

3M CMD Fiber Solutions

Fiber Dome Heat Shrink Closures:

FDC-HS-L5

FDC-HS-S4

June 17, 2007

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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5 & FDC-HS-S4



FDC-HS-L5 and FDC-HS-S4 with 2533
Trays and plastic slack storage basket

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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5 & FDC-HS-S4 - Description -

- Hermetically sealed fiber dome terminal closures designed for aerial, buried/underground above-grade and below-grade applications.
- Features an o-ring sealing system along with an innovative latching/locking mechanism for closure-sealing and utilizes the heat shrink technology for cable sealing.
- Equipped with a built-in fiber management systems which provides a separate area for storing, routing, protecting, & “expressing” buffer tubes, single & ribbon fibers.
- Hinged splice trays accept single fusion, single mechanical, and various mass fusion splices (4-, 6-, 8-, and 12-fiber ribbon).
- Accommodates all-dielectric or armored, loose buffer tube, slotted-core, or central tube core, single fiber or ribbon fiber (4, 6, 8, or 12) cables
- Available in two sizes: FDC-HS-L5 and FDC-HS-S4.
 - FDC-HS-L5 - one oval port for express cable applications and five round cable ports. Single fusion splice capacity 144; mass fusion splice capacity for 4-ribbon, 6-ribbon, 8-ribbon, & 12-ribbon fiber is 288, 432, 480, or 720, respectively.
 - FDC-HS-S4 - one oval port for express cable applications and four round cable ports. Single fusion splice capacity is 48; mass fusion splice capacity for 4-ribbon, 6-ribbon, 8-ribbon, & 12-ribbon fiber is 96, 144, 160, or 240, respectively.
- Air valve for flash testing.

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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5 & FDC-HS-S4 - Specifications -

Feature	FDC-HS-L5	FDC-HS-S4
Dimensions (L x D x W) mm (in)	510x180 (20.1x7.1)	460x160 (18.1x6.3)
Cable Entry Ports & Size	Round Ports: 5 10 to 20mm (0.4" to 0.76")	Round Ports: 4 10 to 20mm (0.4" to 0.76")
	Oval Ports: 1 10 to 25mm (0.4" to 1.0")	Oval Ports: 1 10 to 28mm (0.4" to 1.1")
Closure Material	Polypropylene	Polypropylene
Closure Sealing System	O-Ring & Clamping System	O-Ring & Clamping System
Cable Sealing System	All ports: Heat Shrink	All ports: Heat Shrink
Splice Tray	2533	2533
Number of Splice Trays	Discrete: 6	Discrete: 2
	Ribbon: 6	Ribbon: 2
Splice Capacity	Discrete: 144	Discrete: 48
	Ribbon: 4/6 ribbon fiber = 288/432 8/12 ribbon fiber = 480/720	Ribbon: 4/6 ribbon fiber = 96/144 8/12 ribbon fiber = 160/240
Grounding	# of Feed-Thru Lugs: 0 or 2	# of Feed-Thru Lugs: 0 or 1
Flash Test	Yes; 10 PSI (kPa)	Yes; 10 PSI (kPa)

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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5 & FDC-HS-S4

