes pg. 383
Sheath Scuff pg. 117
Pair Saver pg. 117
Cable Ties pg. 403

CLOSURE SELECTION GUIDE

To order 3M™ Dome Closures, follow these steps:

1. What is your pair count?
2. What is your cable size?
3. What is your sheath opening?
4. What type of connector are you using: module (3M MS Module or 3M 710 Module) or discrete (3M Scotchlok™ Connector)?
Note: Bundles built with modular connectors are half the size of discrettes.
5. What is your splice bundle diameter?

These questions should guide you in choosing the correct closure. For additional ordering information, see below.

ORDERING INFORMATION

3M REENTERABLE PST DOME CLOSURE KITS

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 051138-
4604	15 kits (46.00)	15 kits	36513
4606	9 kits (42.60)	9 kits	36514
4608	5 kits (38.50)	5 kits	36515

ORDERING INFORMATION

3M REENTERABLE DOME CLOSURE ACCESSORIES

PRODUCT NUMBER	DESCRIPTION	SIZE CM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 054007-
4604-PST	Pull and shrink tubing	11.4 x 13.3 (4.8 x 5.25)	5 each (5.50)	5 each	92231
4606-PST	Pull and shrink tubing	14.6 x 15.8 (5.75 x 6.25)	5 each (8.92)	5 each	92230
4608-PST	Pull and shrink tubing	18.4 x 18.4 (7.25 x 7.25)	5 each (20.78)	5 each	92229
4600-GSS	Gel sealant strip	6.3 x 50.7 (2.5 x 20)	50 each (20.78)	50 each	92221
4600-NID	Non-indicating desiccant bags	—	100 each (8.00)	100 each	36517

ORDERING INFORMATION

3M GEL-WRAP PST CLOSURE ACCESSORIES

PRODUCT NUMBER	DESCRIPTION	SIZE	PKG. (LBS.)	MIN. ORDER	UPC 051138-
GW-922	Gel wrap	9" W x 22" L	10 each (13.00)	10 each	57700

ORDERING INFORMATION

3M PST PEDESTAL CLOSURE ACCESSORIES

PRODUCT NUMBER	DESCRIPTION	SIZE MM (IN.)	PKG. (LBS.)	MIN. ORDER 054007-	UPC
4634-R	Pedestal splice closure reentry kit	76.2 (3.0)	10 kits (8.00)	10 kits	17480
4635-R	Pedestal splice closure reentry kit	114.3 (4.5)	10 kits (12.10)	10 kits	17481
4636-R PST	Pedestal splice closure reentry kit	152.4 (6.0)	5 kits (10.00)	5 kits	17654
2900-R	Sealing collar tape	38 x 1.5 m (1.5 x 5')	50 rolls (31.90)	50 rolls	68546
4637-R	Pedestal splice closure reentry kit	—	5 kits (22.40)	5 kits	71534

3M™ FOAM-SEALED CLOSURES



Foam-sealed closures enclose cable plant splices in direct buried, hand hole, and manhole applications.

They also protect cable splices from environmental elements found in these applications and enclose a variety of cable configurations. The closures are also used to easily accommodate distribution drops from the main cable.

The methods used in foam-sealed closures have evolved from early gravity filled methods to compound compression methods.

Foam sealed closures use the compound compression method to apply the pressure to the encapsulant. The polyethylene closure body is over wrapped with the 3M™ Armorcast™ Structural Material for physical strength. 3M™ Expandable Sealant 4411 is used to fill the void between the closure body and the compound compression splice. The expandable foam adheres to the closure body, E-Z wrap and the cable sheath which in turn provides a water tight barrier around the splice and cables entering the closure.

FEATURES

BENEFITS

Few loose parts	Easy assembly and improved productivity
No heat required	Reduces safety concerns
Adjustable closure diameter	Minimizes compound usage and total cost
Tough outer shell	Can be used in harsh environments
Rigid body closure	Easy reentry, physical strength
Rigid bonding assembly	Increased physical strength, provides more support to the cable
Solvent resistant	Gasoline won't erode expandable foam and armorcast
Can be cut with a zip cord	Easy reentry and saves time
Can be extended easily	No need to stock different sizes
Total kit	No need to order individual parts, reduces total cost



PRODUCT REFERRAL GENERATOR

Compounds/Encapsulants . . . pg. 107
Shield Bonding pg. 111
Cable Lubricants pg. 406
3M™ Scotchlok™ Connectors . . . pg. 2
3M™ MS™ Modules pg. 10
Tapes pg. 383

Sheath Scuff pg. 114
Pair Saver pg. 117
Cable Ties pg. 403
Splicing Connectors pg. 2
E-Z Wrap pg. 384

CLOSURE SELECTION GUIDE

To order 3M™ Foam Sealed Closures, follow these steps:

1. What is your pair count?
2. What is your cable size?
3. What is your sheath opening?
4. What type of connector are you using: module (3M MS² Module or 3M 710 Module) or discrete (3M™ Scotchlok Connector)?
Note: Bundles built with modular connectors are half the size of discrettes.
5. What is your splice bundle diameter?

These questions should guide you in choosing the correct closure.

ORDERING INFORMATION

3M FOAM-SEALED CLOSURE WITH COMPOUND COMPRESSION

PRODUCT NUMBER	FSC- 2X12/CC	FSC- 3X12S/CC	FSC- 3X12L/CC	FSC- 3X19/CC	FSC- 3X21/CC	FSC- 4X19	FSC- 4X21/CC	FSC- 6X19/CC	FSC- 8X19/CC12-24	FSC- 8X19/CC-27
Splice bundle diameter mm (in.)	31 (1.25)	50 (2)	76 (3)	76 (3)	76 (3.0)	100 (3.9)	100 (3.9)	145 (5.7)	190 (7.48)	190 (7.48)
Max. splice opening mm (in.)	228 (9)	255 (10)	255 (10)	430 (17)	533 (21)	430 (17)	533 (21)	480 (19)	480 (19)	480 (19)
Closure length end-to-end mm (in.)	90 (15.25)	546 (21.5)	546 (21.5)	724 (28.5)	838.2 (33)	724 (28.5)	838.2 (33)	775 (30.5)	775 (30.5)	775 (30.5)
25-pair modular connectors	0	100/24	200/24	400/24	400/24	600/24	600/24	1200/24	2400/26	2700/26
3M™ Scotchlok™ Connector Splice UY2	25/22	75/24	200/24	400/24	400/24	600/24	600/24	1200/24	2400/26	2700/26
Approx. compound required ml (g)	165 -150	385 -350	769 -700	1648 -1500	1868 -1700	2473 -2250	2857 -2600	5769 -5250	8242 -7500	9890 -9000

ORDERING INFORMATION

PKG. (LBS.)	1 each (2.40)	1 each (5.00)	1 each (16.00)	1 each (9.20)	1 each (0.20)	1 each	1 each (0.20)	1 each (23.30)	1 each (30.80)	1 each (34.30)
MIN. ORDER	1 each	1 each	1 each	1 each	1 each	1 each	1 each	1 each	1 each	1 each
UPC 051138-	75365	70899	70901	70900	76153	70902	76154	70903	70904	70905

Additional products needed to complete this product: splicing connectors and external bonding kit (if necessary), encapsulant and E-Z wrap.

3M™ CLOSURES BETTER BURIED



Buried Compound Compression Closure

The buried compound compression closure method forces the encapsulant up the cable core to stop water ingress. The product is simple to install, comes with the spacer web and plastic wrap and is used to hold and force the encapsulant. The product is offered in different sizes to cover various cable ranges and can be easily extended and bricked.

Better buried closures and 3M™ Scotchcast™ Closures 89 Series use a gravity fill method of encapsulating and protecting the cable splice. Both kits are simple to install and are offered with a full product offering to cover the complete cable ranges found in the outside plant. In addition, both kits can be ordered with 3M™ High Gel Reenterable Encapsulant 4442. The 89 series can also be purchased with 3M™ Encapsulant 4407 for a permanent, hard encapsulated closure with maximum water protection.

Product Nomenclature:

BB = Better Buried	FC = Flat Cap
SW = Spaces Web	PC = Puddle Cap
LHS = Locking Harness System	SC = Single Port End Cap
SB = Strain Relief Bond Bar	DC = Double Port End Cap
DS = Double Sleeve	TC = Triple Port End Cap

CLOSURE CAPACITY FOR BB2X12 THROUGH BB4X12

STEP 1 BETTER BURIED CLOSURES					
DESCRIPTION	BB2X12	BB2X24	BB3X12	BB3X24	BB4X12
Splice bundle diameter mm (in.)	50 (2)	50 (2)	75 (3)	75 (3)	100 (4)
Max. splice opening mm (in.)	177 (7)	425 (17)	177 (7)	425 (17)	177 (7)
Closure length end-to-end mm (in.)	400 (16)	700 (28)	400 (16)	700 (28)	400 (16)
25-pair modular connectors	50-pr.	100-pr.	100-pr.	200-pr.	200-pr.
3M™ Scotchlok™ Connector UR2/UR	25-pr.	50-pr.	75-pr.	100-pr.	150-pr.
Approx. compound required ml (g*)	660 (600)	1,320 (1,200)	1,320 (1,200)	3,300 (3,000)	2,500 (2,250)

*Grams of 4442 High Gel Reenterable Encapsulant based on the density of 1.1ml (0.9g). The density of other reenterable encapsulants will vary.

SPLICE/CABLE CONFIGURATIONS FOR BB2X12 THROUGH BB4X12

STEP 2					
DESCRIPTION	BB2X12	BB2X24	BB3X12	BB3X24	BB4X12
In-line splice with single end caps (1 in/1 out)	SB/2SC-LHS	SB/2SC-LHS	–	SB/2SC-LHS	SB/2DC-LHS
In-line splice with 1 single and 1 double end cap (1 in/2 out)	–	SB/SC, DC-LHS	–	SB/SC, DC-LHS	–
In-line splice with 1 single and 1 double end cap, (SB/SC, DC-LHS), plus 4462 shield bond connector and 4442 high gel (1 in/2 out)	4462/High Gel SC, DC-LHS	4462/High Gel SC, DC-LHS	–	4462/High Gel SC, DC-LHS	–
In-line splice with 2 double end caps (2 in/2 out)	–	–	SB/2DC-LHS	–	–
In-line splice with 1 double and 1 triple end cap (2 in/3 out)	–	–	–	–	–
Butt splice with end cap	2BB BUTT-LHS	–	3BB BUTT-LHS	–	4BB BUTT-LHS

END CAPS/CLOSURE EXTENSION SLEEVES FOR 3M™ BURIED CLOSURES BB2X12 THROUGH BB4X12

ACCESSORIES

DESCRIPTION	BB2X12	BB2X24	BB3X12	BB3X24	BB4X12
Single entry	2" SC-LHS BB	2" SC-LHS BB	3" SC-LHS BB	3" SC-LHS BB	4" SC-LHS BB
Double entry	2" DC-LHS BB	2" DC-LHS BB	3" DC-LHS BB	3" DC-LHS BB	4" DC-LHS BB
Triple entry	–	–	–	–	–
1 flat cap, 1 puddle cap	–	–	–	–	4" BB FC/PC
Sleeve name	2DS-12-BB	2DS-24-BB	3DS-24-BB	3DS-24-BB	4DS-24-BB

Ordering Example: BB2x24 SB/SC, DC-LHS

BB = A Better Buried Closure SC = One Single Port End Cap
 2 x 24 = 2 inch Diameter, 24 inch Length DC = One Double Port End Cap
 SB = Strain Relief Bond Bar LHS = Locking Harness System

CLOSURE CAPACITY FOR BB4X24 THROUGH BB9X26

STEP 1

BETTER BURIED CLOSURES

DESCRIPTION	BB4X24	BB5X26	BB6X26	BB7X26	BB9X26
Splice bundle diameter mm (in.)	100 (4)	125 (5)	150 (6)	175(7)	225(9)
Max. splice opening mm (in.)	425 (17)	475 (19)	475 (19)	475 (19)	475 (19)
Closure length end-to-end mm (in.)	750 (30)	750 (30)	750 (30)	750 (30)	750 (30)
25-pair modular connectors	400-pr.	600-pr.	900-pr.	1,200-pr.	2,400-pr.
3M™ Scotchluk™ Connector UR2/UR	200-pr.	300-pr.	400-pr.	600-pr.	900-pr.
Approx. compound required ml (g)	4,500 (5,000)	7,200 (8,300)	12,500 (13,750)	15,000 (16,500)	21,000 (23,100)

SPLICE/CABLE CONFIGURATIONS FOR BB4X24 THROUGH BB9X26

STEP 2

DESCRIPTION	BB4X24	BB5X26	BB6X26	BB7X26	BB9X26
In-line splice with single end caps (1 in/1 out)	SB/2SC-LHS	SB/2SC-LHS	–	–	–
In-line splice with 1 single and 1 double end cap (1 in/2 out)	SB/SC, DC-LHS	SB/SC, DC-LHS	–	–	–
In-line splice with 1 single and 1 double end cap, (SB/SC, DC-LHS), plus 3M™ Shield Bond Connector 4462 and 3M™ High Gel Compound 4442 (1 in/2 out)	4462/High Gel SC, DC-LHS	4462/High Gel SC, DC-LHS	–	–	–
In-line splice with 2 double end caps (2 in/2 out)	–	–	SB/2DC-LHS	SB/2DC-LHS	SB/2DC-LHS
In-line splice with 1 double and 1 triple end cap (2 in/3 out)	–	–	–	SB/DC, TC-LHS	SB/DC, TC-LHS
Butt splice with double end cap	SW/FC, PC-LHS	SW/FC, PC-LHS	–	SW/FC, PC-LHS	–

END CAPS/CLOSURE EXTENSION SLEEVES FOR BB4X24 THROUGH BB9X26

ACCESSORIES

DESCRIPTION	BB4X24	BB5X26	BB6X26	BB7X26	BB9X26
Single entry	4" SC-LHS BB	5" SC-LHS BB	–	–	–
Double entry	4" DC-LHS BB	5" DC-LHS BB	6" DC-LHS BB	7" DC-LHS BB	9" DC-LHS BB
Triple entry	–	–	–	7" TC-LHS BB	9" TC-LHS BB
1 flat cap, 1 puddle cap	4" BB FC/PC	5" BB FC/PC	–	7" BB FC/PC	–
Sleeve name	4DS-24-BB	5DS-26-BB	6DS-26-BB	7DS-26-BB	9DS-26-BB

CLOSURE SELECTION GUIDE

TO ORDER 3M™ BETTER BURIED CLOSURES, FOLLOW THESE STEPS:

1. Determine closure size using pair capacity and maximum opening, (i.e. = BB2 x 12)
2. Using closure size from Step 1, determine splice and cable configuration code, (i.e. = SB/2SC-LHS)
(Combine steps 1 and 2 to determine product number (i.e. = BB2 x 12 SB/2SC-LHS))

ORDERING INFORMATION

3M BETTER BURIED CLOSURE COMPLETE KITS

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 051138-
BB2x12/8882/High Gel	1 kit (3.20)	1 kit	36502
BB2x24/8882/High Gel	1 kit (5.80)	1 kit	36503
BB3x24/8882/High Gel	1 kit (13.00)	1 kit	36504
BB4x24/8882/High Gel	1 kit (19.00)	1 kit	36505
BB5x26/8882/High Gel	1 kit (28.80)	1 kit	36506

ORDERING INFORMATION

3M BETTER BURIED CLOSURE KITS

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
BB2x12 SB/2SC-LHS	10 kits (13.70)	10 kits	68228
BB2x24 SB/2SC-LHS	1 kit (3.00)	1 kit	68230
BB3x24 SB/2SC-LHS	1 kit (3.90)	1 kit	68236
BB4x24 SB/2SC-LHS	1 kit (5.10)	1 kit	68241
BB5x26 SB/2SC-LHS	1 kit (7.05)	1 kit	68246
BB4x24 SW/FC-PC	1 kit (4.60)	1 kit	63923
BB5x26 SW/FC-PC	1 kit (7.05)	1 kit	63836
BB7x26 SW/FC-PC	1 kit (9.00)	1 kit	68215
BB2x24 SB/SC, DC-LHS	1 kit (3.00)	1 kit	68229
BB3x12 SB/2DC-LHS	1 kit	1 kit	57551*
BB3x24 SB/SC, DC-LHS	1 kit (4.00)	1 kit	68235
BB4x24 SB/SC, DC-LHS	1 kit (5.10)	1 kit	68240
BB5x26 SB/SC, DC-LHS	1 kit (7.30)	1 kit	68245
BB3x24 SB/2SC-LHS	1 kit (3.90)	1 kit	68236
BB4x12 SB/2DC-LHS	1 kit	1 kit	57936*
BB6x26 SB/2DC-LHS	1 kit (9.10)	1 kit	71373
BB7x26 SB/2DC-LHS	1 kit (9.35)	1 kit	71375
BB9x26 SB/2DC-LHS	1 kit	1 kit	71377
BB7x26 SB/DC, TC-LHS	1 kit (10.40)	1 kit	71374
BB9x26 SB/DC, TC-LHS	1 kit (12.70)	1 kit	71376

Note: Kits do not include encapsulant or shield bond connectors.

*UPC prefix 051138-

ORDERING INFORMATION

3M BETTER BURIED CLOSURE ACCESSORIES

PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 054007-
4430-13x20	Spacer web 3x20	2 rolls (2.30)	2 rolls	30362
4430-6x20	Spacer web 6x20	1 roll (2.00)	1 roll	30361

ORDERING INFORMATION**3M™ BETTER BURIED CLOSURE KIT SPARE PARTS**

PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 054007-
2SC-LHS	Single port end cap	10 each (2.00)	10 each	68289
2DC-LHS	Double port end cap	10 each (2.30)	10 each	68290
2DS-24-BB	Split sleeve	10 each (16.40)	10 each	31070
3SC-LHS	Single port end cap	10 each (2.60)	10 each	68291
3DC-LHS	Double port end cap	10 each (2.90)	10 each	68292
3DS-24-BB	Split sleeve	10 each (26.50)	10 each	31071
4SC-LHS	Single port end cap	10 each (3.80)	10 each	68293
4DC-LHS	Double port end cap	10 each (4.00)	10 each	68294
4BB FC/PC	End cap kit	10 kits (0.90)	10 kits	68283
4DS-24-BB	Split sleeve	10 each (35.40)	10 each	31072
5SC-LHS	Single port end cap	10 each (5.00)	10 each	68295
5DC-LHS	Double port end cap	10 each (5.60)	10 each	68296
5BB FC/PC	End cap kit	10 kits (1.05)	10 kits	68284
5DS-26-BB	Split sleeve	10 each (51.50)	10 each	31809
6DC-LHS	Double port end cap	1 each (1.40)	1 each	71391
6DS-26-BB	Split sleeve	1 each (6.35)	1 each	34039
7DC-LHS	Double port end cap	1 each (1.60)	1 each	71394
7TC-LHS	Triple port end cap	1 each (1.90)	1 each	71393
7BB FC/PC	End cap kit	5 kits (10.00)	5 kits	68285
7DS-26-BB	Split sleeve	1 each (7.20)	1 each	31915
9DC-LHS	Double port end cap	1 each (1.80)	1 each	71395
9TC-LHS	Triple port end cap	1 each (2.10)	1 each	71396
9DS-26-BB	Split sleeve	1 each (9.00)	1 each	31916

ORDERING INFORMATION**3M COMPOUND COMPRESSION KITS**

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
BB2x12CC SB/2SC-LHS	10 kits (18.00)	10 kits	91422
BB2x24CC SB/2SC-LHS	1 kit (3.30)	1 kit	91423
BB3x12CC SB/2SC-LHS	1 kit (3.00)	1 kit	91572
BB3x24CC SB/2SC-LHS	1 kit (4.00)	1 kit	92836
BB4x24CC SB/2SC-LHS	1 kit (6.00)	1 kit	91424
BB5x26CC SB/2SC-LHS	1 kit (8.00)	1 kit	92837
BB6x26CC SB/2DC-LHS	1 kit (10.00)	1 kit	91425
BB7x26CC SB/2DC-LHS	1 kit (11.50)	1 kit	92838
BB9x26CC SB/2DC-LHS	1 kit (12.30)	1 kit	92839
BB/CC-R	1 kit (2.00)	1 kit	92842

Note: Kits do not include encapsulant or shield bond connectors.

