Splice Closure Selection Guide

harles
An Amphenol Company

INNOVATIVE ENCLOSED SOLUTIONS™

Charles Splice Closure Deployments

CENTRAL OFFICE (INDOOR)

FODC in splice cabinet

FODC in CMPH

CFAS aerial

Feeder

Distribution

Drop

NEIGHBORHOOD #1 (AERIAL PLANT)

FSDC drop aerial

FODC pole mount

BUSINESS / STRIP MALL (AERIAL PLANT)

MDU (AERIAL PLANT)

FSDC drop pole mount

NEIGHBORHOOD #2 (BURIED PLANT – ABOVE GRADE)

FSDC in BDO pedestal

FORC repair closure

FODC in BGE

NEIGHBORHOOD #3 (BURIED PLANT – BELOW GRADE)

FORC repair closure

FODC drop in BGE

FSDC drop in BGE

Fiber Sealed Drop Closure (FSDC)

Description

Charles fiber optic sealed drop closures provide a versatile and functional cost-effective solution for FTTH network connections to the subscriber. Although a compact size, there is ample room to express 144 fiber cable. The FSDC series closures are fully sealed units which can be mounted on a strand, a pole, or in a pedestal, as well as below grade to meet any installation topology. The closures have internal adapters to support up to 16 drop cables. An alternative housing is available with an OptiTap compatible H-adapter interface to allow use with plug & play hardened pre-terminated drops

Key Features

- Robust molded glass-filled propylene housing
- Up to 48 single fusion splices
- Store 12 buffer tubes (144 cable)
- Environmentally sealed and IP68 rated
- Aerial, pole, pedestal, or below grade mountable
- Easy access for installation, repair, & adds
- Fits splitters and optical tap trays for any architecture
- Cost effective compression grommet sealing

FSDC-16
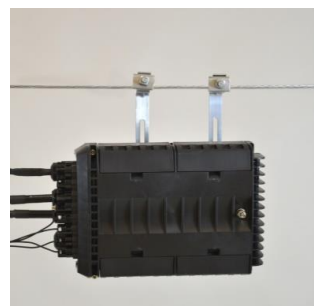for standard drops

FSDC-H
for hardened drops

Specifications

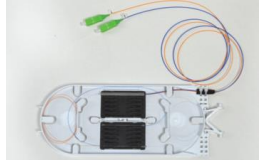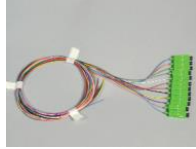| Parameter	FSDC-16	FSDC-H
Use case	Use with standard drops	Use with hardened drops
Dimensions: L x W x H	15" x 9.6" x 5.1" (380 x 245 x 130 mm)	14.1" x 9.6" x 5.1" (350 x 245 x 130mm)
Weight	10 lb. (4.5 kg)	
Feed cable	Dual port : 0.315" – 0.689" OD (8 – 17.5 mm)	
Branch cables	2 ports: 0.315" – 0.689" OD (8 – 17.5 mm)	N/A
Drop port cables	16 drop ports 3mm, 5mm, 7mm, or flat drop grommets	8 OptiTap compatible hardened ports
Adapters	Internal 16 SC adapter panel	N/A
Splices	Up to 48 splice with two 24 splice 4"x 6" trays or four 12 splice 5" x 4" trays	
Mounting	Aerial, pole, pedestal, or below grade	
Rating	IP68	

Optical Splitters and Components for FSDC

Charles Fiber Splitter Trays (CFST) can be installed in splice closures for distributed splice passive optical networks. They feature an operating wavelength of 1260-1650 nm, and are GR-1221-CORE and GR-1209 CORE compliant. In additional to PLC optical splitters, Charles also offers optical taps in splice tray formats for distributed tap networks. For PON networks where splitting is accomplished outside of the splice closures, Charles offers a complete line of fiber fan-out assemblies and color coded fiber pigtail kits.