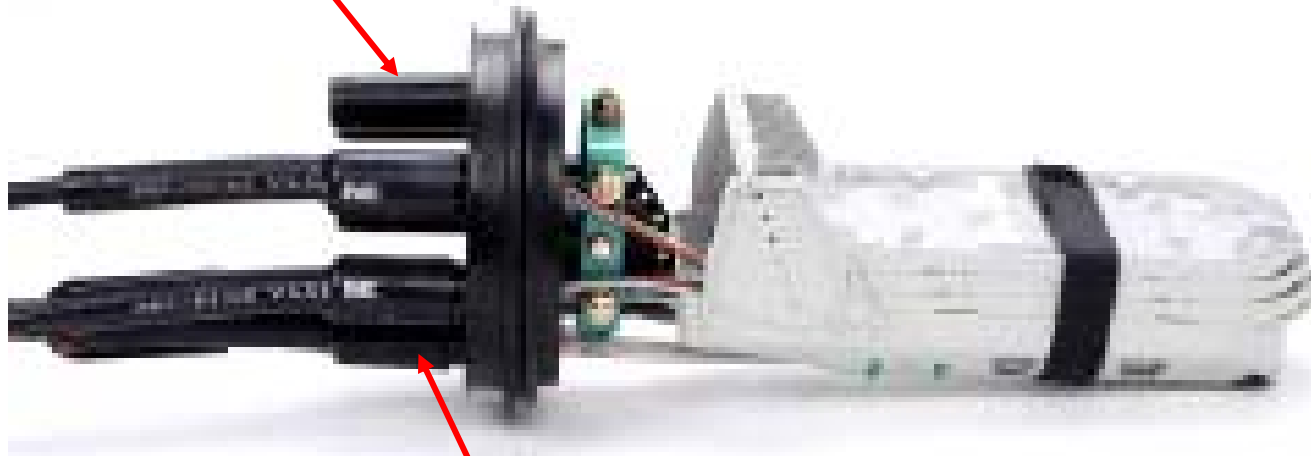
-Features & Benefits-

Features	Benefits
Constructed of highly chemical-resistance material	Can be deployed in all environments: aerial, buried, and underground
Built-in integral multipurpose fiber storage system	Provides separate area for storing, routing, protecting, and “expressing” buffer tubes, single and ribbon fibers
Innovative latching/locking o-ring closure sealing system	Allows for a simple, watertight closure-sealing and re-entry.
Heat shrink cable seal	High quality and reliable environmental sealing
Hinged tray design	Easy access to fibers/splices without removing other trays
Modular splice holder design	Accommodates various fiber splice types: single fiber and ribbon mass (4-fiber, 6-fiber, 8-fiber, and 12-fiber) fusion
Common accessories and installation procedures	Enhances productivity, reduces inventory of accessories (splice trays, cable entry kits), and decreases training time

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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5

Five round cable entry ports which accommodates 10 to 20mm diameter cables



Oval Port for express cable applications; accommodates 10 to 25mm diameter cables

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3M Fiber Dome Heat Shrink Closures: FDC-HS-S4