MAXIMUM SPLICE BUNDLE CAPACITIES (STRAIGHT SPLICE)

3M™ BETTER BURIED COMPOUND COMPRESSION KITS

PRODUCT NUMBER	25-PAIR MODULAR CONNECTOR	UR CONNECTORS (W/3" PIGTAILS)	UPC 054007-
BB2x12CC SB/2SC-LHS	50 pr., 24 AWG (0.5 mm)	25 pr., 22 AWG (0.6 mm)	91422
BB3x12CC SB/2SC-LHS	100 pr., 22 AWG (0.6 mm)	75 pr., 22 AWG (0.6 mm)	91572
BB2x24CC SB/2SC-LHS	100 pr., 24 AWG (0.5 mm)	50 pr., 22 AWG (0.6 mm)	91422
BB3x24CC SB/2SC-LHS	200 pr., 24 AWG (0.5 mm)	100 pr., 22 AWG (0.6 mm)	92836
BB4x24CC SB/2SC-LHS	400 pr., 24 AWG (0.5 mm)	200 pr., 22 AWG (0.6 mm)	91424
BB5x26CC SB/2SC-LHS	600 pr., 24 AWG (0.5 mm)	300 pr., 22 AWG (0.6 mm)	92837
BB6x26CC SB/2DC-LHS	900 pr., 24 AWG (0.5 mm)	400 pr., 22 AWG (0.6 mm)	91425
BB7x26CC SB/2DC-LHS	1200 pr., 24 AWG (0.5 mm)	600 pr., 22 AWG (0.6 mm)	92838
BB9x26CC SB/2DC-LHS	2400 pr., 24 AWG (0.5 mm)	900 pr., 22 AWG (0.6 mm)	92839
BB/CC-R	–	–	92842

CLOSURE DIMENSION GUIDE

BETTER BURIED COMPOUND COMPRESSION KITS

CLOSURE END CAP PORT DIAMETERS					MAX. SPLICE OPENINGS			APPROX. AMOUNT OF COMPOUND REQUIRED
PRODUCT NUMBER	SINGLE ENTRY (MAX.)	MULTIPLE ENTRY (MAX.)			SINGLE SHEATH	DOUBLE SHEATH		AVERAGE SPLICE
		1	2	3		OUTER	INNER	
BB2x12CC SB/2SC-LHS	30 mm (1.2")	30 mm (1.2")	18 mm (0.7")	–	127 mm (5")	–	–	21 oz (600 grams)
BB3x12CC SB/2SC-LHS	41 mm (1.6")	41 mm (1.6")	25 mm (1.0")	–	127 mm (5")	–	–	42 oz (1200 grams)
BB2x24CC SB/2SC-LHS	30 mm (1.2")	30 mm (1.2")	18 mm (0.7")	–	423 mm (17")	423 mm (17")	356 mm (14")	42 oz (1200 grams)
BB3x24CC SB/2SC-LHS	41 mm (1.6")	41 mm (1.6")	25 mm (1.0")	–	423 mm (17")	423 mm (17")	356 mm (14")	106 oz (3000 grams)
BB4x24CC SB/2SC-LHS	51 mm (2.0")	51 mm (2.0")	38 mm (1.5")	–	423 mm (17")	423 mm (17")	356 mm (14")	159 oz (4500 grams)
BB5x26CC SB/2SC-LHS	61 mm (2.4")	61 mm (2.4")	46 mm (1.8")	–	483 mm (19")	483 mm (19")	406 mm (16")	254 oz (7200 grams)
BB6x26CC SB/2DC-LHS	84 mm (3.3")	68 mm (2.7")	50 mm (2.0")	38 mm (1.5")	483 mm (19")	483 mm (19")	406 mm (16")	441 oz (12500 grams)
BB7x26CC SB/2DC-LHS	89 mm (3.5")	89 mm (3.5")	56 mm (2.2")	56 mm (2.2")	483 mm (19")	483 mm (19")	406 mm (16")	530 oz (15000 grams)
BB9x26CC SB/2DC-LHS	102 mm (4.0")	102 mm (4.0")	64 mm (2.5")	64 mm (2.5")	483 mm (19")	483 mm (19")	406 mm (16")	742 oz (21000 grams)

3M™ SCOTCHCAST™ CLOSURES 89 SERIES

**8981/High Gel, 8982/High Gel, 8983/High Gel, 8984/High Gel,
8985/High Gel, 8986/High Gel RUS Listed**

These rigid body closures use a gravity fill method of encapsulating and protecting cables. They are packed with 8882 high gel reenterable encapsulant for easy reentry and includes 3M™ Scotchlok™ Shield Bond Connectors 4462, Scotch® Tape 130C, Scotch® Tape 88T and 3M™ Scotchcast™ Sheath Scuff 4435.



CLOSURE SELECTION GUIDE

TO ORDER 89 SERIES CLOSURES, FOLLOW THESE STEPS:

1. What is your pair count?
2. What is your cable size?
3. What is your sheath opening?
4. What type of connector are you using: module (3M MS™ or 3M 710) or module discrete (3M Scotchlok™ connector)?
Note: Bundles built with modular connectors are half the size of discrettes.
5. What is your splice bundle diameter?

These questions should guide you in choosing the correct closure.

ORDERING INFORMATION

89 SERIES CLOSURES/REENTERABLE ENCAPSULANT

PRODUCT NUMBER	8981-8882 HIGH GEL	8982-8882 HIGH GEL	8983-8882 HIGH GEL	8984-8882 HIGH GEL	8985-8882 HIGH GEL	8986-8882 HIGH GEL
Splice bundle diameter mm (in.)	13 (0.5)	23 (0.9)	32 (1.25)	57 (2.25)	88 (3.5)	119 (4.75)
Max. splice opening mm (in.)	38 (1.5)	132 (5.25)	244 (9.75)	225 (9.0)	425 (17)	425 (17)
Closure length end to end mm (in.)	182 (7.2)	273 (10.75)	396 (15.6)	400 (15.75)	622 (24.5)	635 (24.5)
3M™ Scotchlok Connector UR2/UR	4-pr.	18-pr.	50-pr.	100-pr.	400-pr.	600-pr.
25-pair modular connectors	—	—	—	100-pr.	400-pr.	600-pr.
Approx. compound included	90 ml (82 grams)	300 ml (266 grams)	660 ml (600 grams)	1,320 ml (1,200 grams)	2,640 ml (3,000 grams)	6,600 ml (6,000 grams)
PKG. (LBS.)	10 kits (7.00)	10 kits (16.00)	10 kits (27.00)	1 kit (4.60)	1 kit (10.60)	1 kit (18.95)
MIN. ORDER	10 kits	10 kits	10 kits	1 kit	1 kit	1 kit
UPC 051115-	14653	14654	14655	14656	14657	14658

Additional products needed to complete this closure: 3M™ Pair Saver 4458, 3M™ Scotchlok™ and 3M™ MS™ Connectors.



3M™ SCOTCHCAST™ PIC ENCAPSULATING CLOSURE KITS (NON-REENTERABLE)

These rigid body closures are made of translucent polypropylene and are packed with 4407 urethane compound or 8882 high gel reenterable encapsulant and rubber tape strips for sealing ends of closure.

ORDERING INFORMATION

PRODUCT NUMBER	8981-07	8982-07	8983-07	8984-07	8985-07	8986-07
Splice bundle diameter mm (in.)	13 (0.5)	23 (0.9)	32 (1.25)	57 (2.25)	88 (3.5)	119 (4.75)
Max. splice opening mm (in.)	38 (1.5)	132 (5.25)	244 (9.75)	225 (9.0)	425 (17)	425 (17)
Closure length end to end mm (in.)	182 (7.2)	273 (10.75)	396 (15.6)	400 (15.75)	622 (24.5)	635 (24.5)
3M™ Scotchlok Connector UR2/UR	4-pr.	18-pr.	50-pr.	100-pr.	400-pr.	600-pr.
25-pair modular connectors	–	–	–	100-pr.	400-pr.	600-pr.
Approx. compound included	90 ml (94 grams)	300ml (300 grams)	660 ml (675 grams)	1,320 ml (1,350 grams)	2,640 ml (3,375 grams)	6,600 ml (6,750 grams)
PKG. (LBS.)	10 kits (6.80)	10 kits (13.60)	10 kits (25.00)	1 kit (4.70)	1 kit (10.70)	1 kit (20.50)
MIN. ORDER	10 kits	10 kits	10 kits	1 kit	1 kit	1 kit
UPC 054007-	30851	30852	30853	33376	33374	30854

Additional products needed to complete this closure: 3M™ Pair Saver 4458, 3M™ Scotchlok and 3M™ MS² Connectors.

3M™ SCOTCHCAST™ PIC ENCAPSULATING CLOSURE KITS (NON-REENTERABLE)

3M™ SLiC™ 5-Pair Buried Service Wire Kit

PKG. (LBS.): 12 KITS (5.50) MIN. ORDER: 12 KITS UPC: 054007-71531

Protecting a buried service wire splice is now easier than ever with the SLiC buried service wire kit. The BSW kit is a three-part, rigid body closure that self-encapsulates two- and five-pair buried service wire. It has a built-in bonding system that bonds the buried service wire shield as the splice is put together—and it contains a unique sealant.

The special formulated sealant is a one-part, no-mix, non-urethane product containing no grease. The sealant serves as an electrical insulator and reacts upon moisture contact to prevent water ingression.

At the point of water incursion, the sealant hardens and forms a water-resistant barrier.



Buried Service Wire Splicing/Cable Capping Kit 3817

PKG. (LBS.): 12 KITS (3.10) MIN. ORDER: 12 KITS UPC: 054007-32217

For buried service wire splicing and end capping. The 3817 kit contains T foam spacer pad, 17 compound in “J” size bag, 75 g (2.65 oz.) Uni-pak container. Packaged in poly bag with instructions.



Buried Service Wire Splice Kit 3832

PKG. (LBS.): 12 KITS (4.70) MIN. ORDER: 12 KITS UPC: 054007-32224

The 3832 buried service wire splice kit will accommodate inline and butt splices of up to five-pair filled or unfilled service wire. One “A” size bag of 4403 encapsulant and a split bolt are provided with the kit.

Once the compound has been poured, an outer tube is rotated over the barrel opening to seal the unit, requiring no waiting for the compound to cure before the kit is buried.



3M™ SCOTCHCAST™ PIC ENCAPSULATING CLOSURE KITS (NON-REENTERABLE)

PST/Gel Buried Service Wire Splice Kit 3838

PRODUCT NUMBER: 3838-PST/GEL PKG. (LBS.): 1 KIT (0.65) MIN. ORDER: 1 KIT UPC: 051138-11455



The 3838 PST/gel buried service splice kit is a flexible and “non-compound” splicing system that provides fast, reliable and easy protection. This kit will accommodate inline, butt and extended splices of up to six pair buried service wire. The new kit utilizes non-toxic PST and gel technology and provides an excellent waterproof environment. It meets tough qualification tests such as impact and pull-out resistance, water immersion and freeze thaw cycle test in wet sand. The shield bond connector is specially designed to provide good electrical continuity and strain relief at the same time.

The 3838 PST/gel buried service wire kit is simple to use and requires minimal training.

FEATURES

BENEFITS

PST/gel technology	Proven reliability; waterproof performance saves maintenance costs, keeps lines up and running
Passes freeze/thaw cycle test in wet sand	No return dig-ups; saves repair costs
Used for butt and in-line splicing	Addresses multiple splicing configurations; reduces inventory hassles and costs
No encapsulant mixing	Reduces installation time and reduces waste
Universal sizing, "push type" strain relief	Fits all needs; inventory savings. No special and shield connector tools required; no tooling costs
Fewer piece parts	Fast assembly; reduced labor
No compound	No curing time; can be buried immediately
Easy installation	Craft friendly with minimal training
Applicable in extreme temperatures	No scheduling or weather constraints

3M™ PRESSURE ENCAPSULATED APPARATUS KIT (PEAK) 2-TYPE

A pressure encapsulation technique for spliced connections of filled communication cable using the 2-type closure system. For underground or direct buried applications in straight or multiple branch configurations.

The closure kit provides moisture protections and prevents water migration into the splice bundle. The closure is impact-tough and provides double protection as static air pressure surrounds the encapsulated splice. The closure is reenterable and made for use with (PIC) filled, waterproof cable.

This encapsulated closure system will accommodate the entrance of up to four cables, 81mm (3.2") in diameter and up to 3,000 pairs of copper conductor splices. It will also allow cable sheath openings from 254 mm (10") to 914 mm (36").



CLOSURE SELECTION GUIDE

TO ORDER, FOLLOW THESE STEPS:

1. What is your pair count?
2. What is your cable size?
3. What is your sheath opening?
4. What type of connector are you using? Module (MS² or 710) or Discrete (Scotchlok)?
Note: Bundles built with modular connectors are half the size of discrete.
5. What is your splice bundle diameter?

These questions should guide you in choosing the correct closure.

ORDERING INFORMATION

PRESSURE WRAP KIT

PRODUCT NUMBER	2-TYPE COVER ASSEMBLY	MAX. SPLICE BUNDLE DIA. MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS*	ENCAPS. REQ. GRAMS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
PEAK-PWK-A	2B2A	152 (6.0)	483 (19.0)	900	5400	1 kit (4.34)	1 kit	78027
	2C2A	178 (7.0)	483 (19.0)	1500	8450			
	2D2A	216 (8.5)	483 (19.0)	2400	10800			
PEAK-PWK-B	2B2B	152 (6.0)	699 (27.5)	1500	6650	1 kit (4.54)	1 kit	78029
	2C2B	178 (7.0)	699 (27.5)	2100	12000			
	2D2B	216 (8.5)	699 (27.5)	2700	15600			
PEAK-PWK-C	2B2C	152 (6.0)	914 (36.0)	1800	9000	1 kit (5.87)	1 kit	78030
	2C2C	178 (7.0)	914 (36.0)	2400	15600			
	2D2C	216 (8.5)	914 (36.0)	3000	21600			

*Using 25-pair modular connectors.

ORDERING INFORMATION

3M™ PEAK ENDPLATE KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	2-TYPE COVER ASSEMBLY KIT	NUMBER OF CABLE OPENINGS	MAX. DIAMETER EA. CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
PEAK-A1E	134 (5.25)	2A2 Series	1	56 (2.2)	1 kit (3.01)	1 kit	78019
PEAK-B1E	178 (7.0)	2B2 Series	1	81 (3.2)	1 kit (5.69)	1 kit	78020
PEAK-B2E	178 (7.0)	2B2 Series	2	56 (2.2) 56 (2.2)	1 kit (5.97)	1 kit	78021
PEAK-C1E	203 (8.0)	2C2 Series	1	81 (3.2)	1 kit (4.59)	1 kit	78022
PEAK-D1E	241 (9.5)	2D2 Series	1	81 (3.2)	1 kit (4.90)	1 kit	78023
PEAK-D2E	241 (9.5)	2D2 Series	2	81 (3.2) 81 (3.2)	1 kit (7.40)	1 kit	78024
PEAK-D3E	241 (9.5)	2D2 Series	3	81 (3.2) 56 (2.2) 56 (2.2)	1 kit (8.76)	1 kit	78025

A complete PEAK pressure wrap system requires:

One (1) PEAK pressure wrap kit, one (1) 2-type cover assembly and two (2) PEAK endplate assembly kits.

Standard package = Kit. Minimum Order/Ordering Multiple = 1 Kit.

ORDERING INFORMATION

3M PEAK REENTRY KITS

PRODUCT NUMBER	2-TYPE COVER ASSEMBLY	SHEATH OPENING MM (IN.)	ENCAPSULANT REQUIREMENTS* GRAMS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
PEAK-RK-A	2B2A	483 (19.0)	5400	1 kit (5.00)	1 kit	78031
	2C2A	483 (19.0)	8450			
	2D2A	483 (19.0)	10800			
PEAK-RK-B	2B2B	699 (27.5)	6650	2.3 (5)	1 kit	78033
	2C2B	699 (27.5)	12000			
	2D2B	699 (27.5)	15600			
PEAK-RK-C	2B2C	914 (36.0)	9000	2.3 (5)	1 kit	78034
	2C2C	914 (36.0)	15600			
	2D2C	914 (36.0)	21600			

One (1) each PEAK reentry kit is required for each closure reentry. Standard package = Kit. Minimum Order/Ordering Multiple = 1 Kit.

NOTE: 1. AAAA, AAA, AA, A = 1 roll required - B, C = 2 rolls required.

2. *PEAK pressure wrap kit does not include encapsulant or pressure wrap tape.

Encapsulant requirements will vary due to connector type and splicing method used.

ORDERING INFORMATION

3M PEAK ACCESSORIES

PRODUCT NUMBER	DESCRIPTIONS/DIMENSIONS MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
PWK-BB-14	Bond bar- 355.0 (14.0)	1 each (0.49)	1 each	78751
PWK-BB-23	Bond bar- 584.0 (23.0)	1 each (0.46)	1 each	78037
PWK-BB-32	Bond bar- 812.0 (32.0)	1 each (0.61)	1 each	78038
PWK-BB-40	Bond bar- 1,016 (40.0)	1 each (0.88)	1 each	78039
PWK-PWT-100	Pressure wrap tape	20 each (0.30)	20 each	78040
PWK-127T-72	72-inch roll	20 each (0.80)	20 each	78036

PWK-127T-72 – Sealing tape used to seal liner against endplate flange adapter.

NOTE: AAAA, AAA, AA, A = 1 roll required - B, C = 2 rolls required.

3M™ PRESSURIZED CLOSURES 2-TYPE SERIES

A complete pressure tight reenterable closure system for enclosing spliced connections of communications cables in a wide variety of applications, including manholes.