Series	CFST-A Splitter	CFST-S Splitter	CFST-A Tap	Fiber Fan-out	Fiber Pigtail Kit
View					
Description	Splitter in 4" x 9" splice tray	Splitter in 4" x 6" splice tray	Optical tap in 9"x 4" splice tray	Fiber fan-out assembly	Color coded fiber pigtail kit
Platform compatibility	FSDC, CFAS	FSDC	FSDC, CFAS	FSDC	FSDC
Split ratios available	1x2, 1x4, 1x8, 1x16	1x2, 1x4, 1x8, 1x16	30 tap options available	12, 8, or 6 fiber	12, 8, or 6 fiber
Wavelength	1260 – 1650 nm	1260 – 1650 nm	1260 – 1650 nm	1260 – 1650 nm	1260 – 1650 nm
Fiber type	ITU-T G657 A.1	ITU-T G657 A.1	ITU-T G657 A.1	ITU-T G657 A.1	ITU-T G657 A.1
Input	250 µm fiber stub Option for SC	250 µm fiber stub Option for SC	250 µm fiber stub	250 µm fiber stub	250 µm fiber stub
Output	250 µm bare fiber or 900 µm SC/APC pigtails	250 µm bare fiber or 900 µm SC/APC pigtails	250µm bare fiber for through 900µm SC/APC pigtail drops	900 µm SC/APC pigtails	900 µm SC/APC pigtails
Size	9.5" x 4" x 0.5"	6" x 4" x 0.5"	9.5" x 4" x 0.5"	3 m length	3 m length
Compliance	GR-1209-CORE GR-1221-CORE	GR-1209-CORE GR-1221-CORE	GR-1209-CORE GR-1221-CORE	GR-20-CORE GR-326-CORE	GR-20-CORE GR-326-CORE

Fiber Optic Dome Closures (FODC)

Description

Charles Fiber Optic Dome Closures provide a versatile solution for splicing and protecting outdoor fiber connections in a familiar dome form factor. FODC units can be deployed to support a variety of topologies including strand or pole mountings, as well as below grade vault placements. These closures use compression grommet sealing technology to provide a robust and easy to use economical IP68 rated solution. Charles offers two sizes of FODC that accommodate up to 144 (FODC-A) or 288 (FODC-B) fiber splices.


Features

- Robust glass-filled polypropylene housing
- Two sizes with 144 or 288 splice capacities
- Optional 48 splice version with internal adapter frame
- Closures are aerial, pole, wall, or below grade mountable
- All splice trays and cable grommets included
- Environmentally sealed and IP68 rated

Specifications

Parameter	FODC-AS	FODC-A	FODC-B
Dimension L x W x H	18" x 7.5"/8.9" (455 x 190/225)	20.5" x 7.5"/8.9" (520 x 190/225mm)	24" x 9"/10.2" (610 x 228/260mm)
Feed cable	0.315" – 0.689" (8 – 17.5 mm)	0.315" – 0.689" (8 – 17.5 mm)	0.315" – 0.866" (8 – 22 mm)
Branch cables	4 ports: 0.315" – 0.689" (8 – 17.5 mm) Or multi-port drops: 3, 5, 7, or 8x4mm	4 ports: 0.315" – 0.689" (8 – 17.5 mm) Or multi-port drops: 3, 5, 7, or 8x4mm	6 ports: 0.315" – 0.689" (8 – 17.5 mm) & Or multi-port drops: 3, 5, 7, or 8x4mm
Splice capacity	36 w/splitter 48 w/out splitter	Up to 144 single fusion splices	Up to 288 single fusion splices
Splice Trays	splice tray & splitter splice tray Included	Four 36 splice capacity trays included	Six 48 splice capacity trays included
Mounting	Aerial, pole, pedestal, or below grade Mounting kits sold separately		
Rating	IP68		

FODC-AS   FODC-A   FODC-B

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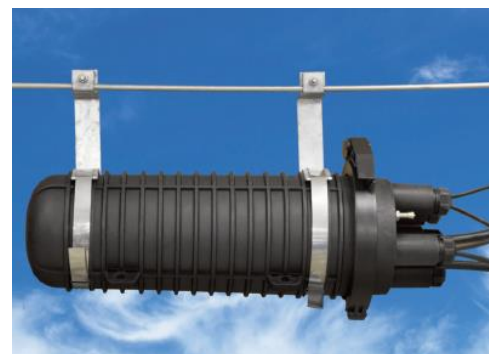
Description

Charles fiber optic round closures provide a versatile and functional cost-effective space saving solution for FTTH network connections. These compact closures are a space saving solution. The units can be direct buried and make an ideal solution as a repair closure. In addition the branch ports can be fitted with multi-cable grommets to splice in drops and can be used as a drop closure. These closures are fully sealed units which can be installed to meet any deployment requirement.

