

## 3M<sup>™</sup> Fiber Dome Terminal Closures FDTC 08M and FDTC 08S Internal Drop Termination

The compact 3M<sup>™</sup> Fiber Dome Terminal Closures FDTC 08M and FDTC 08S are hermetically sealed fiber dome terminal closures for aerial, buried above-grade, and buried below-grade applications. These terminal closures are designed to meet the needs of almost anyone deploying FTTP, ITS, DAS & mobile backhaul networks.

The FDTC 08M and FDTC 08S accomodate various drop termination methods including 4, 6 or 8 SC/APC or SC/UPC factory-terminated, pigtail spliced, or field-terminated internal drop terminations.

These compact terminal closures require no special tools, which can help reduce tooling costs, and allows for ease of installation and re-entry into the terminal closure.

These terminal closures feature a fixed O-ring sealing system along with an innovative latching mechanism. This combination provides simple closure sealing and re-entry. Designed for butt, single or ribbon fiber applications, the FDTC 08M and FDTC 08S are equipped with an oval main cable port which accommodates two 20 mm (0.79 in.) all-dielectric or armored cables. Branch splice capacity for the FDTC 08M is 36 single and 108 mass fusion. Branch splice capacity for the FDTC 08S is 24 single and 72 mass fusion. The terminal closures FDTC 08M and FDTC 08S are Rural Development (RUS) Listed.

### Field or Pigtail Spliced Drop Terminations

For field terminated or pigtail spliced drop terminations, the FDTC 08M and FDTC 08S utilize the 3M External Cable Assembly Module (ECAM) built-in drop entry port system. The ECAM design allows true plug-and-play capability which may help reduce installation and labor costs because the drop preparation and installation are completed outside of the terminal closure body. Also, the built-in cable entry system allows the technician to add and remove drops from the terminal closures without disturbing previously installed drops.

### **Factory-Terminated Drop Terminations**

For factory-terminated drop terminations, the FDTC 08M and FDTC 08S utilize the 3M<sup>™</sup> External Cable Assembly Module (ECAM) FD Factory-Terminated Fiber Drop Cable. The 3M ECAM FD is a factory-terminated drop cable with SC connectors on one or both ends. It is available with SC/APC or SC/UPC connectors and in lengths ranging from 50 to 2000 feet (15 to 610 m). The innovative design of the ECAM FD drop cable allows the SC connector to be replaced with a field assembled connector thus allowing the drop cable to be salvaged if the SC connector is damaged. The

ECAM FD is shipped with a pulling sock to protect the drop and to allow the drop to be pulled through trees and conduit.



3M<sup>™</sup> Fiber Dome Terminal Closure FDTC 08M Internal Drop



3M<sup>™</sup> Fiber Dome Terminal Closure FDTC 08S Internal Drop



3M<sup>™</sup> 12 mm External Cable Assembly Module Cable Entry Port



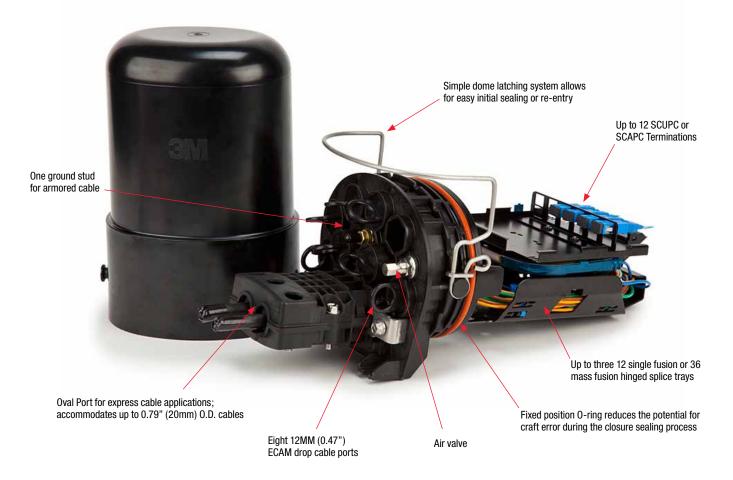
3M<sup>™</sup> External Cable Assembly Module (ECAM) FD Factory-Terminated Fiber Drop