The 2-type closure is available in a wide variety of closure lengths and diameters. Lengths range from 470 mm (18-1/2") to over 2096 mm (82-1/2") and closure diameters range from 77 mm (3") to 305 mm (12"). The 2-type kit comes complete with all the components needed to install the cover and end plates. The only tool required for installation is a washer cutter tool and torque wrench.



Each complete cover kit selection contains:

- Cover assembly with channel bars and bolts
- Transparent splice wrap with cable ties
- Cover sealing R-type reenterable sealing tape
- Endplate sealing R-type reenterable sealing tape
- Solvent cleaning wipe and plastic gloves
- Back cover support clips with cable ties
- Pressurization valve
- Internal shield continuity braid with insulation
- External grounding ribbon
- Vented and solid continuity and ground connectors with hex nuts
- Assembly instructions

Each complete endplate kit selection contains:

- Endplate assembly with sheath grip clamps
- Cable collar build-up R-type reenterable sealing tape material
- Endplate mid-section sealing R-type reenterable sealing tape
- Solvent cleaning wipe and plastic gloves
- Cable diameter measuring tape
- Shield connector
- Cable sheath scuff
- Hose clamps for securing sheath grip clamps to cable
- Additional sheath grip clamps
- Universal slotted washers for sealing cable entrances
- Assembly instructions



PRODUCT REFERRAL GENERATOR

710 Modules pg. 26
3M™ MS™ Modules pg. 10

Tapes pg. 383
Splicing Rigs and Tools pg. 30

3M™ PRESSURIZED CLOSURES 2-TYPE SERIES

2-Type Closure System Ordering Code

Covers

2 D 2 A

2-Type Series

Inside Diameter

Y = 77 mm (3")
X = 102 mm (4")
A = 134 mm (5-1/4")
B = 178 mm (7")
C = 203 mm (8")
D = 241 mm (9-1/2")
E = 305 mm (12")

Material of Manufacture

2 = Standard
4 = Fire Retardant

Overall Length of Cover

AA = 470 mm (18-1/2")
A = 699 mm (27-1/2")
B = 914 mm (36")
C = 1130 mm (44-1/2")
D* = 1232 mm (48-1/2")
E* = 1340 mm (52-3/4")
F* = 1448 mm (57")
G* = 1563 mm (61-1/2")
H* = 1664 mm (65-1/2")
I* = 1772 mm (69-3/4")
J* = 1880 mm (74")
K* = 1994 mm (78-1/2")
L* = 2096 mm (82-1/2")
* = Custom Sizes

2-Type Closure System Ordering Code

Endplates

2 D 2 -1E

2-Type Series

Inside Diameter

Y = 77 mm (3")
X = 102 mm (4")
A = 134 mm (5-1/4")
B = 178 mm (7")
C = 203 mm (8")
D = 241 mm (9-1/2")
E = 305 mm (12")

Number of Cable Entries in Endplate

1E = 1 Cable
2E = 2 Cables
3E = 3 Cables

Material of Manufacture

2 = Standard
4 = Fire Retardant

CLOSURE SELECTION GUIDE

TO ORDER 3M™ PRESSURIZED CLOSURES 2-TYPE, FOLLOW THESE STEPS:

1. What is your pair count?
2. What is your cable size?
3. What is your sheath opening?
4. What type of connector are you using? Module (MS² or 710) or Discrete (Scotchlok)?
Note: Bundles built with modular connectors are half the size of discrettes.
5. What is your splice bundle diameter?

These questions should guide you in choosing the correct closure.

ORDERING INFORMATION

2-TYPE SERIES 2A2 STANDARD SERIES CLOSURES (5-1/4" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2A2AA-510	134 (5.25)	470 (18.5)	254 (10.0)	400	1	1 each (10.63)	1 each	77133
2A2A-510	134 (5.25)	699 (27.5)	483 (19.0)	600	2	1 each (14.14)	1 each	77126
2A2B-510	134 (5.25)	914 (36.0)	699 (27.5)	Custom	3	1 each (19.00)	1 each	77137
2A2C-510	134 (5.25)	1130 (44.5)	914 (36.0)	Custom	4	1 each (22.00)	1 each	77138
2A2F-510	134 (5.25)	1448 (57.0)	1232 (48.5)	Custom	—	1 each (30.00)	1 each	77139
2A2H-510	134 (5.25)	1664 (65.5)	1448 (57.0)	Custom	—	1 each (34.00)	1 each	77003
2A2K-510	134 (5.25)	1994 (78.5)	1778 (70.0)	Custom	—	1 each (39.00)	1 each	77004

ORDERING INFORMATION

2-TYPE SERIES 2A2 STANDARD SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2A2-1E-510	134 (5.25)	1	56 (2.2)	1 each (2.74)	1 each	77108
2A2-2E-510	134 (5.25)	2	41 (1.6) 33 (1.0)	1 each (2.66)	1 each	77113
A complete 2-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.						
NOTE: 1. Custom cover lengths are available on a special order basis. 2. Custom grommet hole configurations are available on a special order basis. 3. Bonding hardware included with solid grommets only. 4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION

2-TYPE SERIES 2A2 STANDARD SERIES CLOSURE KITS (COVER AND ENDPLATES IN KIT)

PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051138-
2A2A-2-510	1 cable in, 1 cable out	1 each (20.82)	1 each	78787
2A2A-3-510	1 cable in, 2 cables out	1 each (20.82)	1 each	78788

ORDERING INFORMATION

3M™ 2B2 STANDARD SERIES CLOSURES 2-TYPE SERIES (7" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2B2AA-510	178 (7.0)	470 (18.5)	254 (10.0)	600	1	1 each (12.37)	1 each	77206
2B2A-510	178 (7.0)	699 (27.5)	483 (19.0)	1200	2	1 each (16.58)	1 each	77197
2B2B-510	178 (7.0)	914 (36.0)	699 (27.5)	2100	3	1 each (21.81)	1 each	77213
2B2C-510	178 (7.0)	1130 (44.0)	914 (36.0)	2700	4	1 each (26.80)	1 each	77218
2B2D-510	178 (7.0)	1232 (48.5)	1016 (40.0)	Custom	—	1 each (31.00)	1 each	77014
2B2E-510	178 (7.0)	1340 (52.8)	1124 (44.3)	Custom	—	1 each (33.00)	1 each	77015
2B2F-510	178 (7.0)	1448 (57)	1232 (48.5)	Custom	—	1 each (36.00)	1 each	77221
2B2I-510	178 (7.0)	1772 (69.75)	1556 (61.25)	Custom	—	1 each (44.00)	1 each	77016
2B2J-510	178 (7.0)	1880 (74.0)	1664 (65.5)	Custom	—	1 each (46.00)	1 each	77222
2B2K-510	178 (7.0)	1994 (78.5)	1778 (70.0)	Custom	—	1 each (48.00)	1 each	77017

ORDERING INFORMATION

2-TYPE SERIES 2B2 STANDARD SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2B2-1E-510	178 (7.0)	1	86 (3.4)	1 each (3.96)	1 each	77158
2B2-2E-510	178 (7.0)	2	56 (2.2) 56 (2.2)	1 each (4.24)	1 each	77168
2B2-3E-510	178 (7.0)	3	56 (2.2) 25 (1.0) 25 (1.0)	1 each (4.56)	1 each	77180
A complete 2-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.						
NOTE: 1. Custom cover lengths are available on a special order basis. 2. Custom grommet hole configurations are available on a special order basis. 3. Bonding hardware included with solid grommets only. 4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION

2-TYPE SERIES 2B2 STANDARD SERIES CLOSURE KITS (COVER AND ENDPLATES IN KIT)

PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051138-
2B2A-2-510	1 cable in, 1 cable out	1 each (26.82)	1 each	78791
2B2A-3-510	1 cable in, 2 cables out	1 each (25.99)	1 each	77193
2B2A-4-510	1 cable in, 3 cables out	1 each (27.82)	1 each	78792
2B2A-5-510	2 cables in, 3 cables out	1 each (30.00)	1 each	78793

ORDERING INFORMATION

3M™ 2C2 STANDARD SERIES CLOSURES 2-TYPE SERIES (8" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2C2A-510	203 (8.0)	699 (27.5)	483 (19.0)	1800	2	1 each (19.28)	1 each	77276
2C2B-510	203 (8.0)	914 (36.0)	699 (27.5)	3600	3	1 each (24.77)	1 each	77287
2C2C-510	203 (8.0)	1130 (44.5)	914 (36.0)	4200	4	1 each (29.84)	1 each	77293
2C2D-510	203 (8.0)	1232 (48.5)	1016 (40.0)	Custom	–	1 each (37.00)	1 each	77296
2C2E-510	203 (8.0)	1340 (52.75)	1124 (44.25)	Custom	–	1 each (39.00)	1 each	77297
2C2F-510	203 (8.0)	1448 (57.0)	1232 (48.5)	Custom	–	1 each (41.00)	1 each	77298
2C2G-510	203 (8.0)	1563 (61.5)	1346 (53.0)	Custom	–	1 each (46.00)	1 each	77299
2C2H-510	203 (8.0)	1664 (65.5)	1448 (57.0)	Custom	–	1 each (47.00)	1 each	77300
2C2I-510	203 (8.0)	1772 (69.75)	1556 (61.25)	Custom	–	1 each (50.00)	1 each	78632
2C2J-510	203 (8.0)	1880 (74.0)	1664 (65.5)	Custom	–	1 each (52.00)	1 each	77301
2C2K-510	203 (8.0)	1994 (78.5)	1778 (70.0)	Custom	–	1 each (55.00)	1 each	78633
2C2L-510	203 (8.0)	2096 (82.5)	1880 (74.0)	Custom	–	1 each (57.00)	1 each	77302
2C2AA-510	203 (8.0)	470 (18.5)	254 (10.0)	Custom	1	1 each (15.00)	1 each	77532

ORDERING INFORMATION

2-TYPE SERIES 2C2 STANDARD SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2C2-1E-510	203 (8.0)	1	86 (3.4)	1 each (5.00)	1 each	77244
2C2-2E-510	203 (8.0)	2	71 (2.8) 71 (2.8)	1 each (5.84)	1 each	77251
2C2-3E-510	203 (8.0)	3	71 (2.8) 41 (1.6) 41 (1.6)	1 each (6.35)	1 each	77258
A complete 2-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit. NOTE: 1. Custom cover lengths are available on a special order basis. 2. Custom grommet hole configurations are available on a special order basis. 3. Bonding hardware included with solid grommets only. 4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION

2-TYPE SERIES 2C2 STANDARD SERIES CLOSURE KITS (COVER AND ENDPLATES IN KIT)

PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051138-
2C2A-2-510	1 cable in, 1 cable out	1 each (27.62)	1 each	78628
2C2A-3-510	1 cable in, 2 cables out	1 each (29.11)	1 each	78629
2C2A-4-510	1 cable in, 3 cables out	1 each (30.80)	1 each	78630
2C2A-5-510	2 cables in, 3 cables out	1 each (31.35)	1 each	78798

ORDERING INFORMATION

3M™ 2D2 STANDARD SERIES CLOSURES 2-TYPE SERIES (9-1/2" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2D2AA-510	241 (9.5)	470 (18.5)	254 (10.0)	Custom	1	1 each (18.00)	1 each	77362
2D2A-510	241 (9.5)	699 (27.5)	483 (19.0)	3300	2	1 each (22.41)	1 each	77358
2D2B-510	241 (9.5)	914 (36.0)	699 (27.5)	4200	3	1 each (28.38)	1 each	77365
2D2C-510	241 (9.5)	1130 (44.5)	914 (36.0)	4800	4	1 each (34.30)	1 each	77370
2D2D-510	241 (9.5)	1232 (48.5)	1016 (40.0)	Custom	—	1 each (40.00)	1 each	77373
2D2E-510	241 (9.5)	1340 (52.75)	1124 (44.25)	Custom	—	1 each (43.00)	1 each	77374
2D2F-510	241 (9.5)	1448 (57.0)	1232 (48.5)	Custom	—	1 each (46.00)	1 each	77375
2D2G-510	241 (9.5)	1563 (61.5)	1346 (53.0)	Custom	—	1 each (50.00)	1 each	77376
2D2H-510	241 (9.5)	1664 (65.5)	1448 (57.0)	Custom	—	1 each (53.00)	1 each	77377
2D2I-510	241 (9.5)	1772 (69.75)	1556 (61.25)	Custom	—	1 each (56.00)	1 each	77378
2D2J-510	241 (9.5)	1880 (74.0)	1664 (65.5)	Custom	—	1 each (59.00)	1 each	77379
2D2K-510	241 (9.5)	1994 (78.5)	1778 (70.0)	Custom	—	1 each (61.00)	1 each	77380
2D2L-510	241 (9.5)	2096 (82.5)	1880 (74.0)	Custom	—	1 each (64.00)	1 each	77381

ORDERING INFORMATION

2-TYPE SERIES 2D2 STANDARD SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2D2-1E-510	241 (9.5)	1	86 (3.4)	1 each (4.60)	1 each	77323
2D2-2E-510	241 (9.5)	2	86 (3.4) 86 (3.4)	1 each (6.60)	1 each	77330
2D2-3E-510	241 (9.5)	3	86 (3.4) 56 (2.2) 56 (2.2)	1 each (6.69)	1 each	77339
A complete 2-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.						
NOTE: 1. Custom cover lengths are available on a special order basis. 2. Custom grommet hole configurations are available on a special order basis. 3. Bonding hardware included with solid grommets only. 4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION

2-TYPE SERIES 2D2 STANDARD SERIES CLOSURE KITS (COVER AND ENDPLATES IN KIT)

PRODUCT NUMBER	PRODUCT DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051138-
2D2A-2-510	1 cable in, 1 cable out	1 each (31.66)	1 each	78635
2D2A-3-510	1 cable in, 2 cables out	1 each (33.05)	1 each	78636
2D2A-4-510	1 cable in, 3 cables out	1 each (35.65)	1 each	78637
2D2A-5-510	2 cables in, 3 cables out	1 each (39.33)	1 each	78803
2D2A-6-510	3 cables in, 3 cables out	1 each (36.48)	1 each	78639
NOTE: To determine maximum cable diameter, refer to the endplate selection chart on pg. 97. 1 cable = 1E, 2 cables = 2E, 3 cables = 3E.				

ORDERING INFORMATION

3M™ 2E2-DD STANDARD SERIES CLOSURES 2-TYPE SERIES (12" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2E2A-DD-510	305 (12.0)	699 (27.5)	483 (19.0)	3300	2	1 each (27.00)	1 each	77412
2E2B-DD-510	305 (12.0)	914 (36.0)	699 (27.5)	4200	3	1 each (33.32)	1 each	77422
2E2C-DD-510	305 (12.0)	1130 (44.5)	914 (36.0)	Custom	4	1 each (43.00)	1 each	77433
2E2D-DD-510	305 (12.0)	1232 (48.5)	1016 (40.0)	Custom	–	1 each (47.00)	1 each	77436
2E2E-DD-510	305 (12.0)	1340 (52.75)	1124 (44.25)	Custom	–	1 each (50.00)	1 each	77439
2E2F-DD-510	305 (12.0)	1448 (57.0)	1232 (48.5)	Custom	–	1 each (54.00)	1 each	77442
2E2G-DD-510	305 (12.0)	1563 (61.5)	1346 (53.0)	Custom	–	1 each (59.00)	1 each	77444
2E2H-DD-510	305 (12.0)	1664 (65.5)	1448 (57.0)	Custom	–	1 each (61.00)	1 each	77446
2E2I-DD-510	305 (12.0)	1772 (69.75)	1556 (61.25)	Custom	–	1 each (65.00)	1 each	78643
2E2J-DD-510	305 (12.0)	1880 (74.0)	1664 (65.5)	Custom	–	1 each (68.50)	1 each	77450
2E2K-DD-510	305 (12.0)	1994 (78.5)	1778 (70.0)	Custom	–	1 each (72.00)	1 each	77452
2E2L-DD-510	305 (12.0)	2096 (82.5)	1880 (74.0)	Custom	–	1 each (74.00)	1 each	77454

ORDERING INFORMATION

2-TYPE SERIES 2E2-DD STANDARD SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2D2-1E-510	241 (9.5)	1	86 (3.4)	1 each (4.60)	1 each	77323
2D2-2E-510	241 (9.5)	2	86 (3.4) 86 (3.4)	1 each (6.60)	1 each	77330
2D2-3E-510	241 (9.5)	3	86 (3.4) 56 (2.2) 56 (2.2)	1 each (6.69)	1 each	77339
A complete 2-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.						
NOTE: 1. Custom cover lengths are available on a special order basis. 2. Custom grommet hole configurations are available on a special order basis. 3. Bonding hardware included with solid grommets only. 4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION

3M™ 2E2-EE STANDARD SERIES CLOSURES 2-TYPE SERIES (12" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2E2A-EE-510	305 (12.0)	699 (27.5)	483 (19.0)	3300	2	1 each (26.29)	1 each	77419
2E2B-EE-510	305 (12.0)	914 (36.0)	699 (27.5)	4200	3	1 each (32.77)	1 each	77431
2E2C-EE-510	305 (12.0)	1130 (44.5)	914 (36.0)	Custom	4	1 each (43.00)	1 each	77435
2E2D-EE-510	305 (12.0)	1232 (48.5)	1016 (40.0)	Custom	–	1 each (47.00)	1 each	77438
2E2E-EE-510	305 (12.0)	1340 (52.75)	1124 (44.25)	Custom	–	1 each (50.00)	1 each	77441
2E2F-EE-510	305 (12.0)	1448 (57.0)	1232 (48.5)	Custom	–	1 each (54.00)	1 each	77443
2E2G-EE-510	305 (12.0)	1563 (61.5)	1346 (53.0)	Custom	–	1 each (59.00)	1 each	77445
2E2H-EE-510	305 (12.0)	1664 (65.5)	1448 (57.0)	Custom	–	1 each (62.00)	1 each	77447
2E2I-EE-510	305 (12.0)	1772 (69.75)	1556 (61.25)	Custom	–	1 each (65.00)	1 each	77449
2E2J-EE-510	305 (12.0)	1880 (74.0)	1664 (65.5)	Custom	–	1 each (69.00)	1 each	77451
2E2K-EE-510	305 (12.0)	1994 (78.5)	1778 (70.0)	Custom	–	1 each (71.00)	1 each	77453
2E2L-EE-510	305 (12.0)	2096 (82.5)	1880 (74.0)	Custom	–	1 each (74.50)	1 each	77456

ORDERING INFORMATION

3M™ 2-TYPE SERIES 2E2-DD STANDARD SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. KG (LBS.)	MIN. ORDER (EACH)	UPC 051138-
Endplate Selection						
2D2-1E-510	241 (9.5)	1	86 (3.4)	2.3 (5)	1	77323
2D2-2E-510	241 (9.5)	2	86 (3.4) 86 (3.4)	3.2 (7)	1	77330
2D2-3E-510	241 (9.5)	3	86 (3.4) 56 (2.2) 56 (2.2)	3.2 (7)	1	77339
Grommet Selection						
2D4-18E	241 (9.5)	18	22 (0.88) up to 28 (1.1)	3.6 (8)	1	77383
2D4-18S	241 (9.5)	18	22 (0.88) up to 28 (1.1)	3.6 (8)	1	77385
2D4-18E-130	241 (9.5)	18	28 (1.1) up to 33 (1.3)	3.6 (8)	1	77384
2D4-18S-130	241 (9.5)	18	28 (1.1) up to 33 (1.3)	3.2 (7)	1	77386
2D4-27E	241 (9.5)	27	22 (0.88) up to 28 (1.1)	3.6 (8)	1	77389
2D4-27S	241 (9.5)	27	22 (0.88) up to 28 (1.1)	3.2 (7)	1	77390
2D4-36E	241 (9.5)	36	22 (0.88) up to 28 (1.1)	3.6 (8)	1	77394
2D4-36S	241 (9.5)	36	22 (0.88) up to 28 (1.1)	3.2 (7)	1	77395
2D4-42E	241 (9.5)	42	22 (0.88) up to 28 (1.1)	3.6 (8)	1	77398

A complete 2-type closure system requires:

1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.