Four round cable entry ports which accommodates 10 to 20mm diameter cables

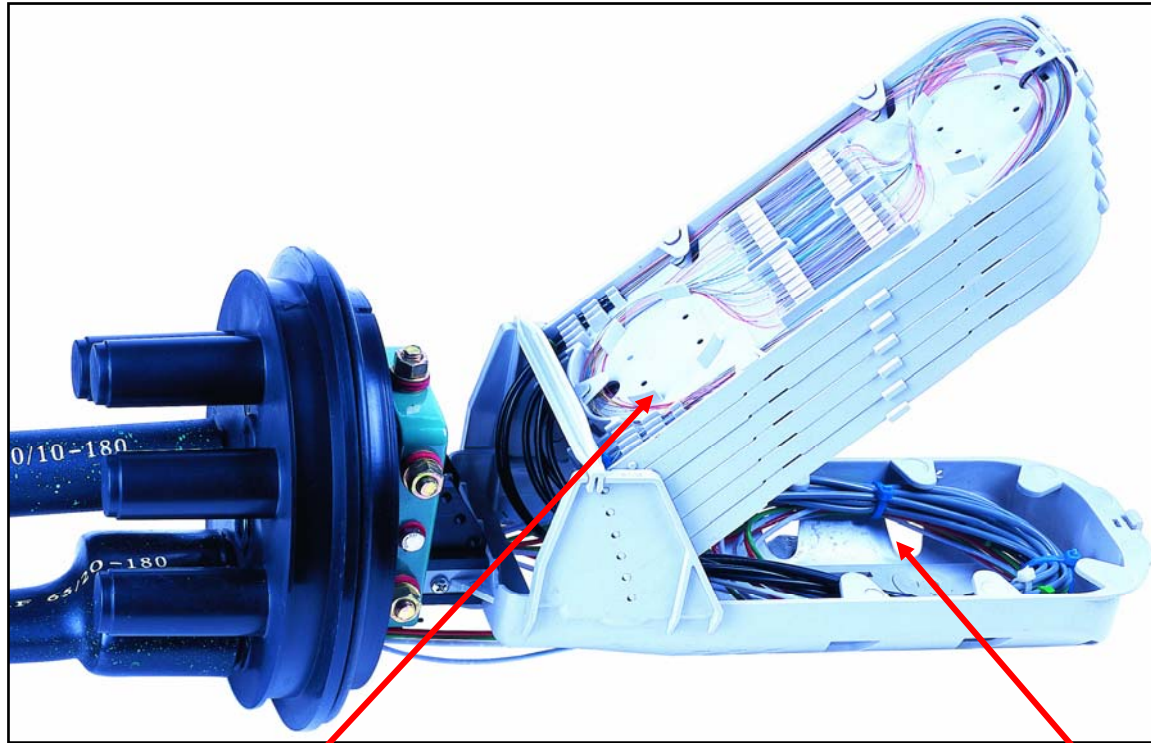


Oval Port for express cable applications; accommodates 10 to 28mm diameter cables

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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5

- Fiber Management with 2533 Tray & Plastic Slack Storage Basket -



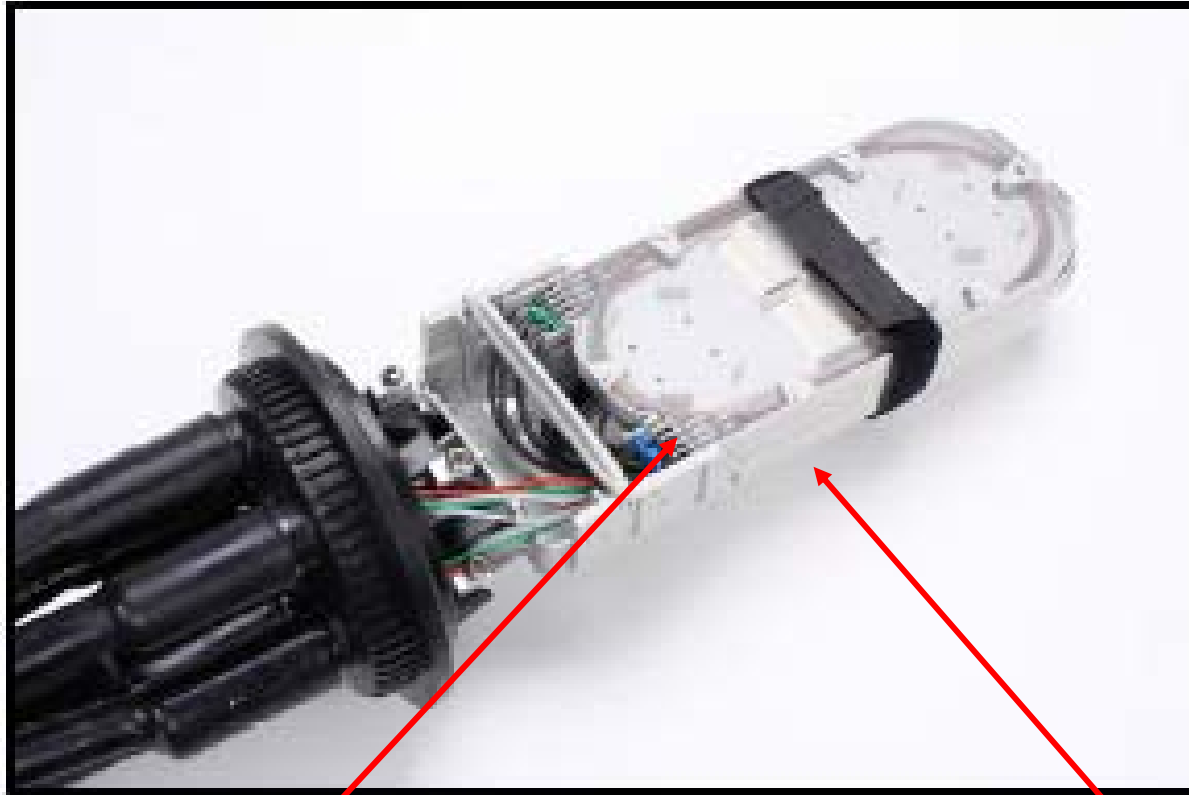
Hinged Tray (2533) which accommodates 24 single fusion, 12 mechanical, or 48, 72, 80, or 120 mass fusion splices (4-, 6-, 8-, or 12-fiber ribbons); maximum # of trays = 6