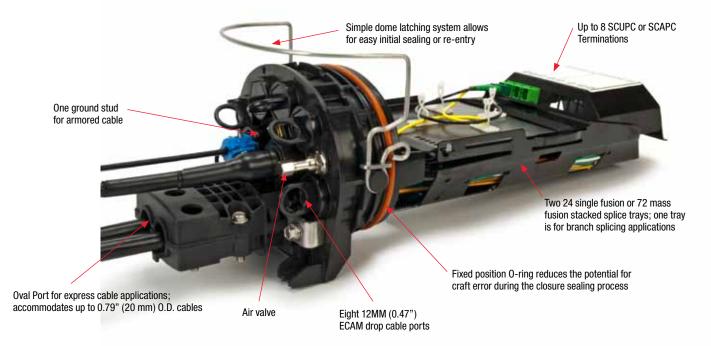
### 3M<sup>™</sup> Fiber Dome Terminal Closure FDTC 08M and 08S Internal Drop Termination

| Features  | Benefits   |
|---|--|
| Compact size  | Fits into small pedestals and handholes                                    |
| Constructed of highly chemical-resistant material   | Can be deployed in all environments: buried, underground and aerial        |
| ECAM port design with true plug-and-play capability | Cost effective: drop preparation is completed outside of the closure       |
| Built-in drop entry termination system              | Permits re-entry into the terminal closure without breaking the drop seals |
| No special tools required                           | Simple installation and re-entry   |
| Fixed O-ring seal                                   | Easy closure sealing and re-entry  |
| PLC splitter options                                | Can be equipped with 1x4 or 1x8 PLC splitters                              |

### 3M<sup>™</sup> Fiber Dome Terminal Closure FDTC 08M Internal Drop Termination



### 3M<sup>™</sup> Fiber Dome Terminal Closure FDTC 08S Internal Drop Termination



# 3M<sup>™</sup> External Cable Assembly Module (ECAM) Drop Cable Entry System 12 mm for Pigtail Spliced or Field Terminated Drops

Each drop has a separate seal (grommet and O-ring), strain-relief bracket, and strength member retention lug.



3M<sup>™</sup> 12 mm External Cable Assembly Module (ECAM) Cable Entry Port



3M<sup>™</sup> Fiber Dome Terminal Closure FDTC 08M and FDTC 08S Internal Drop Port Layout



3M<sup>™</sup> Fiber Splice Tray 2540 with 3M<sup>™</sup> Planar Light Circuit (PLC) 1 x 4 Splitter

### $3M^{\scriptscriptstyle \rm M}$ Fiber Dome Terminal Closure FDTC 08M Internal Drop Termination

#### **Specifications**

|                                      | FDTC 08M Field-Terminated or Pigtail Spliced  | FDTC 08M Factory-Terminated   |  |  |
|--------------------------------------|---|---|--|--|
| Dimensions:<br>(L x H x W) mm (in.)" | 385 x 182 x 152<br>(15.2 x 7.2 x 6.0)   | 385 x 182 x 152<br>(15.2 x 7.2 x 6.0)   |  |  |
| Main Cable Entry Ports & Size        | Oval Ports: 1 10 - 20 mm (0.39" - 0.79")  | Oval Ports: 1 10 - 20 mm (0.39" - 0.79")  |  |  |
| No. of Drop Terminations             | up to 8   | up to 8   |  |  |
| Drop Cable Size & Shape              | Round Drop: 4 - 12 mm (0.15 - 0.47")<br>Flat Drop: (0.18 - 0.32")                               | na  |  |  |
| Drop Installation Kit                | 12mm ECAM Kit with rubber grommet and O-Ring  | ECAM FD Drop Cables   |  |  |
| Connector Type                       | SC/UPC or SC/APC  | SC/UPC or SC/APC  |  |  |
| Number of Splice Trays               | Single: 4*<br>Ribbon: 4*  | Single: 4*<br>Ribbon: 4*  |  |  |
| Branch Splice Capacity               | Single: 36<br>Mass: 108   | Single: 36<br>Mass: 108   |  |  |
| Grounding                            | No. of feed-thru ground studs: 1<br>Additional grounding hardware to be<br>purchased seperately | No. of feed-thru ground studs: 1<br>Additional grounding hardware to be<br>purchased seperately |  |  |
| Flash Test                           | 5.8 PSI max (40 KPa)  | 5.8 PSI max (40 KPa)  |  |  |
|                                      |   |   |  |  |

\*One splice tray is dedicated to splicing distribution fibers to pigtails.