NOTE: 1. Custom cover lengths are available on a special order basis.

2. Custom grommet hole configurations are available on a special order basis.

3. Bonding hardware included with solid grommets only.

4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.

5. Two D diameter endplate or grommet kits must be ordered with 2E2-DD cover kit.

ORDERING INFORMATION

3M™ 2E2-DE STANDARD SERIES CLOSURES 2-TYPE SERIES (12" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2E2A-DE-510	305 (12.0)	699 (27.5)	483 (19.0)	4200	2	1 each (32.82)	1 each	77416
2E2B-DE-510	305 (12.0)	914 (36.0)	699 (27.5)	4800	3	1 each (33.53)	1 each	77428
2E2C-DE-510	305 (12.0)	1130 (44.5)	914 (36.0)	Custom	4	1 each (43.00)	1 each	77434
2E2D-DE-510	305 (12.0)	1232 (48.5)	1016 (40.0)	Custom	—	1 each (47.00)	1 each	77437
2E2E-DE-510	305 (12.0)	1340 (52.75)	1124 (44.25)	Custom	—	1 each (47.00)	1 each	77440
2E2F-DE-510	305 (12.0)	1348 (57.0)	1232 (48.5)	Custom	—	1 each (52.72)	1 each	77040
2E2G-DE-510	305 (12.0)	1563 (61.5)	1346 (53.0)	Custom	—	1 each (57.92)	1 each	86783
2E2H-DE-510	305 (12.0)	1664 (65.5)	1448 (57.0)	Custom	—	1 each (62.00)	1 each	78642
2E2I-DE-510	305 (12.0)	1772 (69.75)	1556 (61.25)	Custom	—	1 each (65.00)	1 each	77448
2E2J-DE-510	305 (12.0)	1880 (74.0)	1664 (65.5)	Custom	—	1 each (69.00)	1 each	78559
2E2K-DE-510	305 (12.0)	1994 (78.5)	1778 (70.0)	Custom	—	1 each (71.00)	1 each	77612
2E2L-DE-510	305 (12.0)	2096 (82.5)	1880 (74.0)	Custom	—	1 each (74.00)	1 each	77455

NOTE: One end is 229 mm (9"), one end is 305 mm (12").

ORDERING INFORMATION

2-TYPE SERIES 2E2-DE STANDARD SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2D2-1E-510	241 (9.5)	1	86 (3.4)	1 each (4.60)	1 each	77323
2D2-2E-510	241 (9.5)	2	86 (3.4) 86 (3.4)	1 each (6.60)	1 each	77330
2D2-3E-510	241 (9.5)	3	86 (3.4) 56 (2.2) 56 (2.2)	1 each (6.69)	1 each	77339
2E2-2E-510	305 (12.0)	2	112 (4.4) 112 (4.4)	1 each (8.69)	1 each	77405
2E2-3E-510	305 (12.0)	3	102 (4.0) 86 (3.4) 86 (3.4)	1 each (9.34)	1 each	77409

A complete 2-type closure system requires:

1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.

NOTE: 1. Custom cover lengths are available on a special order basis.

2. Custom grommet hole configurations are available on a special order basis.

3. Bonding hardware included with solid grommets only.

4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.

ORDERING INFORMATION

3M™ 2X2 STANDARD SERIES CLOSURES 2-TYPE SERIES (4" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2X2AA-510	102 (4.0)	470 (18.5)	254 (10.0)	100	1	1 each (10.69)	1 each	77476
2X2A-510	102 (4.0)	699 (27.5)	483 (19.0)	Custom	2	1 each (17.21)	1 each	77042
2X2B-510	102 (4.0)	914 (36.0)	699 (27.5)	Custom	3	1 each (19.00)	1 each	77043

ORDERING INFORMATION

2-TYPE SERIES 2X2 STANDARD SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)		PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection							
2X2-2E-510	102 (4.0)	2	25 (1.0)	25 (1.0)	1 each (2.22)	1 each	77475
A complete 2-type closure system requires: 1 cover assembly kit and 2 endplate kits.							
NOTE: 1. Custom cover lengths are available on a special order basis. 2. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.							

ORDERING INFORMATION

2-TYPE SERIES 2Y2 STANDARD SERIES CLOSURES (3" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2Y2AA-510	77 (3.0)	470 (18.5)	254 (10.0)	100	1	1 each (10.51)	1 each	77484
2Y2A-510	77 (3.0)	699 (27.5)	483 (19.0)	Custom	2	1 each (15.00)	1 each	77482

ORDERING INFORMATION

2-TYPE SERIES 2Y2 STANDARD SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)		PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection							
2Y2-2E-510	77 (3.0)	2	25 (1.0)	25 (1.0)	1 each (2.16)	1 each	77481
A complete 2-type closure system requires: 1 cover assembly kit and 2 endplate kits.							
NOTE: 1. Custom cover lengths are available on a special order basis. 2. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.							

3M™ FLAME RETARDANT CLOSURES 4-TYPE

The closure is completely self-contained and capable of withstanding a 15 minute horizontal or vertical burn test. In addition, the flame retardant vault/building closure system meets all the performance criteria of the standard 2-type closure series so you can use the same tools and installation procedures.

The system has an oxygen index of 28% minimum and a UL 94 rating exceeding V.O. The closure self extinguishes when the fuel source is removed.

The flame retardant closure can be used for new construction or for retrofitting: cable for entrance facilities, vault or central office, building riser cables or building distribution cables.



CLOSURE SELECTION GUIDE

TO ORDER FLAME RETARDANT CLOSURES 4-TYPE, FOLLOW THESE STEPS:

1. What is your pair count?
2. What is your cable size?
3. What is your sheath opening?
4. What type of connector are you using? Module (MS² or 710) or Discrete (Scotchlok)?
Note: Bundles built with modular connectors are half the size of discrettes.
5. What is your splice bundle diameter?

These questions should guide you in choosing the correct closure.

ORDERING INFORMATION

4-TYPE SERIES 2A4 FLAME RETARDANT SERIES (5-1/4" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2A4AA-510	134 (5.25)	470 (18.5)	254 (10.0)	400	1	1 each (12.59)	1 each	77151
2A4A-510	134 (5.25)	699 (27.5)	483 (19.0)	600	2	1 each (18.77)	1 each	77149

ORDERING INFORMATION

3M™ 2A4 STANDARD SERIES CLOSURES 4-TYPE SERIES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2A4-1E-510	134 (5.25)	1	56 (2.2)	1 each (3.41)	1 each	77141
2A4-2E-510	134 (5.25)	2	41 (1.6) 33 (1.3)	1 each (2.95)	1 each	77143
Grommet Selection						
2A4-6E-130	134 (5.25)	6	28 (1.1) up to 33 (1.3)	1 each (2.72)	1 each	77144
2A4-6S-130	134 (5.25)	6	28 (1.1) up to 33 (1.3)	1 each (2.40)	1 each	77145
2A4-9E	134 (5.25)	9	22 (0.88) up to 28 (1.1)	1 each (2.75)	1 each	77146
2A4-9S	134 (5.25)	9	22 (0.88) up to 28 (1.1)	1 each (2.08)	1 each	77147
A complete 4-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.						
NOTE: 1. Custom grommet hole configurations are available on a special order basis. "E" designates solid endplate for new construction and "S" designates split endplate for existing or retrofit applications. 2. Bonding hardware included with solid grommets only. 3. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION

4-TYPE SERIES 2B4 FLAME RETARDANT SERIES CLOSURES (7" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2B4AA-510	178 (7.0)	470 (18.5)	254 (10.0)	600	1	1 each (15.44)	1 each	77235
2B4A-510	178 (7.0)	699 (27.5)	483 (19.0)	1200	2	1 each (21.25)	1 each	77234
2B4B-510	178 (7.0)	914 (36.0)	699 (27.5)	2100	3	1 each (30.32)	1 each	77236
2B4C-510	178 (7.0)	1130 (44.5)	914 (36.0)	2700	4	1 each (34.00)	1 each	77237

ORDERING INFORMATION

4-TYPE SERIES 2B4 FLAME RETARDANT SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2B4-1E-510	178 (7.0)	1	86 (3.4)	1 each (4.87)	1 each	77227
2B4-2E-510	178 (7.0)	2	56 (2.2) 56 (2.2)	1 each (5.95)	1 each	77229
2B4-3E-510	178 (7.0)	3	56 (2.2) 25 (1.0) 25 (1.0)	1 each (5.69)	1 each	77231
Grommet Selection						
2B4-9E-130	178 (7.0)	9	28 (1.1) up to 33 (1.3)	1 each (4.49)	1 each	77232
2B4-9S-130	178 (7.0)	9	28 (1.1) up to 33 (1.3)	1 each (4.16)	1 each	77233
2B4-12E	178 (7.0)	12	22 (0.88) up to 28 (1.1)	1 each (6.40)	1 each	77223
2B4-12S	178 (7.0)	12	22 (0.88) up to 28 (1.1)	1 each (4.47)	1 each	77224
A complete 4-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.						
NOTE: 1. Custom grommet hole configurations are available on a special order basis. "E" designates solid endplate for new construction and "S" designates split endplate for existing or retrofit applications. 2. Bonding hardware included with solid grommets only. 3. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION**3M™ 2C4 FLAME RETARDANT SERIES CLOSURES 4-TYPE SERIES (8" DIAMETER)**

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2C4A-510	203 (8.0)	699 (27.5)	483 (19.0)	1800	2	1 each (24.98)	1 each	77314
2C4B-510	203 (8.0)	914 (36.0)	699 (27.5)	3600	3	1 each (32.74)	1 each	77315
2C4C-510	203 (8.0)	1130 (44.5)	914 (36.0)	4200	4	1 each (39.59)	1 each	77316

ORDERING INFORMATION**4-TYPE SERIES 2C4 FLAME RETARDANT SERIES CLOSURES KITS**

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2C4-1E-510	203 (8.0)	1	86 (3.4)	1 each (5.02)	1 each	77309
2C4-2E-510	203 (8.0)	2	71 (2.8) 71 (2.8)	1 each (7.19)	1 each	77311
2C4-3E-510	203 (8.0)	3	71 (2.8) 41 (1.6) 41 (1.6)	1 each (7.08)	1 each	77313
Grommet Selection						
2C4-12E-130	203 (8.0)	12	28 (1.1) up to 33 (1.3)	1 each (6.15)	1 each	77303
2C4-12S-130	203 (8.0)	12	28 (1.1) up to 33 (1.3)	1 each (5.42)	1 each	77304
2C4-12S	203 (8.0)	12	22 (0.88) up to 28 (1.1)	1 each (7.57)	1 each	13711*
2C4-18E	203 (8.0)	18	22 (0.88) up to 28 (1.1)	1 each (7.57)	1 each	77305
2C4-18S	203 (8.0)	18	22 (0.88) up to 28 (1.1)	1 each (5.34)	1 each	77306
A complete 4-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.						
NOTE: 1. Custom grommet hole configurations are available on a special order basis. "E" designates solid endplate for new construction and "S" designates split endplate for existing or retrofit applications. 2. Bonding hardware included with solid grommets only. 3. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						
*UPC prefix 051115-						

ORDERING INFORMATION

3M™ 2D4 FLAME RETARDANT SERIES CLOSURES 4-TYPE SERIES (9-1/2" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2D4A-510	241 (9.5)	699 (27.5)	483 (19.0)	3300	2	1 each (31.56)	1 each	77400
2D4B-510	241 (9.5)	914 (36.0)	699 (27.5)	4200	3	1 each (38.66)	1 each	77401
2D4C-510	241 (9.5)	1130 (44.5)	914 (36.0)	4800	4	1 each (45.77)	1 each	77402

ORDERING INFORMATION

4-TYPE SERIES 2D4 FLAME RETARDANT SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2D4-1E-510	241 (9.5)	1	86 (3.4)	1 each (6.11)	1 each	77388
2D4-2E-510	241 (9.5)	2	86 (3.4) 86 (3.4)	1 each (7.54)	1 each	77393
2D4-3E-510	241 (9.5)	3	86 (3.4) 56 (2.2) 56 (2.2)	1 each (7.48)	1 each	77397
Grommet Selection						
2D4-18E	241 (9.5)	18	22 (0.88) up to 28 (1.1)	1 each (8.24)	1 each	77383
2D4-18S	241 (9.5)	18	22 (0.88) up to 28 (1.1)	1 each (7.47)	1 each	77385
2D4-18E-130	241 (9.5)	18	28 (1.1) up to 33 (1.3)	1 each (7.44)	1 each	77384
2D4-18S-130	241 (9.5)	18	28 (1.1) up to 33 (1.3)	1 each (6.61)	1 each	77386
2D4-27E	241 (9.5)	27	22 (0.88) up to 28 (1.1)	1 each (8.65)	1 each	77389
2D4-27S	241 (9.5)	27	22 (0.88) up to 28 (1.1)	1 each (7.88)	1 each	77390
2D4-36E	241 (9.5)	36	22 (0.88) up to 28 (1.1)	1 each (8.02)	1 each	77394
2D4-36S	241 (9.5)	36	22 (0.88) up to 28 (1.1)	1 each (6.43)	1 each	77395
2D4-42E	241 (9.5)	42	22 (0.88) up to 28 (1.1)	1 each (7.79)	1 each	77398

A complete 4-type closure system requires:

1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.

NOTE: 1. Custom grommet hole configurations are available on a special order basis. "E" designates solid endplate for new construction and

"S" designates split endplate for existing or retrofit applications.

2. Bonding hardware included with solid grommets only.

3. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.

ORDERING INFORMATION

3M™ 2E4-DD FLAME RETARDANT SERIES CLOSURES 4-TYPE SERIES (12" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2E4A-DD-510	305 (12.0)	699 (27.5)	483 (19.0)	3300	2	1 each (36.82)	1 each	77468
2E4B-DD-510	305 (12.0)	914 (36.0)	699 (27.5)	4200	3	1 each (44.76)	1 each	77471

ORDERING INFORMATION

4-TYPE SERIES 2E4-DD FLAME RETARDANT SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2D4-1E-510	241 (9.5)	1	86 (3.4)	1 each (6.11)	1 each	77388
2D4-2E-510	241 (9.5)	2	86 (3.4) 86 (3.4)	1 each (7.54)	1 each	77393
2D4-3E-510	241 (9.5)	3	86 (3.4) 56 (2.2) 56 (2.2)	1 each (7.48)	1 each	77397
Grommet Selection						
2D4-18E	241 (9.5)	18	22 (0.88) up to 28 (1.1)	1 each (8.24)	1 each	77383
2D4-18S	241 (9.5)	18	22 (0.88) up to 28 (1.1)	1 each (7.47)	1 each	77385
2D4-18E-130	241 (9.5)	18	28 (1.1) up to 33 (1.3)	1 each (7.44)	1 each	77384
2D4-18S-130	241 (9.5)	18	28 (1.1) up to 33 (1.3)	1 each (6.61)	1 each	77386
2D4-27E	241 (9.5)	27	22 (0.88) up to 28 (1.1)	1 each (8.65)	1 each	77389
2D4-27S	241 (9.5)	27	22 (0.88) up to 28 (1.1)	1 each (7.88)	1 each	77390
2D4-36E	241 (9.5)	36	22 (0.88) up to 28 (1.1)	1 each (8.02)	1 each	77394
2D4-36S	241 (9.5)	36	22 (0.88) up to 28 (1.1)	1 each (6.43)	1 each	77395
2D4-42E	241 (9.5)	42	22 (0.88) up to 28 (1.1)	1 each (7.79)	1 each	77398
A complete 4-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.						
NOTE: 1. Bonding hardware included with solid grommets only. 2. Custom grommet hole configurations are available on a special order basis. "E" designates solid endplate for new construction and "S" designates split endplate for existing or retrofit applications. 3. Bonding hardware included with solid grommets only. 4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION

3M™ 2D4-EE FLAME RETARDANT SERIES CLOSURES 4-TYPE SERIES (9-1/2" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2E4A-EE-510	305 (12.0)	699 (27.5)	483 (19.0)	4200	2	1 each (34.17)	1 each	77470
2E4B-EE-510	305 (12.0)	914 (36.0)	699 (27.5)	4800	3	1 each (43.63)	1 each	77473

ORDERING INFORMATION

4-TYPE SERIES 2D4-EE FLAME RETARDANT SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2E4-2E-510	305 (12)	2	112 (4.4) 112 (4.4)	1 each (9.79)	1 each	77461
2E4-3E-510	305 (12)	3	102 (4.0) 86 (3.4) 86 (3.4)	1 each (10.53)	1 each	77465
Grommet Selection						
2E4-27E	305 (12)	27	22 (0.88) up to 28 (1.1)	1 each (13.00)	1 each	77457
2E4-27S	305 (12)	27	22 (0.88) up to 28 (1.1)	1 each (13.91)	1 each	77458
2E4-27E-130	305 (12)	27	28 (1.1) up to 33 (1.3)	1 each (11.98)	1 each	78645
2E4-27S-130	305 (12)	27	28 (1.1) up to 33 (1.3)	1 each (10.45)	1 each	77459
2E4-36E	305 (12)	36	22 (0.88) up to 28 (1.1)	1 each (13.00)	1 each	77462
2E4-36S	305 (12)	36	22 (0.88) up to 28 (1.1)	1 each (12.38)	1 each	77463
2E4-42E	305 (12)	42	22 (0.88) up to 28 (1.1)	1 each (12.78)	1 each	77466

A complete 4-type closure system requires:

1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.

NOTE: 1. Bonding hardware included with solid grommets only.

2. Custom grommet hole configurations are available on a special order basis. "E" designates solid endplate for new construction and "S" designates split endplate for existing or retrofit applications.

3. Bonding hardware included with solid grommets only.

4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.

