3M™ Pressurized Closure System 2-Type 505

The 3M™ Pressurized Closure System 2-Type 505 is a complete, pressure-tight, re-enterable closure system for enclosing spliced connections of communications cable in a wide variety of applications. The 2-Type closure is offered in seven different diameter sizes (3-inch to 12-inch) and 13 different lengths (18.5” to 82.5”). Custom length closures up to 108 inches in length are available upon request.

The tools required for installation are a washer cutter tool and a torque wrench. This system allows for quick and easy re-entry of closures.

3M™ Pressurized Closure System 2-Type 505

Features

- Pressure tight
- Re-enterable
- Industry common tools used for assembly or re-entry
- Constructed of impact- and corrosion-resistant plastic
- Craft friendly
- Reusable
- More than 25-year field history
- Used in aerial, underground and manhole applications
- Custom lengths available
- Suitable for straight and branch splice configurations
- C, D and E sizes can handle more than 4200 pairs

3M™ Closure System 2-Type 505-Cover

Each Complete 2-Type Cover 505 Selection Contains:

1. Cover halves with installed sealing gasket
2. Protective gloves
3. 3M™ Sealing R-Tape
4. 3M™ Dry Towlette Wipe DTW
5. Alignment bars
6. Alignment bar hardware
7. Back cover clips
8. Flanged hex nut
9. Hex nuts
10. Pressure valve
11. 3M™ Cleaning Wipes CSSC20
12. External ground ribbon
13. Black cable ties
14. Bond braid with eyelets
15. White cable ties
16. Splice wrap

3M™ Pressurized Closure System 2-Type 505 Ordering Code

Covers

2 D 2 A

2-Type Series

Inside Diameter	
A	5 ¼” (134 mm)
B	7” (178 mm)
C	8” (203 mm)
D	9 ½” (241 mm)
E	12” (305 mm)

Material of Manufacture	
2	Standard
4	Fire Retardant

Overall Length of Cover	
AA	18 ½” (470 mm)
A	27 ½” (699 mm)
B	36” (914 mm)
C	44 ½” (1,130 mm)
D*	48 ½” (1,232 mm)
E*	52 ¾” (1,340 mm)
F*	57” (1,448 mm)
G*	61 ½” (1,563 mm)
H*	65 ½” (1,664 mm)
I*	69 ¾” (1,772 mm)
J*	74” (1,880 mm)
K*	78 ½” (1,994 mm)
L*	82 ½” (2,096 mm)

* Custom sizes

3M™ Closure System 2-Type 505-Endplates

Each Complete 2-Type Endplate 505 Selection Contains:

1. Endplate sections
2. Sheath scuff
3. 3M™ Sealing Tape RTW
4. Protective gloves
5. Cable diameter tape
6. Sealing washers
7. Additional longer cable retention clamps (depending upon endplate ordered)
8. 3M™ Sealing Tape RTE
9. 3M™ Scotchlok™ Shield Bond Connectors
10. Hose clamps
11. 3M™ Cleaning Wipes CSSC20

ACCESSORIES:

3M™ Washer Cutter Tool WCT11K
3M™ Spare Blade Kit WCB11K
3M™ Aerial Hanger Kit AH20K
3M™ Underground Closure Support Kit UCS10K
3M™ Plugging Spools
3M™ 2-Type Tool Kit 2-TYPE/TK
3M™ 4-Hole Spool Kit KWSP04
3M™ Universal Alignment Tool Kit UAT20K
3M™ Torque Wrench 2178-2T-LL-CLTK

TOOLS REQUIRED

(not included with cover or endplate kits)

- 3M™ Washer Cutter Tool WCT11K
- Speed Wrench
- Can wrench with 3/8" (9.5 mm) and 7/16" (11 mm) ends
- 1/2" (13 mm) and 7/16" (11 mm) deep wrench sockets
- 3" (76 mm) socket extender
- Screw driver
- Snips
- Knife
- Tabbing shears

3M™ Pressurized Closure System 2-Type 505 Ordering Code

Endplates

2 D 2 -1E

2-Type Series

Inside Diameter	
A	5 ¼” (134 mm)
B	7” (178 mm)
C	8” (203 mm)
D	9 ½” (241 mm)
E	12” (305 mm)

Material of Manufacture	
2	Standard
4	Fire Retardant

Number of Cable Entries in Endplate	
1E	1 Cable
2E	2 Cables
3E	3 Cables

3M™ Closure System 2-Type 505-Cover Selection

Determine number of cable pairs, splice bundle diameter and sheath opening required. Use the proper ordering code, from this table, to indicate your cover selection.

Series Number Inside Diameter, Inches (mm)		2A2 5 1/4" (134)	2B2 7" (178)	2C2 8" (203)	2D2 9 1/2" (241)	2E2 12" (305)
Overall Length	**Sheath Opening**					
18 1/2" (470)	10" (254)	**2A2AA**	**2B2AA**	2C2AA	2D2AA	2E2AA
27 1/2" (699)	19" (483)	**2A2A***	**2B2A***	**2C2A***	**2D2A***	**2E2A***
Maximum number of cable pairs [1]		600	1200	1800	3600	4200
36" (914)	27 1/2" (699)	2A2B*	**2B2B***	**2C2B***	**2D2B***	**2E2B***
44 1/2" (1130)	36" (914)	2A2C*	**2B2C***	**2C2C***	**2D2C***	2E2C*
48 1/2" (1232)	40" (1016)	2A2D	2B2D	2C2D	2D2D	2E2D
52 3/4" (1340)	44 1/4" (1124)	2A2E	2B2E	2C2E	2D2E	2E2E
57" (1448)	48 1/2" (1232)	2A2F	2B2F	2C2F	2D2F	2E2F
61 1/2" (1563)	53" (1346)	2A2G	2B2G	2C2G	2D2G	2E2G
65 1/2" (1664)	57" (1448)	2A2H	2B2H	2C2H	2D2H	2E2H
69 3/4" (1772)	61 1/4" (1556)	2A2I	2B2I	2C2I	2D2I	2E2I
74" (1880)	65 1/2" (1664)	2A2J	2B2J	2C2J	2D2J	2E2J
78 1/2" (1994)	70" (1778)	2A2K	2B2K	2C2K	2D2K	2E2K
82 1/2" (2096)	74" (1880)	2A2L	2B2L	2C2L	2D2L	2E2L