# $3M^{\mbox{\tiny M}}$ Fiber Dome Terminal Closure FDTC 08M Internal Drop Termination Branch Splice Capacity

| Product Number   | Product Description                                     | Splices Accommodated  | Splice<br>Capacity<br>per Tray | Max no.<br>of Trays | Max<br>Splice<br>Capacity |
|------------------|---|---|--------------------------------|---------------------|---------------------------|
|                  |   | Single fusion (45 mm)   | 12                             | 3                   | 36                        |
| 2540-12-SF/72-MF | Hinged splice tray, fiber entry/exit at top of the tray | Single mechanical (3M <sup>™</sup> Fibrlok <sup>™</sup> Splice) | 6                              | 3                   | 18                        |
|                  |   | Mass fusion   | 36                             | 3                   | 108                       |



3M<sup>™</sup> Fiber Optic Splice Tray 2540-12-SF/72-MF

### $3M^{\scriptscriptstyle \rm M}$ Fiber Dome Terminal Closure FDTC 08S Internal Drop Termination

### Specifications

|                                     | FDTC 08S Field-Terminated or Pigtail Spliced  | FDTC 08S Factory-Terminated   |  |  |
|-------------------------------------|---|---|--|--|
| Dimensions:<br>(L x H x W) mm (in.) | 539 x 182 x 152<br>(21.2 x 7.2 x 6.0)   | 539 x 182 x 152<br>(21.2 x 7.2 x 6.0)   |  |  |
| Main Cable Entry Ports & Size       | Oval ports: 1 for 2 express cables<br>8 - 20 mm (0.31 - 0.79 in.) 0.D.                          | Oval ports: 1 for 2 express cables<br>8 - 20 mm (0.31 - 0.79 in.) 0.D.                          |  |  |
| No. of Drop Terminations            | up to 8   | up to 8   |  |  |
| Drop Cable Size & Shape             | Round drop: 4 - 12 mm (0.15 - 0.47 in.) 0.D.<br>Flat drop: 8.5 x 4.3 mm (0.33 x 0.17 in.)       | N/A   |  |  |
| Drop Installation Kit               | 12 mm ECAM cable entry port<br>with rubber grommet and O-ring                                   | ECAM FD factory-terminated drop   |  |  |
| Connector Type                      | SC/UPC or SC/APC  | SC/UPC or SC/APC  |  |  |
| Number of Splice Trays              | Discrete: 2*<br>Ribbon: 2*  | Discrete: 2*<br>Ribbon: 2*  |  |  |
| Branch Splice Capacity              | Discrete: 24<br>Ribbon: 72  | Discrete: 24<br>Ribbon: 72  |  |  |
| Grounding                           | No. of feed-thru ground studs: 1<br>Additional grounding hardware to be<br>purchased seperately | No. of feed-thru ground studs: 1<br>Additional grounding hardware to be<br>purchased seperately |  |  |
| Flash Test                          | 5.8 PSI max (40 KPa)  | 5.8 PSI max (40 KPa)  |  |  |
|                                     |   |   |  |  |

\*One splice tray is dedicated to splicing distribution fibers to pigtails.

### **Branch Splice Capacity**

| Product Number   | Product Description   | Splices Accommodated  | Splice<br>Capacity<br>per Tray | Max no.<br>of Trays | Max<br>Splice<br>Capacity |
|------------------|---|---|--------------------------------|---------------------|---------------------------|
|                  | Other lack is a stress filter system (                                | Single fusion (45 or 60 mm)                                     | 24                             | 1                   | 24                        |
| 2538-24-SF/72-MF | Stackable splice tray, fiber entry/<br>exit at any corner of the tray | Single mechanical (3M <sup>™</sup> Fibrlok <sup>™</sup> Splice) | 12                             | 1                   | 12                        |
|                  |   | Mass fusion   | 72                             | 1                   | 72                        |