ORDERING INFORMATION

3M™ 2E4-DE FLAME RETARDANT SERIES CLOSURES 4-TYPE SERIES (12" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2E4A-DE-510	305 (12.0)	699 (27.5)	483 (19.0)	4200	2	1 each (33.59)	1 each	77469
2E4B-DE-510	305 (12.0)	914 (36.0)	699 (27.5)	4800	3	1 each (44.75)	1 each	77472

ORDERING INFORMATION

4-TYPE SERIES 2E4-DE FLAME RETARDANT SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2D4-1E-510	241 (9.5)	1	86 (3.4)	1 each (6.11)	1 each	77388
2D4-2E-510	241 (9.5)	2	86 (3.4) 86 (3.4)	1 each (7.54)	1 each	77393
2D4-3E-510	241 (9.5)	3	86 (3.4) 56 (2.2) 56 (2.2)	1 each (7.48)	1 each	77397
Grommet Selection						
2D4-18E	241 (9.5)	18	22 (0.88) up to 28 (1.1)	1 each (8.24)	1 each	77383
2D4-18S	241 (9.5)	18	22 (0.88) up to 28 (1.1)	1 each (7.47)	1 each	77385
2D4-18E-130	241 (9.5)	18	28 (1.1) up to 33 (1.3)	1 each (7.44)	1 each	77384
2D4-18S-130	241 (9.5)	18	28 (1.1) up to 33 (1.3)	1 each (6.61)	1 each	77386
2D4-27E	241 (9.5)	27	22 (0.88) up to 28 (1.1)	1 each (8.65)	1 each	77389
2D4-27S	241 (9.5)	27	22 (0.88) up to 28 (1.1)	1 each (7.88)	1 each	77390
2D4-36E	241 (9.5)	36	22 (0.88) up to 28 (1.1)	1 each (8.02)	1 each	77394
2D4-36S	241 (9.5)	36	22 (0.88) up to 28 (1.1)	1 each (6.43)	1 each	77395
2D4-42E	241 (9.5)	42	22 (0.88) up to 28 (1.1)	1 each (7.79)	1 each	77398
A complete 4-type closure system requires: 1 cover assembly kit and 2 endplate kits or 1 cover assembly kit, 1 endplate kit and 1 grommet kit.						
NOTE: 1. Custom cover lengths are available on a special order basis. 2. Custom grommet hole configurations are available on a special order basis. 3. Bonding hardware included with solid grommets only. 4. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION

3M™ 2X4 FLAME RETARDANT SERIES CLOSURES 4-TYPE SERIES (4" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2X4AA-510	102 (4.0)	470 (18.5)	254 (10.0)	100	1	1 each (12.78)	1 each	77479

ORDERING INFORMATION

4-TYPE SERIES 2X4 FLAME RETARDANT SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2X4-2E-510	102 (4.0)	2	25 (1.0) 25 (1.0)	1 each (2.90)	1 each	77478
A complete 4-type closure system requires: 1 cover assembly kit and 2 endplate kits.						
NOTE: 1. Custom cover lengths are available on a special order basis. 2. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

ORDERING INFORMATION

4-TYPE SERIES 2Y4 FLAME RETARDANT SERIES CLOSURES (3" DIAMETER)

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. NUMBER CABLE PAIRS	SPLICE BANKS	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Cover Halves Assembly Selection								
2Y4AA-510	77 (3.0)	470 (18.5)	254 (10.0)	100	1	1 each (12.77)	1 each	77487

ORDERING INFORMATION

4-TYPE SERIES 2Y4 FLAME RETARDANT SERIES CLOSURES KITS

PRODUCT NUMBER	ENDPLATE DIAMETER MM (IN.)	CABLE OPENINGS	MAX. DIAMETER EACH CABLE OPENING MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Endplate Selection						
2Y4-2E-510	77 (3.0)	2	25 (1.0)	1 each (2.96)	1 each	77486
A complete 4-type closure system requires: 1 cover assembly kit and 2 endplate kits.						
NOTE: 1. Custom cover lengths are available on a special order basis. 2. Maximum number of cable pairs based on 0.51/0.40 mm (24/26") gauge cable using 25 pair modular connectors for straight, in-line splice.						

3M™ CLOSURE ACCESSORIES AND REPLACEMENT PARTS

ORDERING INFORMATION

2-TYPE CLOSURE AND 4-TYPE FLAME RETARDANT VAULT CLOSURE

PRODUCT NUMBER	DESCRIPTIONS/ DIMENSIONS MM (IN.)	QUANTITY IN STANDARD PACKAGE	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Aerial Hanger Kit For supporting closure assembly to strand wire in aerial applications.					
AH20K	Aerial hanger kit	2	20 kits (0.90)	20 kits	78418
Back Cover Clip Kit For supporting backing cover to endplates during splicing. Also keeps endplates parallel and properly spaced.					
BCC10K	A, B, C, X, Y and Z covers		20 kits (0.10)	20 kits	77704
BCC10-M100	Kit in bulk (cable ties not Included)	100	100 each (0.28)	100 each	77707
Bolts For replacing lost or damaged bolts in endplates and covers.					
SB1875K	7.9 x 47.6 (5/16 x 1-7/8) - short	25	4 pkgs. (1.64)	4 pkgs.	78094
SB2375K	7.9 x 60.3 (5/16 x 2-3/8) - long	25	4 pkgs. (1.89)	4 pkgs.	78095
Bond Connector Kit For replacing lost or damaged bond connectors.					
BCHN10K	Solid, vented bond conn. kit w/ hex nuts	2	20 pkgs. (0.35)	20 pkgs.	77708
BBC20K	Solid bond connector	25	4 pkgs. (1.02)	4 pkgs.	77702
Bonding Harness For establishing shield continuity on tip cables inside vault closures. Standard packaging - 9 wire harnesses.					
BH18K	Bonding harness kit (18-wire)	2	1 each (0.72)	1 each	77714
BH27K	Bonding harness kit (27-wire)	3	1 each (1.10)	1 each	77715
BH36K	Bonding harness kit (36-wire)	4	1 each (1.40)	1 each	77716
BH42K	Bonding harness kit (42-wire)	5	1 each (1.64)	1 each	77717
Channel Bars For replacing lost or damaged channel bars in 2-Type and 4-Type cover halves. T = Threaded, U = Unthreaded.					
CTB10K	2-type cover - T 699 (27.5)	6	6 each (1.12)	6 each	77753
CTB11K	2-type cover - T 914 (36.0)	6	6 each (1.55)	6 each	77756
CTB12K	2-type cover - T 1130 (44.5)	6	6 each (1.89)	6 each	77759
CUB11K	2-type cover - U 914 (36.0)	6	6 each (7.29)	6 each	77765
Channel Bar Inserts for 2-Type Closure For replacing lost or damaged channel bar inserts.					
CBN10K	Channel bar threaded inserts	25	4 pkgs. (0.94)	4 pkgs.	77728
CBW10K	Channel bar unthreaded inserts	25	4 pkgs. (0.95)	4 pkgs.	77735
Cleaning Wipes For preparing plastic closure halves, endplates and cables before applying sealing tapes.					
CSSC20-M100	Closure sealing surface cleaner	100	100 each (0.60)	100 each	77749
Continuity/Grounding Pressurization Kit For restoring continuity and external grounding of closure. Also used for flash testing and pressurization.					
BG9K	470 (18.5) length cover (AA)	1	10 each (0.70)	10 each	77713
BG10K	699 (27.5) length cover (A)	1	10 each (0.87)	10 each	77711
BG12K	914 and 1130 (36 and 44.5) length cover (B and C)	1	10 each (1.04)	10 each	77712
Endplate Inserts For replacing lost or damaged endplate inserts.					
SNI300K	Threaded endplate inserts	25	4 pkgs. (1.31)	4 pkgs.	78112
SWI300K	Unthreaded endplate inserts	25	4 pkgs. (1.26)	4 pkgs.	78120

ORDERING INFORMATION

3M™ CLOSURE 2-TYPE AND FLAME RETARDANT VAULT CLOSURE 4-TYPE

PRODUCT NUMBER	DESCRIPTIONS/ DIMENSIONS MM (IN.)	QUANTITY IN STANDARD PACKAGE	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Grommet Sealant and Tip Cable Insertion Shoe					
Insertion shoe for easy insertion of tip cables into grommets and grommet sealant for sealing tip cables into grommet.					
GSC10	3 oz. tube of sealant	1	10 each (0.40)	10 each	77912
GCIS20	Tip cable insertion shoe	1	1 each (0.23)	1 each	77903
Jacking Plates					
For replacing lost or damaged jacking plates.					
CIT68K	Threaded jacking plate	25	4 pkgs. (0.76)	4 pkgs.	77738
CIU68K	Unthreaded jacking plates	25	4 pkgs. (0.76)	4 pkgs.	77739
Pressure Valve Assembly					
For replacing lost or damaged pressure valves.					
FVA11K	Pressure valve assembly	10	10 pkgs. (0.70)	10 pkgs.	77801
RC Reenterable Sealing Cord					
For sealing the groove along the length of cover halves. AA Length Cover = 1 roll RC45; A Length Cover = 1 roll RC62; B and C Length Covers = 1 roll RC96, Z-Closure - 1 roll RC36					
RC45-8	—	1	96 each (23.00)	96 each	78044
RC62-8	—	1	96 each (31.00)	96 each	78045
RC96-8	—	1	96 each (46.00)	96 each	78050
RTE Reenterable Sealing Tape					
For sealing between cover halves and endplates. 2Y2, 2X2 and 2A2 series = 1 roll RTE36 required for 2 each endplates; 2B2 series = 1 roll RTE46 required for 2 each endplates. 2C2 and 2D2 series = 1 roll RTE62 required for 2 each endplates; 2E2 series = 2 rolls RTE46 required for 2 each endplates.					
RTE36-8	—	1	108 each (50.00)	108 each	78071
RTE46-8	—	1	108 each (61.00)	108 each	78073
RTE62-8	—	1	54 each (40.00)	54 each	78075
RTW Reenterable Sealing Tape					
For sealing collar build-up around cable. Note: Usage will vary with cable diameter.					
RTW36-8	—	1	60 each (26.00)	60 each	78082
RTW72-8	—	1	60 each (46.00)	60 each	78083
Shield Connector					
For replacing lost or damaged shield connectors.					
SC10K	BCP1-1, size #1, up to 20 (0.8) cable dia.	25	4 pkgs. (1.09)	4 pkgs.	78100
SC20K	BCP2-1, size #2, 20 (0.8) to 41 (1.6) cable dia.	25	4 pkgs. (1.42)	4 pkgs.	78101
SC30K	BCP3-1, size #3, over 41 (1.6) cable dia.	25	4 pkgs. (1.59)	4 pkgs.	78102
Splice Wrap Kit					
For wrapping and protecting splice bundle and to keep wire out of the cover half sealing groove during assembly.					
ASW9K	2Y2AA, 2X2AA and 2A2AA closures	1	32 each (2.74)	32 each	78424
BSW10K	2A2A and 2B2A closures	1	16 each (2.81)	16 each	77721
BSW11K	2B2B closure	1	16 each (3.60)	16 each	77722
BSW12K	2B2C closure	1	16 each (4.12)	16 each	77723
DSW10K	2C2A and 2D2A closures	1	16 each (3.23)	16 each	77778
DSW11K	2C2B and 2D2B closures	1	16 each (3.84)	16 each	77779
DSW12K	2C2C and 2D2C closures	1	16 each (4.62)	16 each	77780
ESW10K	2E2A closure	1	16 each (3.23)	16 each	77782
ESW11K	2E2B closure	1	16 each (4.12)	16 each	77783
Stepwasher					
MK-K	Stepwasher	2	1 each (0.16)	1 each	77997

ORDERING INFORMATION

3M™ CLOSURE 2-TYPE AND 3M™ FLAME RETARDANT VAULT CLOSURE 4-TYPE

PRODUCT NUMBER	DESCRIPTIONS/ DIMENSIONS MM (IN.)	QUANTITY IN STANDARD PACKAGE	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Tip Cable Opening Plugs					
For plugging unused tip cable openings for endplate grommets.					
GP88100	22 - 28 (0.88 - 1.1) pin size: E	1	50 each (0.06)	50 each	78248
GP110130	28 - 33 (1.1 - 1.3) pin size: F	1	50 each (0.08)	50 each	78247
Underground Closure Support Kit					
For supporting closure assembly to racks in vault or manhole applications					
UCS10K	Underground support kit	2	10 pkgs. (1.45)	10 pkgs.	78494
Universal Plugging Spools					
For plugging unused cable openings in endplate openings. Black in color.					
FX-K	For 25 (1.0) cable openings	25	1 each (0.06)	1 each	77804
GX-K	For 41 (1.6) cable openings	25	1 each (0.08)	1 each	77913
HX-K	For 51 (2.2) cable openings	25	1 each (0.20)	1 each	77925
JX-K	For 71 (2.8) cable openings	25	1 each (0.17)	1 each	77977
KX-K	For 86 (3.4) cable openings	25	1 each (0.28)	1 each	77990
LX-K	For 102 (4.0) cable openings	1	1 each (0.30)	1 each	77996
MX-K	For 112 (4.4) cable openings	10	1 each (0.33)	1 each	78004
Universal Plugging Spools (Flame Retardant)					
For plugging unused cable openings in endplate openings. Gray in color.					
FX-4-K	For 25 (1.0) cable openings	25	1 each (0.09)	1 each	77802
HX-4-K	For 51 (2.2) cable openings	1	1 each (0.11)	1 each	77924
JX-4-K	For 71 (2.8) cable openings	1	1 each (0.26)	1 each	77976
KX-4-K	For 86 (3.4) cable openings	1	1 each (0.25)	1 each	77989
LX-4-K	For 102 (4.0) cable openings	1	1 each (0.33)	1 each	77995
MX-4-K	For 112 (4.4) cable openings	1	1 each (0.40)	1 each	78002
Universal Slotted Sealing Washers (Bulk Packaging)					
For sealing cable entrances in endplate openings. Black in color.					
FS-B-M200	Cable range – 10 - 25 (0.4 - 1.0)	2	100 pkgs. (0.42)	100 pkgs.	77796
GS-B-M200	Cable range – 10 - 41 (0.4 - 1.6)	2	100 pkgs. (0.59)	100 pkgs.	77908
HS-B-M200	Cable range – 10 - 51 (0.4 - 2.2)	2	100 pkgs. (0.67)	100 pkgs.	78400
JS-B-M200	Cable range – 10 - 71 (0.4 - 2.8)	2	100 pkgs. (0.76)	100 pkgs.	77969
KS-B-M200	Cable range – 10 - 86 (0.4 - 3.4)	2	100 pkgs. (0.98)	100 pkgs.	77983
LS-B-M100	Cable range – 41 - 102 (1.6 - 4.0)	2	50 pkgs. (1.00)	50 pkgs.	77993
MS-B-M100	Cable range – 41 - 112 (1.6 - 4.4)	2	50 pkgs. (1.01)	50 pkgs.	78000
Universal Slotted Sealing Washers (Flame Retardant - Bulk Packaging)					
For sealing cable entrances in endplate openings. Gray in color.					
FS-4-B-M200	Cable range – 10 - 25 (0.4 - 1.0)	2	100 pkgs. (2.55)	100 pkgs.	77794
GS-4-B-M200	Cable range – 10 - 41 (0.4 - 1.6)	2	100 pkgs. (4.70)	100 pkgs.	77906
HS-4-B-M200	Cable range – 10 - 51 (0.4 - 2.2)	2	100 pkgs. (6.75)	100 pkgs.	77919
JS-4-B-M200	Cable range – 10 - 71 (0.4 - 2.8)	2	100 pkgs. (11.22)	100 pkgs.	77967
KS-4-B-M200	Cable range – 10 - 86 (0.4 - 3.4)	2	100 pkgs. (15.12)	100 pkgs.	77981
LS-4-B-M100	Cable range – 41 - 102 (1.6 - 4.0)	2	50 pkgs. (9.91)	50 pkgs.	77991
MS-4-B-M100	Cable range – 41 - 112 (1.6 - 4.4)	2	50 pkgs. (11.32)	50 pkgs.	77998

3M™ CLOSURE INSTALLATION TOOLS

ORDERING INFORMATION

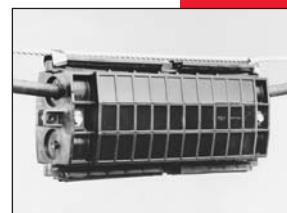
2-TYPE CLOSURE AND 4-TYPE FLAME RETARDANT VAULT CLOSURE

PRODUCT NUMBER	DESCRIPTIONS/ DIMENSIONS MM (IN.)	QUANTITY IN STANDARD PACKAGE	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Tools for Closure Assembly					
Tools required for closure assembly but not included with cover or endplate kits.					
2-TYPE/TK	Complete tool kit	1	1 each	1 each	89781
Universal Alignment Tool Kit					
For maintaining endplate spacing and alignment.					
UAT20K	Alignment kit	1	1 each (23.90)	1 each	78492
Washer Cutter Tool Kit					
For cutting universal sealing washers.					
WCT11K	Washer cutter tool kit	1	10 each (2.38)	10 each	78152
WCB11K	Replacement blade kit	2	10 pkgs. (0.31)	10 pkgs.	78149
NOTE: SPW10K does not include sockets.					
TWS10K includes 12.7 and 11.1 mm (1/2 and 7/16") sockets and 3 socket extender.					
TK-3M includes Carrying Case and WCT11K Washer Cutter Tool.					

3M™ WATERTIGHT CLOSURE SYSTEM Z SERIES

For Protection of Nonpressurized Copper Conductors

The Z watertight closure is made of an impact-resistant plastic and is corrosion resistant. The closure can be used for straight or multiple branch splices and there is a flame retardant version available for building applications. It is lightweight, watertight and reenterable. Z watertight closures may be mounted on strands or walls and accommodate up to 300-pair copper conductor splices. The system will also accommodate the entrance of up to four cables, 41 mm (1.6") in diameter. All components come in one kit and special tools are not required.



CLOSURE SELECTION GUIDE

TO ORDER Z WATERTIGHT CLOSURE SYSTEM, FOLLOW THESE STEPS:

1. What is your pair count?
2. What is your cable size?
3. What is your sheath opening?
4. What type of connector are you using? Module (MS² or 710) or Discrete (Scotchlok)?
Note: Bundles built with modular connectors are half the size of discrettes.
5. What is your splice bundle diameter?

These questions should guide you in choosing the correct closure.

ORDERING INFORMATION

Z WATERTIGHT CLOSURE SYSTEM

PRODUCT NUMBER	DESCRIPTION	MAX. NUMBER CABLE PAIRS	LENGTH MM (IN.)	WIDTH MM (IN.)	MAX. NO. HEIGHT MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Closure Selection								
2Z2AAA-510	Standard	300	419 (16.5)	114 (4.5)	165 (6.5)	1 each (5.71)	1 each	77489
2Z4AAA-510	Flame retardant*	300	419 (16.5)	114 (4.5)	165 (6.5)	1 each (6.00)	1 each	77494

Standard package = kit, minimum order/ordering multiple = 1 kit.

*Gray in color.