Key Features

- Robust glass filled polypropylene housing
- Compact size for limited space applications
- Environmentally sealed and IP68 rated
- 36 splice capacity
- Dual feed port and two branch ports
- Multi-cable grommets available to use as a drop closure

Specifications

Parameter	Specification
Dimensions: L x W x H	11.6 x 8.7 x 3.5 inch (295 x 220 x 90 mm)
Weight	4.4 lb. (2 kg)
Feed cable	0.393 – 0.669 inch OD (10 – 17 mm)
Branch ports	2 ports, grommets available for 8 - 12mm (0.472"- 0.669") and 12 - 17mm (0.315" - .472") cables Multi-cable grommets available for: 4x 5-7mm, 8x 3-5mm, or 2x flat drop cable
Splice capacity	3 trays, each with 12 single fusion splices (total 36 splice)
Cable sealing method	Compression grommets
Environmental rating	IP 68
Mounting	Below grade, direct buried, aerial, wall
Location marker	Optional EMS disk marker available

Description

Charles fiber aerial splice closures are a simple, and easy to use solution for mid-span splice and/or fiber drop requirements. Designed with separate compartments and openings for drop and splice provide user-friendly access and trade separation. The closure has the ability to accommodate loop-through, branch and butt splicing. CFAS are ideally suited for outside plant, cell sites, MSO or other environments where providers use aerial distribution. The units are free-breathing.

Key Features

- Robust molded lightweight housing
- Separated splice and drop compartments
- Available in either splice or drop configurations
- 12 drop ports with SC adapters in drop configuration
- Can be deployed with in-line or butt splice fiber splicing
- Free breathing
- Aerial strand mounting

Drop Side

Splice Side

Specifications

Parameter	Specification
Dimensions: L x W x H	8.5" x 25.3" x 5.4" (216 x 642 x 137 mm)
Feed cable	0.393 – 0.669 inch OD (10 – 17 mm)
Cable size accommodation	3 ports per end Port 1: 0.6" – 2.2" (15 – 55mm) Ports 2&3: 0.2" – 1.4" (5.0 – 35mm)
Drop ports	12 ports: 3-8mm or flat drop 0.118" – 0.315"
Adapters	Drop configuration comes with 12 SC/APC SC/UPC or LC options available
Splice trays	Drop side, up to two 4" x 6" 24 splice trays Feed side, up to two 9" x 4" 24 splice trays
Environmental rating	Free breathing
Mounting	Aerial strand (brackets included)

Standard Part Ordering Guide*

PART NUMBER	DESCRIPTION
FSDC	
FSDCBS16SA8L8MV	Fiber Sealed Drop Closure for use with hinged trays, 16 SC/APC adapters, 16 drop ports with 8 large & 8 med drop port grommets, includes one 4"x6" 24-splice tray and 24 splice protection sleeves
FSDCBS16SA16LMV	Fiber Sealed Drop Closure for use with hinged trays, 16SC/APC adapters, 16 drop ports with 16 large drop port grommets, includes one 4"x6" 24-splice tray and 24 splice protection sleeves
FSDCBS08HSCV	Fiber Sealed Drop Closure, for use with hinged trays, 8 hardened OptiTap compatible to SC adapters, one 4"x6" 24-splice tray and 12 splice protection sleeves
97-FSDCPLKTA	FSDC Pole mount kit with 2 pole bands
97-FSDCPLKTB	FSDC Pole mount kit for lag bolts with extended bottom bracket
97-FSDCAMKT	FSDC Aerial strand mount kit with 2 adjustable tap brackets
FODC	
FODCAS488SACF	Fiber Optic Dome Closure, A size with internal adapter frame with 8 SC/APC adapters, 36 splice, includes one splitter tray and one splice tray, grommets for common drop cable sizes, and 24 splice protection sleeves
FODCA144BBCEF	Fiber Optic Dome Closure, A size, dual feed port, 4 branch ports, 144 splice, four 36 splice trays, assorted grommet set for common cable sizes, and 36 splice protection sleeves
FODCB288BCDEF	Fiber Optic Dome Closure, B size, dual feed port, 6 branch ports, 288 splice capacity, six 48 splice trays, assorted grommet set for common cable sizes, and 48 splice protection sleeves
97-FODCPLKTA	FODC-A Pole mount kit with pole bands
97-FODCPLKTB	FODC-B pole mount kit with pole bands
97-FODCAMKT	FODC aerial strand mount kit
FORC	
FORC36CF5	Fiber Optic Round Closure, three 12 fiber splice trays, extra grommet kit for 5-7mm and flat drops, 36 splice protection sleeves
CFAS	
CFAS-C12SA001	Fiber aerial housing in terminal drop configuration 12 SC/APC Adapters, two feed side 4"x9" splice trays, strand mount brackets
CFAS-SPL01	Fiber aerial housing in splice configuration, no feed trays, one 4"x6" drop side splice tray, strand mount brackets

Additional configurations are available, please contact Charles with your requirements

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For more information and consultation on your specific FTTP projects, contact Charles' Fiber Enclosure Experts today!

Dependable Solutions. Superior Support.
• Field-proven and unequaled 24-hour technical support
• Individualized application consultation
• Superior quality (ISO 9001/TL 9000 registered)

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