Slack storage area for LBT single fiber cable or central tube single or ribbon cables

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3M Fiber Dome Heat Shrink Closures: FDC-HS-S4

- Fiber Management with 2533 Tray & Plastic Slack Storage Basket -



Hinged Tray (2533) which accommodates 24 single fusion, 12 mechanical, or 48, 72, 80, or 120 mass fusion splices (4-, 6-, 8-, or 12-fiber ribbons); maximum # of trays = 2

Slack storage area for LBT single fiber cable or central tube single or ribbon cables

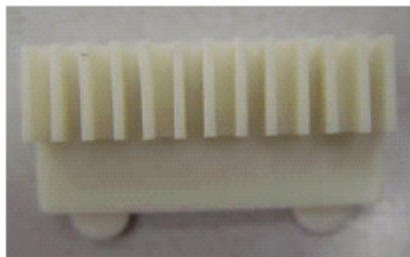
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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5 & FDC-HS-S4

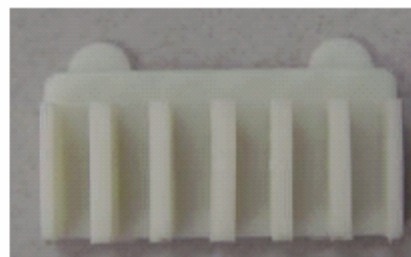
2533 Tray



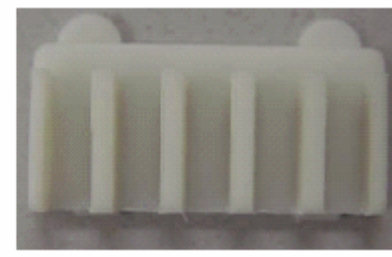
Splice Inserts



For single fusion
2.4mm x 60mm
sleeves



For 4- and 6-fiber
ribbon, and FibrLok
2529



For 8- and 12-fiber
ribbon

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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5 & FDC-HS-S4 - Splice Capacity -

Splice Tray Capacity				L5		S4	
Model #	Description	Splices Accommodated	Splice Capacity per Tray	Maxi. # of trays	Maxi. Splice Capacity	Maxi. # of trays	Maxi. Splice Capacity
2533	Hinged tray, fiber entry/exit at the bottom corner of the tray	Single Fusion (2.4x60mm) Single Mechanical (FibrLok) 4 - 6 Fiber Mass Fusion 8 - 12 Fiber Mass Fusion	24 12 48/72 80/120	6	144 72 288/432 480/720	2	48 24 96/144 160/240

Notes:

1. Ribbon splice capacity per tray is based on splice configuration (butt splice/inline splice)

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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5 & FDC-HS-S4 - Configuration Guide -

3M Fiber Dome Closure - Heat Shrink (FDC-HS) Configuration Guide

3M FDC-HS XX X XXXX X X X X

Closure Size & Ports

L5	510x180mm - 1 oval port (two 25mm cables), 5 round ports (20mm)
S4	485x160mm - 1 oval port (two 28mm cables), 4 round ports (20mm)

of Round Cable Termination Kits

0	None
2	2 cable termination kit included
4	4 cable termination kit included
6	6 cable termination kit included (only L5)

Splice Trays

00 - 06	# of splice trays
Type of Splice tray	
N	None
A	2533 Hinged Tray (for L5 & S4)
Type of Splice Holder	
A	single fusion 2.4mm/60mm
B	4 - 6 ribbon mass fusion
C	8 - 12 ribbon mass fusion