ORDERING INFORMATION

ACCESSORIES AND REPLACEMENT PARTS FOR Z WATERTIGHT SERIES CLOSURES

PRODUCT NUMBER	DESCRIPTIONS/ DIMENSIONS MM (IN.)	QUANTITY IN STANDARD PACKAGE	MIN. ORDER/ ORDERING MULTIPLE	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Two Cable Branch Kit						
Provides branching adapter spool and internal bonding for two additional cables. Up to 19 mm (0.75") each cable opening.						
BKZ10-2	Standard	1	1 kit	1 each (0.20)	1 each	77719
BKZ10-2-4	Flame retardant*	1	1 kit	1 each (0.30)	1 each	78652
Plugging Spool Kit						
Provides two plugging spools for plugging unused cable openings.						
GZX-K	Standard plugging spools	2	1 kit	1 each (0.12)	1 each	77916
GZX-4-K	Flame retardant plugging spools, gray in color	2	1 kit	1 each (0.20)	1 each	77915

Back Cover Clip Kit

For supporting back cover to cables during splicing. Also keeps endplates parallel and properly spaced.

BCC10K	Back cover clip kit for Z-type covers	2 clips w/cable ties	20 kits	20 pkgs. (0.10)	20 pkgs.	77704
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*Gray in color.

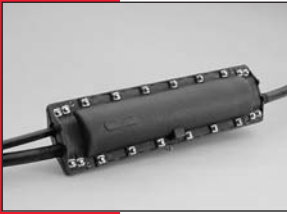


PRODUCT REFERRAL GENERATOR

710 Modules pg. 26
3M™ MS²™ Modules pg. 10

Shield Bonding pg. 111
3M™ Scotchlok™ Connectors . . . pg. 2

3M™ PRESSURIZED CLOSURES 50/51P SERIES



A complete pressure tight closure system for protecting spliced communication cables in a wide range of applications.

The 50/51P series pressurized closures can be used for aerial and underground applications. Seven sizes will accommodate cable diameters from 10 mm (0.4") to 71mm (2.8") and splices up to 1500 pairs. This closure may be used for sheath openings of 330 mm (13") or less to a maximum of 483 mm (19"). It is available in straight or branch splice configurations.

CLOSURE SELECTION GUIDE

TO ORDER 50/51P SERIES PRESSURIZED, FOLLOW THESE STEPS:

1. What is your pair count?
2. What is your cable size?
3. What is your sheath opening?
4. What type of connector are you using? Module (MS² or 710) or Discrete (Scotchlok)?
Note: Bundles built with modular connectors are half the size of discrettes.
5. What is your splice bundle diameter?

These questions should guide you in choosing the correct closure.

ORDERING INFORMATION

50/51P-TYPE PRESSURIZED CLOSURE SYSTEM

PRODUCT NUMBER	INSIDE DIAMETER MM (IN.)	OVERALL LENGTH MM (IN.)	SHEATH OPENING MM (IN.)	MAX. SHEATH DIAMETER MM (IN.)	MAX. CABLE PAIRS 24 GA. 26 GA.	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Straight Splice Configurations								
50AA3P-510	51 (2.0)	546 (21.5)	330 (13.0)	25 (2 - 1.0)	100 100	1 each (6.77)	1 each	77497
50B3P-510	83 (3.25)	724 (28.5)	483 (19.0)	41 (2 - 1.6)	300 400	1 each (8.95)	1 each	77500
50C3P-510	114 (4.5)	724 (28.5)	483 (19.0)	56 (2 - 2.2)	600 900	1 each (13.35)	1 each	77633
50D3P-510	159 (6.25)	724 (28.5)	483 (19.0)	76 (2 - 3.0)	1200 1500	1 each (16.69)	1 each	77636
Branch Splice Configurations								
51AA3P-510	76 (3.0)	546 (21.5)	330 (13.0)	25 (4 - 1.0)	100 200	1 each (7.84)	1 each	77641
51B3P-510	127 (5.0)	724 (28.5)	483 (19.0)	41 (4 - 1.6)	400 600	1 each (14.12)	1 each	77646
51D3P-510	184 (7.25)	724 (28.5)	483 (19.0)	76 (4 - 3.0)	1500 1800	1 each (18.55)	1 each	77650

NOTE: Maximum number of cable pairs based on using 25 modular connectors for in-line splice. 24 gauge = 0.51 mm, 26 gauge = 0.4 mm.

3M™ TOOLS, ACCESSORIES AND REPLACEMENT PARTS

ORDERING INFORMATION

50/51 SERIES AERIAL CLOSURES—PRESSURIZED AND NON-PRESSURIZED— TOOLS, ACCESSORIES AND REPLACEMENT PARTS

PRODUCT NUMBER	DESCRIPTIONS/ DIMENSIONS MM (IN.)	QUANTITY IN STANDARD PACKAGE	MIN. ORDER/ ORDERING MULTIPLE	PKG. (LBS.)	MIN. ORDER	UPC 051138-
Aerial Hanger Kit Used for supporting closure assembly to strand wire in aerial applications.						
AHK5-M20	Hanger kit	2	20 kits	20 pkgs. (7.00)	20 pkgs.	78780
Ant Repellent Kit Used to prevent the entry of ants into the splice case.						
ARKO-26	Ant kit	1	100 kits	50 each (1.08)	50 each	78422
Bolts for 50/51 Type Closures For replacing lost or damaged bolts in endplates and covers. S = Short, L = Long.						
SB4LK	6.4 (1/4) - 508 x 44.5 (20 x 1.75) - L	25	4 pkgs.	4 pkgs. (1.26)	4 pkgs.	78096
Jacking Plates for 50/51 Type Closures For replacing lost or damaged jacking plates.						
CIT68-4K	Threaded jacking plate, Bolt size = 6.4 (1/4)	25	4 pkgs.	4 pkgs. (0.26)	4 pkgs.	77737
CIT68K	Threaded jacking plate, Bolt size = 7.9 (5/16)	25	4 pkgs.	4 pkgs. (0.76)	4 pkgs.	77738
CIU68K	Unthreaded jacking plate, All bolt sizes	25	4 pkgs.	4 pkgs. (0.76)	4 pkgs.	77739
Thru the seal ground strap for 50/51 type closures						
L50SBK	Ground strap	10	1 kit	1 each (1.72)	1 each	78747
Insert Kit for 50/51 Type Closures For replacing lost or damaged inserts.						
SNI300-5K	7.9 (5/16) threaded insert	25	4 pkgs.	4 pkgs. (1.26)	4 pkgs.	78111
SWI300-5K	7.9 (5/16) unthreaded insert	25	4 pkgs.	4 pkgs. (1.26)	4 pkgs.	78119



3M™ VAULT AND RISER CLOSURES K&B SERIES

K&B closures are strong, lightweight, and protect a wide variety of vault splice configurations with an air and water tight seal. K&B closures offer a full product line that is simple to install and reenter. This full product offering provides closures in standard kits to protect the majority of cable configurations and customized and special closures to meet your vault requirements. All K&B closures are flame retardant. **RUS Listed.**

Ordering K&B Vault Closures

The key to ordering the correct K&B vault closures kit is knowing what components suit the splice configuration. The kit can be a solid or split sleeve and have a collared end cap, multiple end cap, stainless steel hose clamps and cable lubricant.

Because the K&B vault closure is air and water tight, the closures collared and multiple end caps have to be sized precisely to the cables entering them. When ordering K&B closures, three pertinent facts are needed:

- The diameter of all the cables, field and tip, to be spliced. This is needed for hole sizing of the end caps.
- The maximum number of cable pairs to be spliced and the type of connector to be used for splicing, an example is a 2700-pair field cable, spliced to 27-100 pair tip cable is a “2700-pair splice.” This determines the size/diameter of the closure.
- The number of tip cables to be enclosed.

NOTE: If the application determines that the closure does not need to be air and water tight, then the use of a K&B riser closure should be considered.

The standard K&B vault closure kit contains the following:

- One sleeve, solid or split
- One collared end cap
- One multiple end cap
- Hose clamps:
 - Solid sleeve - two sleeve clamps, one collared clamp
 - Split sleeve - three sleeve clamps, one collared clamp

Steps to Ordering Standard K&B Closures Kits

1. Determine the maximum number of cable pairs, entering into the closure. If a 1200-pair field cable enters the closure, but is only spliced to 6-100 pair tip cables, this is still sized at the 1200 potential pairs.
2. Determine the type of module or connector to be used for splicing. The 25-pair module/connector is recommended because this can make for a more compact splice bundle for a smaller closure diameter.
3. Make a selection from the standard kits available. With the standard kits, the collared cap opening can be up to 6.35 mm (1/4") larger than the cable diameters. The clamp will tighten it down, and the multiple cap needs to be within the stated diameter range.
4. Fill any vacant multiple holes with the appropriate plug.

3M™ VAULT AND RISER CLOSURES K&B SERIES

CLOSURE SELECTION GUIDE

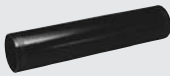

TO ORDER K&B VAULT AND RISER CLOSURES, FOLLOW THESE STEPS:

1. What is your pair count?
2. What is your cable size?
3. What is your sheath opening?
4. What type of connector are you using? Module (MS² or 710) or Discrete (Scotchlok)?
Note: Bundles built with modular connectors are half the size of discrettes.
5. What is your splice bundle diameter?

These questions should guide you in choosing the correct closure.

SELECTION GUIDE

STANDARD K&B CLOSURE



MAXIMUM PAIR COUNT		SOLID SLEEVE		SPLIT SLEEVE	
					
25-PAIR MODULAR CONNECTORS	3M™ SCOTCHLOK™	KIT PART NUMBER	DIAMETER LENGTH	KIT PART NUMBER	DIAMETER LENGTH
100	50	KB2-100-2	2-24	—	—
200	100	KB3-175-1	3-24	KBS3-175-1	3DS-24
400	200	KB4-175-1 KB4-175-2	4-24 4-24	—	—
600	300	KB5-100-6 KB5-130-6 KB5-175-2	5-26 5-26 5-26	KBS5-100-6 KBS5-130-6 KBS5-175-2	5DS-26 5DS-26 5DS-26
900	400	KB6-100-9 KB6-130-9 KB6-175-3	6-26 6-26 6-26	KBS6-100-9 KBS6-130-9 KBS6-175-3	6DS-26 6DS-26 6DS-26
1200	600	KB7-100-15 KB7-175-5	7-26 7-26	KBS7-100-15 KBS7-175-5	7DS-26 7DS-26
2400	800	KB8-100-24 KB8-130-18 KB8-175-8	8-26 8-26 8-26	KBS8-100-24 KBS8-130-18 KBS8-175-8	8DS-26 8DS-26 8DS-26
2700	900	KB9-100-27 KB9-130-24 KB9-175-9	9-26 9-26 9-26	KBS9-100-27 KBS9-130-24 KBS9-175-9	9DS-26 9DS-26 9DS-26
3600	—	KB10-100-36 KB10-100-36L	10-26 10-26	KBS10-100-36 KBS10-100-36L	10DS-26 10DS-34
4800	—	KB12-130-37	12-28	—	—

NOTE: Collared cap opening can be up to 6.35 mm (1/4") longer than the cable diameter, the clamp will tighten it down.

Two clamps are included with solid sleeve order. Three clamps are included with split sleeve order. One clamp is included with collared end cap.
254 mm (10") cap with 27- 22 mm to 27 mm (.85" to 1.06") holes around 1- 76 mm (3.0") hole.

SELECTION GUIDE

STANDARD 3M™ CLOSURE K&B

COLLARED END CAPS**		MULTIPLE END CAPS	
			
PART NUMBER	HOLE SIZE MM (IN.)	PART NUMBER	HOLE SIZE MM (IN.)
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	C7-100-15	21.5-26.0 (.85-1.06)
—	—	C7-175-5	31.7-41.4 (1.25-1.75)
C8-300-1C	76.2 (3)	C8-100-24	21.5-26.0 (.85-1.06)
C8-300-1C	76.2 (3)	C8-130-18	27.4-33 (1.08-1.3)
C8-300-1C	76.2 (3)	C8-175-8	31.7-41.4 (1.25-1.75)
C9-300-1C	76.2 (3)	C9-100-27	21.5-26.0 (.85-1.06)
C9-300-1C	76.2 (3)	C9-130-24	27.4-33 (1.08-1.3)
C9-300-1C	76.2 (3)	C9-175-9	31.7-41.4 (1.25-1.75)
C10-360-1C	91.4 (3.6)	C10-100-36	21.5-26.0 (.85-1.06)
C10-360-1C	91.4 (3.6)	C10-100-27/300	21.5-26.0 (.85-1.06)
C12-390-1C	99 (3.9)	C12-100-48	21.5-26.0 (.85-1.06)
C12-390-1C	99 (3.9)	C12-130-37	27.4-33 (1.08-1.3)

NOTE: *Based on 2-bank in-line splice using 3M™ MS™ Splicing Modules 4000D/TR.
 **Collared cap opening can be up to 6.35 mm (1/4") longer than the cable diameter, the clamp will tighten it down.
 Two clamps are included with solid sleeve order. Three clamps are included with split sleeve order. One clamp is included with collared end cap.
 254 mm (10") cap with 27- 22 mm to 27 mm (.85" to 1.06") holes around 1- 76 mm (3.0") hole.

ORDERING INFORMATION**3M™ VAULT CLOSURE K&B WITH SOLID SLEEVE KIT**

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
KB2-100-2	1 each (2.00)	1 each	26818
KB3-175-1	1 each (4.00)	1 each	26820
KB4-175-1	1 each (5.00)	1 each	26822
KB4-175-2	1 each (5.00)	1 each	26823
KB5-100-6	1 each (5.00)	1 each	26825
KB5-130-6	1 each (5.00)	1 each	26826
KB5-175-2	1 each (5.00)	1 each	26827
KB6-100-9	1 each (8.00)	1 each	26829
KB6-130-9	1 each (8.00)	1 each	26830
KB6-175-3	1 each (8.00)	1 each	26831
KB7-100-15	1 each (8.00)	1 each	26833
KB7-175-5	1 each (13.00)	1 each	26834
KB8-100-24	1 each (16.00)	1 each	26381
KB8-130-18	1 each (16.00)	1 each	26382
KB8-175-8	1 each (16.00)	1 each	26464
KB9-100-27	1 each (16.00)	1 each	26465
KB9-130-24	1 each (18.00)	1 each	26466
KB9-175-9	1 each (18.00)	1 each	26504
KB10-100-36	1 each (20.00)	1 each	26624
KB10-100-36L	1 each (20.00)	1 each	26505
KB12-130-37	1 each (28.00)	1 each	26507



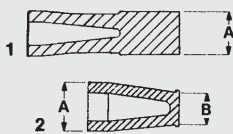
ORDERING INFORMATION**K&B VAULT CLOSURE KITS WITH SPLIT SLEEVE**

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
KBS3-175-1	1 each (4.00)	1 each	26835
KBS5-100-6	1 each (5.00)	1 each	26837
KBS5-130-6	1 each (5.00)	1 each	26838
KBS5-175-2	1 each (5.00)	1 each	26839
KBS6-100-9	1 each (8.00)	1 each	26841
KBS6-130-9	1 each (8.00)	1 each	26842
KBS6-175-3	1 each (8.00)	1 each	26843
KBS7-100-15	1 each (13.00)	1 each	26845
KBS7-175-5	1 each (13.00)	1 each	26846
KBS8-100-24	1 each (16.00)	1 each	26566
KBS8-130-18	1 each (16.00)	1 each	26567
KBS8-175-8	1 each (16.00)	1 each	26568
KBS9-100-27	1 each (18.00)	1 each	26569
KBS9-130-24	1 each (18.00)	1 each	26570
KBS9-175-9	1 each (18.00)	1 each	26571
KBS10-100-36 26"	1 each (20.00)	1 each	26572
KBS10-100-36L 34"	1 each (20.00)	1 each	26573

NOTE: Solid sleeve kits contain 2 each sleeve clamps and 1 each collar clamp. Split sleeve kits come with 3 each sleeve clamps and 1 each collar clamp.

SPECIFICATIONS

3M™ VAULT CLOSURE K&B PLUGS

RUBBER BUSHINGS	DIMENSIONAL DIAGRAM	PRODUCT NUMBER	DIMENSION A*	DIMENSION B*	
Plugs					
		Collared			
		PC-175	1.75 (44)		
		PC-225	2.25 (57)		
		PC-275	2.75 (70)		
		PC-298	2.98 (76)		
		Tapered			
		PT-100	1.0 (25)		
		PT-120	1.2 (31)		
		PT-125	1.25 (32)		0.75 (19)
		PT-130	1.3 (33)		
		PT-175	1.75 (44)		1.25 (32)
		PT-225	2.25 (57)		1.75 (44)
*Inches (mm)					
Note: If inside diameter is less than 6.35 mm (0.25"), use KBS-1 to seal.					

ORDERING INFORMATION

K&B VAULT CLOSURE COLLARED PLUGS

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
PC-175	1 each (0.13)	1 each	26433
PC-225	1 each	1 each	26434
PC-275	1 each	1 each	26436
PC-298	1 each (0.38)	1 each	26438

ORDERING INFORMATION

K&B VAULT CLOSURE TAPERED PLUGS

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
PT-100	1 each (0.06)	1 each	17602
PT-120	1 each (0.06)	1 each	26441
PT-125	1 each (0.06)	1 each	26440
PT-130	1 each (0.13)	1 each	17603
PT-175	1 each (0.13)	1 each	26443

3M™ VAULT CLOSURE K&B BUSHINGS

Selecting and Sizing Bushings




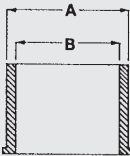

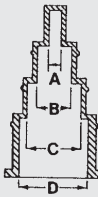

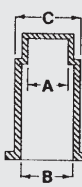
As an example:

- You have a 1200-pair splice, with a 1200 pair field cable that has 50.8 mm (2.0") OD and 12-100 pair tip that has 25.4 mm (1.0") OD.
- The approximate closure size is a KB7-100-15. It has a multiple end cap with 15 openings of 25.4 mm (1.0") OD and a collared end cap with an opening of 69.9 mm (2.75") OD.
- The multiple end cap will give the tip cable a precise fit.
- The collared end cap is too big and needs a B275-200 bushing to reduce the opening.

The order should be:

- One each KB7-100-15
- One each B-275-200-IC (this bushing fits into the 69.9 mm (2.75") hole and reduces it down to 50.8 mm (2.0"). The "IC" stands for Insert and Cement)
- Three each PT100

ORDERING INFORMATION

RUBBER BUSHINGS	DIMENSIONAL DIAGRAM	PRODUCT NUMBER	DIMENSION A*	DIMENSION B*	DIMENSION C*	DIMENSION D*
		B-100-70 B-125-100	1.0 (28) 1.25 (32)	0.92 (23.4) 1.06 (26.9)	0.62 (15.7) 0.85 (21.8)	
		B-175-125 B-175-150 B-225-175 B-225-200 B-275-200 B-275-225 B-275-250 B-300-275 B-360-300 B-360-330 B-390-360	1.75 (44) 1.75 (44) 2.25 (57) 2.25 (57) 2.75 (70) 2.75 (70) 2.75 (70) 3.0 (76) 3.6 (91) 3.6 (91) 3.9 (99)	1.25 (32) 1.5 (38) 1.75 (44) 2.0 (51) 2.0 (51) 2.25 (57) 2.5 (64) 2.75 (70) 3.0 (76) 3.3 (84) 3.6 (91)		
VARIABLE BUSHINGS	DIMENSIONAL DIAGRAM	PRODUCT NUMBER	DIMENSION A*	DIMENSION B*	DIMENSION C*	DIMENSION D*
		B-1.00-0.25 B-2.50-1.00	0.49 (12.4) 1.0 (25.4)	0.69 (17.5) 1.40 (35.6)	0.79 (20.1) 1.90 (48.3)	1.0 (25.4) 2.50 (63.5)
		B-1.75-1.50-1.00	1.12 (28.4)	1.50 (38.1)	1.75 (44.5)	

*Inches (mm)

NOTE: If inside diameter is less than 6.35 mm (0.25"), use KBS-1 to seal.