 $3M^{\scriptscriptstyle\rm TM}$  Fiber Optic Splice Tray 2538

# $3M^{\scriptscriptstyle\rm TM}$ Fiber Dome Terminal Closures FDTC 08M and FDTC 08S Internal Drop Termination

### **Ordering Information**

| Product Number                 | FGS Product Description  | 3M ID          | Min.<br>Order |
|--------------------------------|--|----------------|---------------|
| FDTC-08M-E-00N-01C-A-04-EPNA   | Fiber dome terminal closure with one 20 mm double cable port, eight 12 mm ECAM drop ports, one ground, one 2540 tray, four internal SC/APC pigtails and couplings                                    | 80-6113-8246-8 | 1             |
| FDTC-08M-E-00N-02C-A-05-EPNN-A | Fiber dome terminal closure with one 20 mm double cable port, eight 12 mm ECAM drop ports, one ground, two 2540 tray, five internal SC/APC pigtails and couplings, one 1x4PLC connectorized splitter | 80-6113-8118-9 | 1             |
| FDTC-08M-E-00N-01C-A-06-EPNA   | Fiber dome terminal closure with one 20 mm double cable port, eight 12 mm ECAM drop ports, one ground, one 2540 tray, six internal SC/APC pigtails and couplings                                     | 80-6113-8041-3 | 1             |
| FDTC-08M-E-00N-01C-A-08-EPNA   | Fiber dome terminal closure with one 20 mm double cable port, eight 12 mm ECAM drop ports, one ground, one 2540 tray, eight internal SC/APC pigtails and couplings                                   | 80-6113-8247-6 | 1             |
| FDTC-08M-E-00N-02C-A-09-EPNN-C | Fiber dome terminal closure with one 20 mm double cable port, eight 12 mm ECAM drop ports, one ground, two 2540 tray, nine internal SC/APC pigtails and couplings, one 1x8PLC connectorized splitter | 80-6113-8119-7 | 1             |
| FDTC-08M-E-00N-01C-A-06-DANN   | Fiber dome terminal closure with one 20 mm double cable port, eight 12 mm ECAM drop ports, one ground, one 2540 tray, six internal SC/UPC couplings  | 80-6113-8040-5 | 1             |
| FDTC-08S-E-00N-01A-A-04-EPNA   | Fiber dome terminal closure with one 20 mm double cable port, eight 12 mm ECAM drop ports, one ground, one 2538 tray, four internal SC/APC pigtails and couplings                                    | 80-6113-3622-5 | 1             |
| FDTC-08S-E-00N-01A-A-06-EPNA   | Fiber dome terminal closure with one 20 mm double cable port, eight 12 mm ECAM drop ports, one ground, one 2538 tray, six internal SC/APC pigtails and couplings                                     | 80-6113-3623-3 | 1             |
| FDTC-08S-E-00N-01A-A-08-EPNA   | Fiber dome terminal closure with one 20 mm double cable port, eight 12 mm ECAM drop ports, one ground, one 2538 tray, eight internal SC/APC pigtails and couplings                                   | 80-6113-3624-1 | 1             |
| FDTC-08S-G-00N-01A-B-02-DANA   | Fiber dome terminal closure with one 27 mm double cable port, one 12 mm ECAM drop port, two 18 mm ECAM drop ports, two grounds, one 2538 tray, two internal SC/UPC pigtails and couplings            | 80-6113-3796-7 | 1             |

