

3M[™] Pressurized Closure System 2-Type 505

The 3M[™] Pressurized Closure System 2-Type 505 is a complete, pressure-tight, reenterable 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.

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™ Pressurized Closure System 2-Type 505



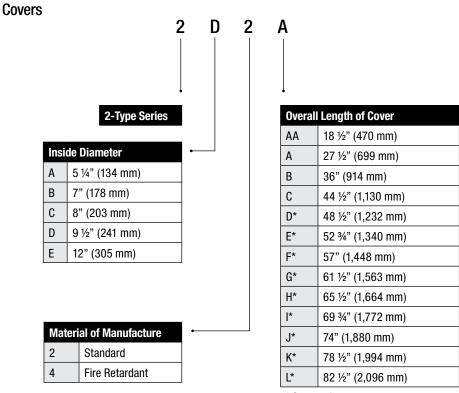
3M™ Closure System 2-Type 505-Cover



Each Complete 2-Type Cover 505 Selection Contains:

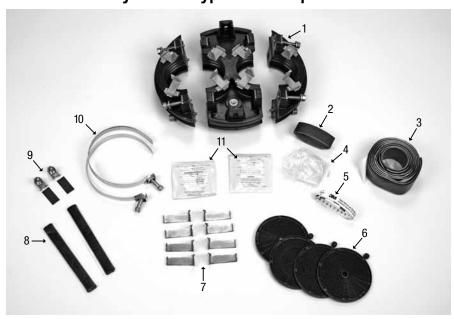
- 1. Cover halves with installed sealing gasket
- 2. Protective gloves
- 3. 3M[™] Sealing R-Tape
- 4. 3M[™] Dry Towlette Wipe DTW
- 5. Alignment bars
- 6. Alignment bar hardware
- 7. Back cover clips
- 8. Flanged hex nut
- 9. Hex nuts
- 10. Pressure valve
- 11. 3M™ Cleaning Wipes CSSC20
- 12. External 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



^{*} 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

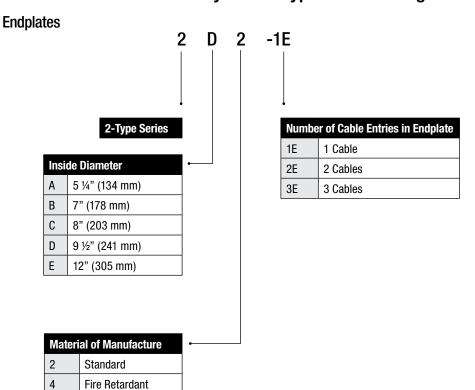
3M™ Torque Wrench 2178-2T-LL-CLTK

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



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 9¹/₂" (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
611/2" (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

[&]quot;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 ½," 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 ½," overall cover length, 19" sheath opening).

Endplate Selection

Lilupiat	.0 001	0011011												
Number of Cable Openings/Endplate		1	2	2	3			9	12	18	27	36	42	
Ordering Code		*1E	*2	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)		000	0000	00000				
		A	A	В	A	В	C							
Diameter			Maximum Cable Outside Diameter					Cable Range Outside Diameter						
Series	ln.	(mm)												
2A2-(*)	54"	(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-(*)	9111	(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"

[&]quot;Tip cable diameters other than cable range shown may be special ordered.

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
- 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 each1 each2 B2A Cover Assembly1 each2 B2-1E Endplate Assembly1 each2 B2-2E 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.

^{*} Alignment bars provided in 505 cover kits. Bold type indicates standard covers.

^{©24}É" 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 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.



 $3M^{\scriptscriptstyle\mathsf{TM}}$ 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. 3M and Scotchlok are trademarks of 3M Company. **Important Notice** All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M. Warranty; Limited Remedy; Limited Liability. This product will be free from defects in material and manufacture for a period of 12 months from the time of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether indirect, special, incidental or consequential regardless of the legal theory asserted.

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