[1] Maximum number of cable pairs based on the following specifications: 2Y2 & 2X2 Series = 24/26 gauge cable using 25 pair modular connectors for straight, in-line, 1-bank splice (18 1/2" overall cover length, 10" sheath opening) 2A2, 2B2, 2C2, 2D2, & 2E2 Series. = 24/26 gauge cable using 25 pair modular connectors for straight, in-line, 2-bank splice (27 1/2" overall cover length, 19" sheath opening).
* Alignment bars provided in 505 cover kits. Bold type indicates standard covers.

Endplate Selection

Number of Cable Openings/Endplate		1	2		3			9	12	18	27	36	42
Ordering Code		***1E**	***2E**		***3E**			***9E or S**	***12E or S**	***18E or S**	***27E or S**	***36E or S**	***42E[1]**
2-Type Endplate Cable Entrance Configuration		**A**	**A**	**B**	**A**	**B**	**C**						
Series	**Diameter In.**	**(mm)**	**Maximum Cable Outside Diameter**						**Cable Range Outside Diameter**					
2A2-(*)	5 1/4"	(134)	2.2" (56)	1.6" (41)	1.3" (33)	N/A	N/A	N/A	.88" - 1.1"	N/A	N/A	N/A	N/A	N/A
2B2-(*)	7"	(178)	3.4" (86)	2.2" (56)	2.2" (56)	2.2" (56)	1.0" (25)	1.0" (25)	N/A	.88" - 1.1"	N/A	N/A	N/A	N/A
2C2-(*)	8"	(203)	3.4" (86)	2.8" (71)	2.8" (71	2.8" (71)	1.6" (41)	1.6" (41)	N/A	N/A	.88" - 1.1"	N/A	N/A	N/A
2D2-(*)	9 1/2"	(241)	3.4" (86)	3.4" (86)	3.4" (86)	3.4" (86)	2.2" (56)	2.2" (56)	N/A	N/A	.88" - 1.1"	.88" - 1.1"	.88" - 1.1"	.88" - 1.1"
2E2-(*)	12"	(305)	N/A	4.4" (112)	4.4" (112)	4.0" (102)	3.4" (86)	3.4" (86)	N/A	N/A	N/A	.88" - 1.1"	.88" - 1.1"	.88" - 1.1"

[1] Tip cable diameters other than cable range shown may be special ordered.
[2] "E" designates solid endplate for new construction. "S" designates split endplate for existing or retrofit applications. 42E not available in split endplate configuration
NOTE: 2D2 series endplates may be used with 2E2 series covers.
NOTE: .88" - 1.1" = 22 mm - 28 mm

3M™ Closure System 2-Type 505 Ordering Information

To select the correct cover:
1. Determine number of cable pairs
2. Determine splice bundle diameter
3. Determine sheath opening required

Example:
Number of cable pairs = 1200/24 gauge
Splice bundle diameter = 6" (152 mm)
Sheath opening = 19" (483 mm)
Cable configuration = 3-way
1200 pairs in/600 pairs out x 600 pairs out

To select the correct endplate:
4. Determine cable entrance configuration
5. Determine outside diameter of each cable
(Outside cable diameter must not exceed pre-sized opening in endplate)

Cable outside diameters:
1200 pairs = 2.6" (66 mm)
600 pairs = 1.9" (48 mm)

Correct codes to order one cover and two endplates.
1 each 2B2A Cover Assembly
1 each 2B2-1E Endplate Assembly
1 each 2B2-2E Endplate Assembly

A complete 2-Type Closure for enclosing spliced connections of communication cables requires the selection of one (1) cover assembly kit and two (2) endplate assembly kits from the same series. Note from the example that the cover series (2B2) matches the endplate series (2B2). This ordering procedure is an approximate guide only. Proper cover and endplate selection will vary with type of splice connectors and splicing method used.

3M™ Closure System 2-Type Accessories

3M™ Washer Cutter Tool Kit WCT11K

This kit is used for cutting 3M™ Universal Slotted Washers to match cables entering a closure.

3M™ Closure Tool Kit 2TYPE/TK

3M™ Torque Wrench 2178-2T-LL-CLTK

3M™ Underground Closure Support Kit UCS10K

This kit provides closure support on racks in manholes and vaults.

3M™ Aerial Hanger Kit AH20K

This kit is used for fastening a complete 2-Type closure to strand support wire in aerial applications.

3M™ Back Cover Clips BCC10K

These clips are used for holding the cover assembly to the endplates and for keeping endplates properly spaced and parallel during splicing.

3M™ Plugging Spools FX, GX, HX, JX, KX, LX, MX

These spools are used for plugging unused cable openings.

3M™ Universal Slotted Washers FS, GS, HS, JS, KS, LS, MS

3M™ Sealing Tape RTW

This tape is used to form collars for sealing cables in end plates.

3M™ Sealing Tape RC

This tape is used for sealing grooves.

3M™ Sealing Tape RTE

This tape is used to seal endplates.

3M™ Bonding and Grounding Kit

This kit is used for maintaining internal shield continuity and external grounding. A pressure valve provides for external flash testing and pressurization.

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80-6113-2876-8