## 3M<sup>™</sup> Fiber Dome Terminal Closure - FDTC 08 Configuration Guide

| Model            | Number                                      | FDTC                                  | XXX -                  | Х       | - XXX          | - XX | χ. | - X   | - XX     | - X                 | _  |
|------------------|---|---------------------------------------|------------------------|---------|----------------|------|----|-------|----------|---------------------|--|
|                  |   |                                       |                        |         |                |      |    |       |          |                     |  |
| FIBER DOME       | E SIZE                                      |                                       |                        |         |                |      |    |       |          | Split               | ers (Qnty. Type, Input/Output Fibers)              |
| <b>08M</b> 1     | 15.2" x 7.2" x 6.0" (385.0mm x              | 182.0mm x 151.0mm); mid               | span application       |         |                |      |    |       |          | A                   | 1, 1x4 PLC, Input Spliced/Output<br>Connectorized  |
| <b>08S</b> 2     | 21.2" x 7.2" x 6.0" (539.0mm x              | 182.0mm x 151.0mm); mid               | span application       |         |                |      |    |       |          | в                   | 1, 1x4 PLC, 250µm Input/Output Fibers              |
| 08ME 1           | 13.0" x 7.2" x 6.0" (330.0mm x 1            | 82.0mm x 151.0mm); end o              | of span application    |         |                |      |    |       |          | C                   | 1, 1x8 PLC, Input Spliced/Output                   |
| 10SE 1           | 19.3" x 10.1" (485.0mm x 255.0              | mm); end of span applicatio           | n                      |         |                |      |    |       |          |                     | Connectorized                                      |
| Base Port C      | Configuration                               |                                       |                        |         |                |      |    |       |          | D                   | 1, 1x8 PLC, 250µm Input/Output Fibers              |
|                  | External Adaptor (HFOC) ports, 2<br>midspan | 2-12mm branch cable port              | s, 20mm double cabl    | e port/ |                |      |    |       |          | E                   | 1, 1x16 PLC, Input Spliced/Output<br>Connectorized |
| <b>C</b> 8 - E   | External Adaptor (HFOC) ports, 2            | 20mm double cable port/k              | it; midspan            |         |                |      |    |       |          | F                   | 1, 1x16 PLC, 250µm Input/Output Fibers             |
| E 8 - 1          | 2mm ECAM ports, 20mm doub                   | le cable port/kit; midspan            |                        |         |                |      |    |       |          |                     |  |
| F 10 -           | 12mm ECAM ports with one EC                 | CAM-12MM kit; end of spa              | n                      |         |                |      |    |       |          |                     |  |
| G 1 - 1          | 2mm ECAM port, 2 - 18mm EC                  | AM ports, 27mm double c               | able port/kit; midspa  | n       |                |      |    |       | Conn     | ector Ty            | 00   |
|                  | External Adaptor (HFOC) ports, 2<br>of span | 2 - 12mm branch cable po              | rts, 12mm cable port   | /kit;   |                |      |    |       | NN       | Non                 | e  |
| J 8 - E          | External Adaptor (HFOC) ports,              | 12mm cable port/kit; end o            | of span                |         |                |      |    |       | EP       |                     | APC, single mode                                   |
| <b>K</b> 7 - 1   | 8mm ECAM ports with one ECA                 | AM-18MM kit; end of span              |                        |         |                |      |    |       | DW       |                     | APC single mode                                    |
| ECAM Drop        | Kits  |                                       |                        |         |                |      |    |       | DA<br>DV |                     | UPC single mode<br>UPC single mode                 |
| <b>00-08</b> # 0 | of ECAM kits                                |                                       |                        |         |                |      |    |       |          | nal Ada             | •  |
| Type of ECA      | M Drop Kit                                  |                                       |                        |         |                |      |    |       | N        | Non                 |  |
| N No             | one   |                                       |                        |         |                |      |    |       | A        |                     | ernal SC Adapter (HFOC)                            |
| EC               | AM-12MM-FLAT-US for flat dro                | op cables; (25 lb pullout)            |                        |         |                |      |    |       |          | Pigtail S           | ,  |
| EC.              | AM-12MM-RND-5/8MM for 5 t                   | o 8mm round drop cables;              | (> 25 lb pullout)      |         |                |      |    |       | N        |                     | Applicable   |
| J EC.            | AM-12MM Universal for round                 | or flat drop cables; (> 25 l          | b pullout)             |         |                |      |    |       | Α        |                     | μm tight buffer tube, 1 meter                      |
| M EC.            | AM-12MM-MF for Miniflex con                 | duit                                  |                        |         |                |      |    |       | в        |                     | n yellow jacketed cable, 1 meter                   |
| Splice Tray      | /\$   |                                       |                        |         |                |      |    |       | С        | 250                 | µm ribbon to 900µm fanout, 3 meters                |
| 0-6 # of         | f splice trays; see terminal closu          | ures specs for type of tray           | and maximum # of tr    | ays.    |                |      |    |       |          |                     |  |
| Type of Spl      | lice Tray                                   |                                       |                        |         |                |      |    |       |          |                     |  |
| N Non            | 10  |                                       |                        |         |                |      |    | Conne | ctors    |                     |  |
|                  | 8-24-SF/72-MF; accommodate<br>FDTC 08S)     | es 12 2529 3M Fibrlok <sup>™</sup> Sp | lices, 24 single or 72 | mass    | fusion splices |      |    |       |          | connecto<br>Applica |  |
| <b>B</b> 253     | 9-12-SF; accommodates 12 sir                | igle fusion splices (for FDT          | C 08S, 08M, & 08ME     | E)      |                |      |    | DS    |          |                     | I Drop Termination                                 |
| <b>C</b> 254     | 0-12-SF/36-MF; accommodate                  | es 12 single or 36 mass fu            | sion splices (for FDTC | 08S, 0  | 08M, & 08ME    |      |    |       | 200      | - photo             | - F  |
| Ground Leg       | 19  |                                       |                        |         |                |      |    |       |          |                     |  |
| N Non            |   |                                       |                        |         |                |      |    |       |          |                     |  |
|                  | ND Lug                                      |                                       |                        |         |                |      |    |       |          |                     |  |
|                  |   |                                       |                        |         |                |      |    |       |          |                     |  |