Collared caps must be bushed to within 1/4" of cable diameter.

ORDERING INFORMATION

3M™ VAULT CLOSURE K&B SOLID SLEEVES

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
3-24	1 each (1.00)	1 each	26819
4-24	1 each (2.00)	1 each	26821
5-26	1 each (2.00)	1 each	26824
6-26	1 each (3.00)	1 each	26828
7-26	1 each (5.00)	1 each	26832
10-26	1 each (7.00)	1 each	26623

ORDERING INFORMATION

K&B VAULT CLOSURE SPLIT SLEEVES

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
5DS-26	1 each (3.00)	1 each	26836
6DS-26	1 each (4.00)	1 each	26840
7DS-26	1 each (5.00)	1 each	26844
10DS-34	1 each (8.00)	1 each	26574
12SS-28	1 each (11.00)	1 each	26693

ORDERING INFORMATION

K&B VAULT CLOSURE MULTIPLE CAPS

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
C8-100-24	1 each (3.75)	1 each	26410
C8-130-18	1 each (3.50)	1 each	26411
C8-175-8	1 each (3.50)	1 each	26412
C9-100-27	1 each (3.75)	1 each	26413
C9-130-24	1 each (3.50)	1 each	26414
C9-175-9	1 each (3.50)	1 each	26415
C9-275-3	1 each (3.00)	1 each	26853
C10-100-27/300 ESS	1 each (5.00)	1 each	26689
C10-100-36	1 each (5.00)	1 each	26513
C12-130-37	1 each (6.75)	1 each	26497
C12-100-48	1 each (6.75)	1 each	26697

ORDERING INFORMATION

K&B VAULT CLOSURE COLLARED END CAPS

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
C8-300-1C	1 each (3.00)	1 each	26537
C9-300-1C	1 each (3.50)	1 each	26538
C10-360-1C	1 each (3.50)	1 each	26539
C12-390-1C	1 each (5.50)	1 each	26540

ORDERING INFORMATION**3M™ VAULT CLOSURE K&B FLAT CAPS**

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
C5 (5")	1 each (1.00)	1 each	26698
C6 (6")	1 each (1.00)	1 each	26699
C7 (7")	1 each (1.00)	1 each	26700
C8 (8")	1 each (2.00)	1 each	26701
C9 (9")	1 each (3.00)	1 each	26702
C10 (10")	1 each (3.00)	1 each	26703
C12 (12")	1 each (5.00)	1 each	26704

ORDERING INFORMATION**K&B VAULT CLOSURE PUDDLE CAPS**

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
C8-7	1 each (2.00)	1 each	26696
C9-5	1 each (3.00)	1 each	26423
C9-7	1 each (2.00)	1 each	26424
C10-8	1 each (4.00)	1 each	26695
C12-8/6	1 each (5.00)	1 each	26852

ORDERING INFORMATION**K&B VAULT CLOSURE BUSHINGS**

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
B100-50	1 each (3.00)	1 each	26446
B100-70	1 each (3.00)	1 each	27182
B125-100	1 each (1.00)	1 each	26692
B175-125	1 each (2.00)	1 each	26528
B175-150	1 each (2.00)	1 each	26527
B225-175	1 each (3.00)	1 each	26519
B225-200	1 each (6.00)	1 each	27185
B275-200	1 each (6.00)	1 each	26520
B275-225	1 each (4.00)	1 each	26521
B275-250	1 each (2.00)	1 each	26522
B300-275	1 each (3.00)	1 each	26523
B360-300	1 each (4.00)	1 each	26524
B360-330	1 each (4.00)	1 each	26525
B390-360	1 each (4.00)	1 each	26526

ORDERING INFORMATION**K&B VAULT CLOSURE VARIABLE BUSHINGS**

PRODUCT NUMBER	PKG. (LBS.)	MIN. ORDER	UPC 054007-
B-1.0-2.5	1 each (3.00)	1 each	26461 *
B-2.5-1.0	1 each (3.00)	1 each	26462
B-1.75-1.50-1.0	1 each (3.00)	1 each	26360

*UPC prefix 051115-

3M™ VAULT CLOSURE K&B SERIES ACCESSORIES



Fire Barrier Vault Rehabilitation Kit 5925

PKG. (LBS.): 1 EACH (8.90) MIN. ORDER: 1 EACH UPC: 051115-02438

For use in conjunction with an existing vertically installed K&B vault closure when specific flame retardancy requirements such as the Bell System Technical Reference PUB 55006 (Issue 1, Section 5.53) are required.

Kit contents include 3M™ Fire Barrier Foil Mat 298 mm x 3.7 m (11 3/4" x 12') and 3M™ Glass Cloth Tape 69 25 mm x 23 m (1" x 25 yds.).



Splice Supports RC-100

PKG. (LBS.): 10 SETS (7.71) MIN. ORDER: 10 SETS UPC: 054007-31713

Designed to reduce closure support costs. The rack clips permit fast, multi-positioning of industry standard manhole racks or uni-struts and hooks to facilitate support of a closure. Two supports per set.



Sealing Kit KB-S1

PKG. (LBS.): 1 EACH (0.33) MIN. ORDER: 1 EACH UPC: 054007-31101

Designed for sealing split K&B vault sleeves and split end caps. Each kit contains a "Mini-Semkit" of 38g of urethane adhesive, a 50.8 mm x 76.2 mm x 9.5 mm (2" x 3" x 3/8") 3M™ ScotchBrite™ Pad 7H, a wooden spatula, and instructions.



Bonding Harness

PRODUCT NUMBER: **BH2-6** PKG. (LBS.): 1 EACH (0.50) MIN. ORDER: 1 EACH UPC: 054007-26362

PRODUCT NUMBER: **BH7** PKG. (LBS.): 1 EACH (1.00) MIN. ORDER: 1 EACH UPC: 054007-26363

PRODUCT NUMBER: **BH8-9** PKG. (LBS.): 1 EACH (1.50) MIN. ORDER: 1 EACH UPC: 054007-26365

For use in closure to ground shields of spliced cable; 14 AWG.



Cable Lubricant

PKG. (LBS.): 1 BOTTLE (0.25) MIN. ORDER: 1 BOTTLE UPC: 054007-26512

Designed to make vault closure installation faster by lubricating tip cables before insertion into multiple end caps, the cable lubricant evaporates after use and does not damage closure elements in any way. Supplied in a 113.2 g (4 oz.) dauber-top bottle.

3M™ BUILDING RISER CLOSURE K&B SERIES

10 Port/Single Entry Closure R-6

PRODUCT NUMBER: **R6** PKG. (LBS.): 1 KIT (10.20) MIN. ORDER: 1 KIT UPC: 054007-33488



The K&B riser closure has the same proven qualities of the K&B vault closure but are used in applications that do not require an air or water tight closure. Because of this, the end caps do not need to precisely fit the cable and are more versatile and user friendly. Use “Closure Selection Guide” (below) for determining the proper closure size for your application. All K&B Riser Closures are flame retardant.

KIT CONTENTS

Split closure cover

Stainless steel hose clamps (2)

Flex strips (4)

End caps (2)

NOTE: Single port SRC end caps are optional and must be ordered separately.

Closures R3, R5, R7 and R9

PRODUCT NUMBER: **R3** PKG. (LBS.): 10 KITS (25.60) MIN. ORDER: 10 KITS UPC: 054007-33484

PRODUCT NUMBER: **R5** PKG. (LBS.): 1 KIT (6.30) MIN. ORDER: 1 KIT UPC: 054007-33485

PRODUCT NUMBER: **R7** PKG. (LBS.): 1 KIT (9.20) MIN. ORDER: 1 KIT UPC: 054007-33486

PRODUCT NUMBER: **R9** PKG. (LBS.): 1 KIT (11.80) MIN. ORDER: 1 KIT UPC: 054007-33487



- R3 and R5 – 2 each of double (2) entry conical end caps
- R6-10 – 1 each of a single (1) entry conical end cap and 1 each of a ten (10) port rubber end cap. Also 1 each of a 4 ounce bottle of cable lubricant.
- R7 and R9 – 2 each of triple (3) entry conical end caps

ORDERING INFORMATION

K&B BUILDING RISER CLOSURE SELECTION GUIDE

PRODUCT NUMBER	R-3	R-5	R-6	R-7	R-9
Closure inside dimensions					
Diameter, mm (in.)	76 (3)	127 (5)	152 (6)	178 (7)	228 (9)
Length, mm (in.)	24 (607)	660 (26)	660 (26)	660 (26)	660 (26)
Approx. splice bundle Capacity					
	300-pr. 24 AWG or less*	900-pr. 24 AWG*	900-pr. 24 AWG*	1800-pr. 24 AWG*	3000-pr. 26 AWG*
MAXIMUM ALLOWABLE CABLE DIAMETER					
Multiple entry end caps					
Port 1, mm (in.)	30 (1.2)	51 (2.0)	84 (3.3)	79 (3.1)	96 (3.8)
Port 2, mm (in.)	30 (1.2)	51 (2.0)	Ports 1-10 28 (1.1)	61 (2.4)	79 (3.1)
Port 3, mm (in.)	—	—	—	51 (2.0)	61 (2.4)
Optional single entry end caps					
mm (in.)	SRC-3 43 (1.7)	SRC-5 61 (2.4)	—	SRC-7 91 (3.6)	SRC-9 96 (3.8)

*Based on 2-Bank Straight Splice using 25-pair modular connectors.

ORDERING INFORMATION

3M™ BUILDING RISER CLOSURE K&B END CAPS FEATURES

PRODUCT NUMBER	DESCRIPTION	CAP DIMENSION MM (IN.)	PKG. (LBS.)	MIN. ORDER	UPC 054007-
SRC-3	Riser closure end cap	76 (3)	10 each (2.80)	10 each	33490
SRC-5	Riser closure end cap	127 (5)	10 each (6.10)	10 each	33491
SRC-7	Riser closure end cap	178 (7)	1 each (1.40)	1 each	33493
SRC-9	Riser closure end cap	229 (9)	1 each (1.67)	1 each	33489

3M™ COMPOUNDS AND SEALING KITS

High Gel Reenterable Encapsulant (Non-Urethane Encapsulant) 8882

PRODUCT NUMBER: **8882-6000** VOLUME: 6592 ML (6000 G) PKG. (LBS.): 1 EACH (14.60)
MIN. ORDER: 1 EACH UPC: 051138-75468

PRODUCT NUMBER: **8882-A** VOLUME: 90 ML (82 G) PKG. (LBS.): 10 EACH (3.45)
MIN. ORDER: 10 EACH UPC: 051138-75469

PRODUCT NUMBER: **8882-C** VOLUME: 385 ML (350 G) PKG. (LBS.): 10 EACH (10.50)
MIN. ORDER: 10 EACH UPC: 051138-75470

PRODUCT NUMBER: **8882-D** VOLUME: 659 ML (600 G) PKG. (LBS.): 10 EACH (16.20)
MIN. ORDER: 10 EACH UPC: 051138-75471

PRODUCT NUMBER: **8882-E** VOLUME: 292 ML (266 G) PKG. (LBS.): 10 EACH (8.10)
MIN. ORDER: 10 EACH UPC: 051138-75472

PRODUCT NUMBER: **8882-750/F** VOLUME: 824 ML (750 G) PKG. (LBS.): 4 EACH (7.45)
MIN. ORDER: 4 EACH UPC: 051138-75478

PRODUCT NUMBER: **8882-1500/F** VOLUME: 1648 ML (1500 G) PKG. (LBS.): 2 EACH (7.51)
MIN. ORDER: 2 EACH UPC: 051138-75473

PRODUCT NUMBER: **8882-3000/F** VOLUME: 3296 ML (3000 G) PKG. (LBS.): 1 EACH (7.30)
MIN. ORDER: 1 EACH UPC: 051138-75475

This completely reenterable encapsulant uses a new compound technology. It delivers a high level of adhesion and excellent moisture protection at low cost. It absorbs cable-filling materials, yet remains reenterable. Contains no isocyanates.

It provides better penetration of splice bundles at low temperatures due to its lower viscosity and longer gel time.

3M™ Scotchcast™ Encapsulating and Blocking Compound 4407

PRODUCT NUMBER: **4407-A** VOLUME: 89 ML (94 G) PKG. (LBS.): 10 BAGS (3.78)
MIN. ORDER: 10 BAGS UPC: 054007-30556

PRODUCT NUMBER: **4407-B** VOLUME: 197 ML (209 G) PKG. (LBS.): 10 BAGS (6.80)
MIN. ORDER: 10 BAGS UPC: 054007-30557

PRODUCT NUMBER: **4407-C** VOLUME: 396 ML (420 G) PKG. (LBS.): 10 BAGS (11.80)
MIN. ORDER: 10 BAGS UPC: 054007-30558

PRODUCT NUMBER: **4407-D** VOLUME: 637 ML (675 G) PKG. (LBS.): 10 BAGS (18.10)
MIN. ORDER: 10 BAGS UPC: 054007-30559

PRODUCT NUMBER: **4407-E** VOLUME: 283 ML (300 G) PKG. (LBS.): 10 BAGS (9.00)
MIN. ORDER: 10 BAGS UPC: 054007-30560

PRODUCT NUMBER: **4407-1500/F** VOLUME: 1415 ML (1500 G) PKG. (LBS.): 2 EACH (7.45)
MIN. ORDER: 2 EACH UPC: 051138-75381

PRODUCT NUMBER: **4407-3000/F** VOLUME: 2830 ML (3000 G) PKG. (LBS.): 1 UNIT (8.80)
MIN. ORDER: 1 UNIT UPC: 051138-75382

Developed for splice encapsulation and pressure blocking, Scotchcast compound 4407 is a two-part compound. It features excellent wetting properties and low viscosity, which means it flows quickly and freely. Its low temperature cure properties mean that it may be used in almost any type of weather. Cure time is fast; approximately 1 hour at 22°C (72°F) and 20 hours at -4°C (20°F). 4407 is usable to -18°C (0°F). Designed for both splice encapsulation and cable blocking, the 4407 compound eliminates the need to stock more than one compound.



3M™ SCOTCHCAST™ COMPOUNDS AND SEALING KITS

Pedestal Base Sealant Kit 4411

PRODUCT NUMBER: **4411-A** VOLUME: 795 ML (96.3 G) PKG. (LBS.): 16 BAGS (5.00)
MIN. ORDER: 16 BAGS UPC: 054007-33065

PRODUCT NUMBER: **4411-B** VOLUME: 1570 ML (190 G) PKG. (LBS.): 16 BAGS (8.80)
MIN. ORDER: 16 BAGS UPC: 054007-32006

PRODUCT NUMBER: **4411-D** VOLUME: 4130 ML (500 G) PKG. (LBS.): 16 BAGS (23.00)
MIN. ORDER: 16 BAGS UPC: 054007-32562

PRODUCT NUMBER: **4411-750/F** VOLUME: 6195 ML (750 G) PKG. (LBS.): 4 EACH (7.45)
MIN. ORDER: 4 EACH UPC: 051138-70500

A two-part expanding sealant used to fill pedestal bases to prevent ground moisture from entering the pedestal. The sealant protects the cables against rodents, insects and moisture. An “A” size Uni-pak bag will expand to fill about 753.80 cubic cm (46 cubic inches); a “B” size will fill about 1556.77 cubic cm (95 cubic inches), and a “D” size will expand to fill about 4096.77 cubic cm (250 cubic inches). **RUS Listed.**



Duct Sealing Kit 4416

PKG. (LBS.): 1 EACH (3.50) MIN. ORDER: 1 EACH UPC: 054007-57220

The 4416 duct sealing kit prevents water and other liquids from running out of a cable duct and entering a manhole or central office. **RUS Listed.**



KIT CONTENTS

Foam strip

Spacer web strip

Scotchcast cleaning pads (4)

Scotchcast expandable sealant (4)

Plastic tubes

Foam Kit 4430-F

PKG. (LBS.): 1 KIT (3.40) MIN. ORDER: 1 KIT UPC: 054007-33389

Open cell polyurethane foam strips used for cable duct sealing or for containing expandable sealants.

Kit contents include 8 rolls foam, 25.4 mm x 76.2 mm x 1.8 m (1" x 3" x 72").



3M™ SCOTCHCAST™ PRESSURE AND MOISTURE BLOCKING KITS

Pedestal Pressure/Moisture Blocking Kit 8964

PKG. (LBS.): 1 KIT (2.40) MIN. ORDER: 1 KIT UPC: 054007-92965

A system for PIC air core cable blocking. Used to make a pressure block and moisture seal at the pedestal interface. The kit contains a universal sleeve and the pourable Haplec 4408 compound conveniently packaged in a Uni-pak container. The 8964 kit includes: 1 closure body 254 mm x 355.6 mm (10" x 12"), 1 spacer web 127 mm x 228.6 mm (5" x 9"), 1 mastic strip 254 mm (10"), 1 Fiberglass strip roll 38.1 mm x 0.9 mm (1 1/2" x 36"), 1 4408 Haplec blocking compound D bag 600 g (21.2 oz.), 1 Instruction sheet.



Open Sheath Blocking Closures 4530, 4530-L, 4530-S/NB/4408

PRODUCT NUMBER: 4530-KIT PKG. (LBS.): 10 KITS (16.40) MIN. ORDER: 10 KITS UPC: 054007-31110

PRODUCT NUMBER: 4530-L PKG. (LBS.): 1 KIT (2.65) MIN. ORDER: 1 KIT UPC: 054007-33812

PRODUCT NUMBER: 4530-S/NB/4408 PKG. (LBS.): 10 KITS (19.50) MIN. ORDER: 10 KITS UPC: 054007-92964

This system provides full pressure blocking on air core cable (paper or pulp insulated cable that has not been treated with anti-wetting agents and PIC).



Compound filling of the cable block can be accomplished by pouring and injecting or, when cable is under air pressure, by injecting alone. 3M™ Scotchcast™ Encapsulating and Blocking Compound 4407 is used with the 4530 and 4530-L closure kits.

Scotchcast 4407 compound is a two-part polyurethane compound characterized by excellent wetting properties and low viscosity which is ideal for pressure blocking applications. The 4407 compound is sold separately from the closure kit to permit optimization of the amount of compound used.