Flashing Valve

Y	Yes
N	No

Ground Bracket

A	Insulated
B	Non-Insulated

of Ground Lugs

0	None
1	1 - ground lug
2	2 - ground lug (L5 only)

Slack Storage Basket

N	No Basket
P	Plastic Basket (2533 tray only)

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3M Fiber Dome Heat Shrink Closures: FDC-HS-L5 & FDC-HS-S4 - Accessories -

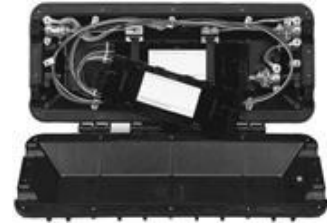
Stock #	Model #	Description
XS003840609	FDC-HS-OVAL-HSTUBE	FDC-HS OVAL PORT HS TUBE (for L5 & S4)
XS003840658	FDC-HS-RND-HSTUBE	FDC-HS ROUND PORT HS TUBE (L5 & S4)
XS003826558	2170S-2.4/60-HS-SLEEVES	2.4MM X 60MM SINGLE FIBER HEAT SHRINK SLEEVES
XS003854709	2170M-8/12-HS-SLEEVES	8 OR 12 RIBBON FIBER HEAT SHRINK SLEEVES
XS003854691	2170M-2/6-HS-SLEEVES	2 OR 6 RIBBON FIBER HEAT SHRINK SLEEVES
XS003826566	2170S-2.4/45-HS-SLEEVES	2.4MM X 45MM SINGLE FIBER HEAT SHRINK SLEEVES
XS003850608	2533-24-SF	2533 SPLICE TRAY, 24 SINGLE FUSION SPLICES
XS003850616	2533-72-MF-4/6C	2533 SPLICE TRAY, 48/72 4 - 6 RIBBON FIBER FUSION SPLICES
XS003850624	2533-120-MF-8/12C	2533 SPLICE TRAY, 80/120 8 - 12 RIBBON FIBER FUSION SPLICES
XS003855367	2179/FDCHS-AIR-VALVE	AIR VALVE FOR FLASHING 2179 & FDC-HS CLOSURES
XS003855375	2179/FDCHS-GND-LUG	GROUND LUG FOR 2179 & FDC-HS CLOSURES

ANTEC CLOSURE 144 CORE / ANTEC SPLICE TRAY FP-24

Item Code CLS-ANT-144C, CLS-ANT-ST-P-24

- Features** Easy to install and extremely durable
- Configuration: two piece hinged shell, in-line or butt-style closures
 - Maximum splice capacity: 288 single fusion splices or 36 mass Fusion splices (432 fibers)
 - Closure shell with pressurization valve, three cable sealing, retention and grounding/bonding kits, two 24-count single fusion splice trays and two aerial hanger brackets

Application Used to store, organize and protect single fusion or single mechanical splices in outside plant applications. Use in large-count aerial, underground, pedestal, or direct bury applications



CLOSURE, CFFO FOR CELCOM

Item Code CLS-CFFO

- Features**
- OPP-CFFO contains six (6) cable entry ports and is capable of containing 192 single fusion splices in splice capacity OPP-CFFO fiber splice trays
 - Contains maximum 6 pieces Splice Tray (12 Core – 32 Core) in CFFO Closure



CLOSURE RAYCHEM SPLICE 48C & 3M

Item Code CLS-400A4-S24-1-N, CLS-400B4-S24-2, 48 Core
CLS-400B4-S24-4, CLS-400B4-S24-6, 96 Core

- Features** It is suitable for all kinds of optical fiber cables
- Suitable for different environments (Pole/wall mount, aerial mount, rod mount and etc)
 - Suitable for any application of fiber optical cables
 - Dome and base are sealed up by the dome seal
 - The dome seal is a mechanical clamp which is easy both to open and to lock
 - There are 4 sub inlets, and 1 main inlet for the cable
 - Spliced Fiber Storage Capacity: Up to 96°C



Closure



Bill of Quantity

ACCESSORIES	QUANTITY (pcs)
B4 Tray	2
Cable tie 6"	20
Tube	20
1 NT Sealing	1