B 2 GND Lugs (for FDTC-08S-G only)

### 3M<sup>™</sup> Fiber Dome Terminal Closures FDTC 08M and FDTC 08S Internal Drop Termination

#### Accessories

| Product Number              | Product Description   | 3M ID          | Minimum Order |
|-----------------------------|---|----------------|---------------|
| 2170                        | Fiber Optic Splice Sleeve   | 80-6102-8138-0 | 50            |
| 2171                        | BPEO Fiber Optic Splice Sleeve  | 80-6111-4669-9 | 50            |
| 4460-D                      | 3M <sup>™</sup> Scotchlok <sup>™</sup> Shield Bond connector  | 80-6104-1486-6 | 100           |
| 4460-D/F0                   | 3M <sup>™</sup> Scotchlok <sup>™</sup> Shield Bond Connector Assembly                                 | 80-6108-4444-3 | 100           |
| 2538-24-SF/72-MF            | Fiber Splice Organizer 2538, 24 Discrete or 72 Mass Fusion Splices, Stackable                         | 80-6113-1714-2 | 2             |
| 2539-12-SF                  | Fiber Splice Organizer 2539, 12 Discrete Fusion Splices, Hinged                                       | 80-6113-1715-9 | 2             |
| 2540-12-SF/36-MF            | Fiber Splice Organizer 2540, 12 Discrete Fusion or 36 Mass Fusion Splices, Hinged                     | 80-6113-1716-7 | 2             |
| ECAM-12MM                   | 12 mm ECAM Single Cable Entry Port  | 80-6130-1696-1 | 4             |
| ECAM-12MM-MF-US             | 12 mm ECAM Single Cable Entry Port for Miniflex Duct 8 mm   | 80-6113-3621-7 | 8             |
| ECAM-12MM-FLAT-US           | 12 mm ECAM Single Cable Entry Port for 1 or 2 Flat Cables   | 80-6113-2649-9 | 8             |
| ECAM-20MM-D                 | 20 mm ECAM Double Cable Entry Port  | 80-6113-2951-9 | 1             |
| ECAM-GND-6-AWG              | ECAM (18 mm, 20 mm, 27 mm) Cable Ground (6 AWG)   | 80-6113-1702-7 | 2             |
| ECAM-GND-14-AWG             | ECAM (18 mm, 20 mm, 27 mm) Cable Ground (14 AWG)  | 80-6113-1704-3 | 2             |
| FD-08-HH-1730               | FD 08 Handhole Mounting Bracket for 17"x 30" Channell & Strongwell                                    | 80-6113-1706-8 | 2             |
| FDT-08-PED-CH               | FD 08 Pedestal Mounting Bracket for 10" Channell Pedestal   | 80-6113-1720-9 | 2             |
| FDT-08-PED-CI               | FD 08 Pedestal Mounting Bracket for Charles Industries 8" Pedestal                                    | 80-6113-1721-7 | 2             |
| FD-08-AERIAL-SHB            | FD 08 Aerial Stand Mount Hanger Bracket   | 80-6113-1707-6 | 2             |
| SCAPC-900-COL1-4            | SC/APC 900µm Pigtail Kit, Colors 1-4  | 80-6113-2056-7 | 1             |
| SCAPC-900-COL5-8            | SC/APC 900µm Pigtail Kit, Colors 5-8  | 80-6113-2057-5 | 1             |
| SCAPC-900-COL9-12           | SC/APC 900µm Pigtail Kit, Colors 1-4  | 80-6113-2058-3 | 1             |
| FDST/FDT-08M-<br>AERIAL-SHB | Aerial Strand Mount Hanger Bracket for FDST 08 & FDT 08M  | 80-6113-3206-7 | 3             |
| FDST/FDT-08-POLE/<br>PED-HB | Pole Mount, Wall Mount, BD4,BD5, Channel MAH100 Pedestal Mount Bracket for FDST 08, FDT 08M & FDT 08S | 80-6113-3205-9 | 3             |
|                             |   |                |               |

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