KIT COMPONENTS

KIT PRODUCT NUMBERS	4530	4530-L	4530-S/NB/4408
Injection sleeve	•	•	•
Fill port caps (2)	•	•	•
W9 channeling wedges (12)	•	•	•
4460-S shield bond connectors (2)	•	•	•
25T grounding braid (356 mm (14") strip)	•	•	•
Fiberglass tape (2 strips)	•	•	•
Spacer web	•	•	•
Air vent plugs (2)	•	•	•
Mastic strip	•	•	•
Stainless steel hose clamps (2)	•	•	•
378 mm (1/10 gal.) injection cartridge	•	•	•
Stackable plungers (5)	•	•	•
Injection caps (2)	•	•	•
13 mm (1/2") O.D. tubing 4"	•	•	•
3 mm (1/8") O.D. tubing 6"	•	•	•
Fiberglass strips (2)	•	•	•
Funnel		•	•
"E" size bag of 4408 haplec blocking compound			•

3M™ SCOTCHCAST™ PRESSURE AND MOISTURE BLOCKING KITS



Plugging Under Pressure (PUP) Kit (Air Pressure Blocking) 4477 and 4477-R

PRODUCT NUMBER: **4477** PKG. (LBS.): 1 KIT (1.25) MIN. ORDER: 1 KIT UPC: 054007-31090

PRODUCT NUMBER: **4477-R** PKG. (LBS.): 1 KIT (1.11) MIN. ORDER: 1 KIT UPC: 054007-31933

This easy-to-use kit is a system that allows the craftsman to make a pressure block without cable line air pressure shutdown. The kit saves time in making a pressure block because it contains all the necessary components in a system package. The 4477-R kit is a replenishment kit that permits use of 4477 kit components that are removed after plug curing for other pressure block applications. The PUP kit's relief valve and bypass tube automatically equalize pressure to 5 p.s.i. on both sides of the injection point. The system's injection valve permits compound injection without loss or mess while the cross fitting permits the addition of an "F" valve for adding buffered air or monitoring. The 4477-R kit includes 60 plungers for SCS usage.



Single Cartridge System Kit 4407 Series

PRODUCT NUMBER: **4407/SCS** PKG. (LBS.): 1 KIT (13.90) MIN. ORDER: 1 KIT UPC: 054007-31107

PRODUCT NUMBER: **4407/SCS-D** PKG. (LBS.): 10 EACH (23.10) MIN. ORDER: 10 EACH UPC: 054007-31094

PRODUCT NUMBER: **4407/SCS-IG** PKG. (LBS.): 10 KITS (11.30) MIN. ORDER: 10 KITS UPC: 054007-31768

The Scotchcast cable blocking system features a reusable injection cartridge which can be used for as many as six injections of Scotchcast 4407 compound, or up to 72 oz. (2 kg) of compound, depending on the size of the block. The single cartridge system can be used on both open and direct sheath applications, on vertical as well as horizontal blocks, and on plugs made under pressure. The cable blocking system comes with an injection gun.

The empty cartridge is screwed onto the injection port of the sheath or 4530 closure. After the compound is poured, a plunger is inserted, the injection gun is placed on the cartridge, and the compound is injected into the sheath or the closure. This is repeated using the same cartridge until the block is completed or six plungers have been used.

KIT COMPONENTS

KIT PRODUCT NUMBERS	4407/SCS KIT-IG	4407/SCS-D SINGLE CARTRIDGE SYSTEM	4407/SCS-IG DIRECT SHEATH INJECTION KIT
Plungers	1	2	12
Cartridge	1	1	6
4478 flanges	1		6
Petcocks	1	1	6
"B" bag 4407	1		—
"D" bags 4407	0	1	6
W9 channeling wedges	6		100
4470 injection gun	0		1

3M™ SCOTCHLOK™ SHIELD BONDING PRODUCTS

Shield Bond Connector (No Tabbing Required) 4460

PKG. (LBS.): 100 EACH (4.10) MIN. ORDER: 100 EACH UPC: 054007-30193

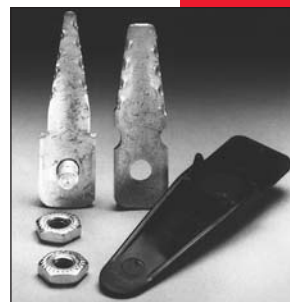
The 4460 shield bond connector is designed to make a stable, low-resistance electrical connection between the shield of a communications cable and a conductor such as a strap, bar, or wire. The connector consists of four parts: lower member (base), upper member (top), and two securing nuts (lock nuts). The base teeth are set at such an angle as to permit easy insertion under the cable shield. Top and base members are made of tin-plated tempered brass, slightly curved to exert a continuous spring force on sheath and shield after clamping.



Shield Bond Connector 4460-S

PKG. (LBS.): 100 EACH (4.00) MIN. ORDER: 100 EACH UPC: 054007-30625

The 4460-S shield bond connector is designed to make a stable, low-resistance electrical connection between the shield of a communications cable and a conductor such as a strap, bar, or wire. The connector consists of five parts: lower member (base), upper member (top), two securing nuts (lock nuts) and a plastic shoe to aid connector insertion and to protect conductors. The base teeth are set at such an angle as to permit easy insertion under the cable shield. Top and base members are made of tin-plated tempered brass, slightly curved to exert a continuous spring force on sheath and shield after clamping.



Shield Bond Connector 4460-D

PKG. (LBS.): 100 EACH (3.60) MIN. ORDER: 100 EACH UPC: 054007-71217

The 4460-D shield bond connector is a downsized version of the 4460 shield bond connector. Its small size makes it an excellent choice for cables of 100-pair or less. Its current-carrying capacity is equal to or better than aluminum-shielded cables of 100-pair or less and can be used on all cable with 20.3 mm (0.8") or smaller O.D.



Shield Bond Connector 4460-DS

The 4460-DS connector is similar to 4460-D shield connector and is supplied with a small piece of pair saver to aid connector insertion and to protect conductors. This connector is suitable for a cable size of 100 pair or less.



PRODUCT REFERRAL GENERATOR

Closures pg. 35

3M™ SCOTCHLOK™ SHIELD BONDING PRODUCTS



Shield Bond Connector Assembly 4460-D/FO

PKG. (LBS.): 100 EACH (7.95) MIN. ORDER: 100 EACH UPC: 054007-92757

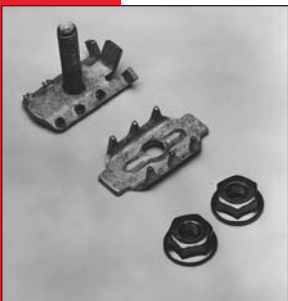
The 4460-D/FO shield bond connector is specifically designed to meet the bonding needs of fiber optic cables that contain metallic or fiberglass strength members. The connector is a version of the 4460-D connector assembly which utilizes two additional plates to capture and secure the strength members. Its current-carrying capacity is equal to or better than aluminum-shielded fiber optic cable and can be used on all cables with 20.3 mm (0.8") or smaller O.D.



Shield Bond Connector (Designed Specifically For C.A.C.S.P. Cable) 4462

PKG. (LBS.): 500 EACH (19.40) MIN. ORDER: 500 EACH UPC: 054007-17302

The 4462 shield bond connector is designed to make a stable, low resistance electrical connection between the shield of a communications cable and a conductor such as a strap, bar, wire or braid.



Shield Bond Connector 4462-FN

PKG. (LBS.): 500 EACH (22.10) MIN. ORDER: 500 EACH UPC: 054007-63990

The 4462-FN shield bond connector includes flanged nuts.

Shield Bond Connector 4462-SN

PKG. (LBS.): 500 EACH (23.60) MIN. ORDER: 500 EACH UPC: 054007-71291

The 4462-SN shield bond connector is an improved version of the popular 4462 shield bond connector, with a longer and stronger stud to easily accommodate two bond braids (with eyelets). It is specifically designed to supply greater pullout strength than the 4462 shield bond connector. The nuts have been deepened, too, making them much easier to hold and tighten. The 4462-SN shield bond connector is also designed for use with coated cables and has superior electrical properties for the protection of data circuits.



Shield Bond Connector 4462-SNA

PKG. (LBS.): 500 EACH (23.80) MIN. ORDER: 500 EACH UPC: 054007-57157

The 4462-SNA has a longer stud, deepened nuts and an insulating shoe.



Service Wire Shield Connector 4463

PKG. (LBS.): 1000 EACH (8.60) MIN. ORDER: 1000 EACH UPC: 054007-17301

The 4463 service wire shield connector is designed to make a stable, low resistance electrical connection between the shield of a buried service wire and the ground stud of a house terminal box or other shield connector. The 4463 can be used on service wire with an O.D. up to 11 mm (0.45").

SHIELD BONDING PRODUCTS

3M™ Scotchlok™ Shield Bond Connector 4464

PKG. (LBS.): 1000 EACH (15.00) MIN. ORDER: 1000 EACH
UPC: 054007-30280

The 4464 shield bond connector is a strip of tin-plated brass, punched with mounting holes and two sets of sharp teeth. Each connector can join the shields of up to four two-pair service wires to a stud type shield connector. In addition to providing a stable, low-resistance electrical contact, the connector provides excellent strain relief and occupies a minimum of space. Each connector will accommodate up to four service wires with a shield diameter of up to 5.6 mm (0.21") or two service wires with a shield diameter up to 819 mm (0.35").



Scotch® Grounding Braid 25T

PRODUCT NUMBER: 25T-GB PKG. (LBS.): 1 ROLL (2.10) MIN. ORDER: 1 ROLL UPC: 054007-31102

This flat, tin-plated copper braid conductor is supplied for use with Scotchlok shield bond connectors. When clamped firmly, 25T braid provides low electrical resistance connections for dependable shield bonding, and its physical strength contributes to strain relief across spliced cables. 25T braid is 13 mm (1/2") wide, and is supplied in 7.6 m (25') rolls. Size: 13 mm x 7.6 m (1/2" x 25')

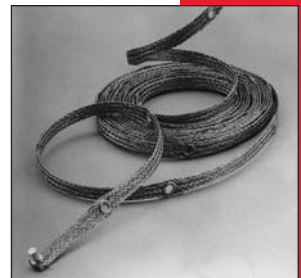


Scotch® Grounding Braid with Eyelets 25T

PRODUCT NUMBER: 25T-BBE3 EYELETS SPACED 78 MM (3") SIZE: 13 MM X 7.6 M (1/2" X 25')
PKG. (LBS.): 1 EACH (2.70) MIN. ORDER: 1 EACH UPC: 054007-32670

PRODUCT NUMBER: 25T-BBE6 EYELETS SPACED 156 MM (6") SIZE: 13 MM X 7.6 M (1/2" X 25')
PKG. (LBS.): 1 EACH (3.00) MIN. ORDER: 1 EACH UPC: 054007-32671

Provides low electrical resistance connections, contributes to strain relief across cables. Eyelets fit shield connector studs up to 6 mm (1/4") diameter. Size: 13 mm x 7.6 m (1/2" x 25'), eyelets spaced 76 mm (3")
Size: 13 mm x 7.6 m (1/2" x 25'), eyelets spaced 152 mm (6")



Scotch® Grounding Braid Dispenser Pack 25/4467

PKG. (LBS.): 5 PACKS (14.70) MIN. ORDER: 5 PACKS UPC: 054007-30561

The 25/4467 grounding braid dispenser pack is a combination of our dependable grounding braid and insulation sleeve in one convenient package. Equal lengths of each can be dispensed from the 7.6 m (25') roll. Size: braid 13 mm x 7.6 m (1/2" x 25'), sleeve 13 mm x 7.6 m (1/2" x 25') 25/4467 without eyelets



3M™ ARMORCAST™ SHEATH REPAIR PRODUCTS

Armorcast Structural Material

Armorcast structural material is a flexible fiberglass knit fabric strip saturated with black resin syrup. No heat is required in the installation process, just water. It forms a tough durable covering that cures in just 20 minutes. For use on pressurized, non-pressurized, polyethylene or lead sheathed cable.



Structural Material Bulk 4560

PRODUCT NUMBER: **4560-5** (BULK, 1.5 M (5')) PKG. (LBS.): 5 ROLLS (2.00)
MIN. ORDER: 5 ROLLS UPC: 051138-57719

PRODUCT NUMBER: **4560-10** (BULK, 3 M (10')) PKG. (LBS.): 5 ROLLS (3.00)
MIN. ORDER: 5 ROLLS UPC: 051138-57717

PRODUCT NUMBER: **4560-15** (BULK, 4.5 M (15')) PKG. (LBS.): 5 ROLLS (4.00)
MIN. ORDER: 5 ROLLS UPC: 051138-57718

Available in rolls of 1.5 m (5'), 3 m (10') and 4.57 m (15'), each 101.6 mm (4") wide. Each package contains five rolls and five pairs of gloves.



Sheath Repair Kit 4561

PKG. (LBS.) 1 KIT (3.75) MIN. ORDER: 1 KIT UPC: 051138-57720

Contains all products required to repair damaged cable sheath. Kit components are designed for use with Armorcast materials.

KIT CONTENTS

1 roll Armorcast material, 101.6 mm x 4.57 m (4" x 15')
1 roll Scotch® Tape VM, 101.6 mm x 3 m (4" x 10')
1 roll Scotch® Tape 50, 50 mm x 30 m (2" x 100')
1 pair gloves



PRODUCT REFERRAL GENERATOR

Dome Closures pg. 56
Better Buried Closures pg. 60

Foam-Sealed Closures pg. 58

SHEATH REPAIR PRODUCTS

Scotch® Tape Vinyl/Mastic VM

38 mm x 6 m (1-1/2" x 20')
PRODUCT NUMBER: **VM-1.5X20** PKG. (LBS.): 10 ROLLS (6.00) MIN. ORDER: 10 ROLLS
UPC: 054007-27575

101.6 mm x 3 m (4" x 10')
PRODUCT NUMBER: **VM-4X10** PKG. (LBS.): 10 ROLLS (11.40) MIN. ORDER: 10 ROLLS
UPC: 054007-27576

152 mm x 3 m (6" x 10')
PRODUCT NUMBER: **VM-6X10** PKG. (LBS.): 1 ROLL (2.00) MIN. ORDER: 1 ROLL
UPC: 054007-27577

559 mm x 3 m (22" x 10')
PRODUCT NUMBER: **VM-22X10** PKG. (LBS.): 1 ROLL (6.90) MIN. ORDER: 1 ROLL
UPC: 054007-27578



VM tape seals out moisture and protects against corrosion without the need for heating tools. Two tapes in one (vinyl and mastic)—VM tape is especially designed for cable sheath repair, splice case and load coil case protection, auxiliary sleeve and cable reel end sealing, drop wire insulating, conduit repair and protection of CATV components plus many other general taping applications.

VM tape is a rubber based mastic laminated to an all weather 0.18 mm (7 mil) vinyl, which provides double duty protection in one wrap. Four sizes to meet all possible applications are available; 38 mm – 559 mm (1-1/2" – 22") width.

3M™ SCOTCHCAST™ ACCESSORIES

PRODUCT NUMBER/ PACKAGING INFO

DESCRIPTION

4413-S

PKG. (LBS.): 8 KITS (11.35)

MIN. ORDER: 8 KITS

UPC: 054007-17442

Filled Cable Cleaning Kit

A specially formulated cleaning solvent for cleaning grease and flex-gel filling compound from filled core cable without damaging connectors, cable or individual conductors. One bag will clean both cable ends at splice point. Comes complete with the right amount of solvent sealed in the bag. No special tools are required. Virtually no personnel contact with the solvent or solvent vapors occurs during cleaning because of the unique packaging concept.

Kit contents include heat-sealed cleaning bag with solvent, pair gloves, puncture-protection bags (2).

For up to 200-pair cables.

4413-L

PKG. (LBS.): 4 KITS (11.00)

MIN. ORDER: 4 KITS

UPC: 054007-17443

Filled Cable Cleaning Kit

Same as above. For up to 600-pair cables.

4413-XL

PKG. (LBS.): 2 KITS (12.00)

MIN. ORDER: 2 KITS

UPC: 054007-17441

Filled Cable Cleaning Kit

Same as above. For 600-900 pair cables.

4413-SXL

PKG. (LBS.): 2 KITS (21.20)

MIN. ORDER: 2 KITS

UPC: 054007-68466

Filled Cable Cleaning Kit

Same as above. For 900-pair cables and more.

4414

PKG. (LBS.): 1 KITS (1.40)

MIN. ORDER: 1 KIT

UPC: 054007-57218

Filled Cable Cleaning Kit

Provides all the necessary materials for cleaning the filling compound from filled copper and fiber optic cables in an easy-to-transport kit. This kit includes 15 pads saturated in cleaning solvent, five scraper pads and 10 towels.

The specially formulated cleaning solvents are contained in premeasured portions on saturated pads for fast, easy, convenient solvent application to cable core after sheath has been removed. The solvent and wet pads effectively remove cable filling compound from conductors and connectors with no damage to either.

Kit contents/additional materials required include solvent saturated pads (15), 4435 sheath scuff, scraper pads (5), Scotch® Vinyl Tape 88T and towels (10).



PRODUCT REFERRAL GENERATOR

3M™ Scotchcast™ Sheath Scuff 4435 pg. 117

Scotch® Vinyl Tape 88T pg. 388

3M™ SCOTCHCAST™ ACCESSORIES

PRODUCT NUMBER/ PACKAGING INFO	DESCRIPTION
4415 PKG. (LBS.): 10 KITS (8.90) MIN. ORDER: 10 KITS UPC: 054007-57219	Service Wire Cleaning Kit Everything needed to clean troublesome filled service wire is included in the 4415 kit. Solvent saturated pads are individually bagged for convenience. No extra tools are needed, and an instruction sheet is included in each kit. Kit contents include towels (10), solvent saturated pads (10).
4435 PKG. (LBS.): 10 ROLLS (12.90) MIN. ORDER: 10 ROLLS UPC: 051144-13947	Sheath Scuff This flexible 80 grit, non-conductive, aluminum oxide strip is used to clean and rough up cable sheath. The clean, scuffed sheath greatly enhances the bond between the compound and sheath. Since the strip is 25.4 mm (1") wide, it encourages the craftsman to scuff around the sheath rather than along it, thus virtually eliminating moisture paths along the sheath, and also makes it easy to get into tight places. Size: 25.4 mm x 22.86 m (1" x 75') roll
4458 PKG. (LBS.): 10 ROLLS (3.60) MIN. ORDER: 10 ROLLS UPC: 054007-32560	Pair Saver Protect cable pairs from the sharp edges of the shield and template, while permitting standard bond connector installations. Size: 21.6 mm x 5.4 m (0.85" x 18') rolls
4458-W PKG. (LBS.): 10 ROLLS (7.90) MIN. ORDER: 10 ROLLS UPC: 054007-33629	Pair Saver Protect cable pairs from the sharp edges of the shield and template, while permitting standard bond connector installations. Size: 38 mm x 5.5 m (1.5" x 18') rolls
W-9 PKG. (LBS.): 1000 EACH (3.80) MIN. ORDER: 1000 EACH UPC: 054007-30229	Channeling Wedge Used in separating bundles of conductors when plugging cable. Made of flexible plastic, tapered at one end and grooved, the W-9 wedge separates conductors to ensure maximum penetration of the compound when forming a plug.



