Amphenol Charles Industries
SPLICE CLOSURE
SELECTION GUIDE

Protecting the connections that bring people together

Amphenol Charles Splice Closures (CSC) in FTTP Networks
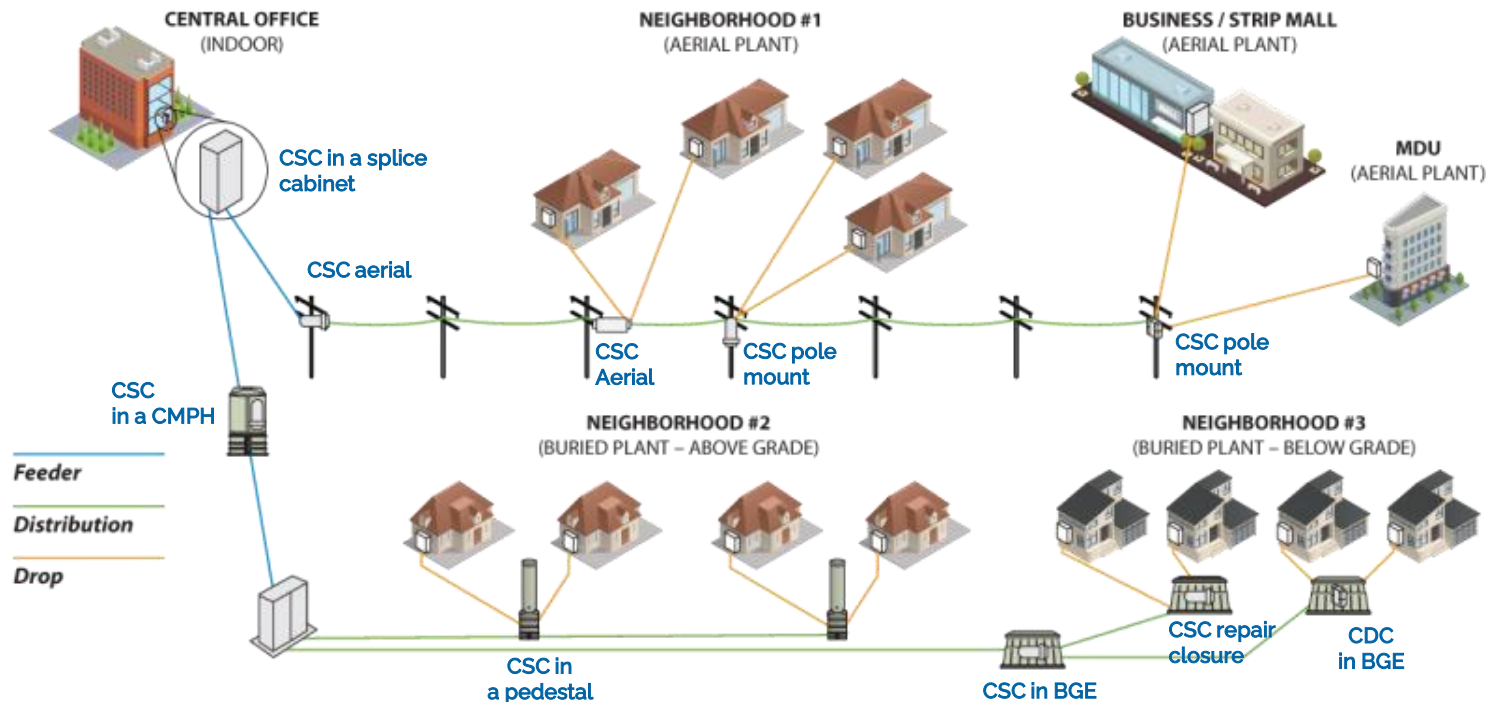
Fiber Sealed Drop Closure (FSDC) for SC/APC Drops

Amphenol Charles fiber sealed drop closures provide a versatile, functional, and cost-effective solution for FTTH network connections to the subscriber. There are two housing sizes available—standard and miniature. The standard size housing can store 144 fiber cables. A new housing option, FSDC-G, is available that has a lock down cover over the splice section to separate the splice and drop compartments. The FSDC-M miniature size is a compact unit ideal for a small hand-hole or pedestal.

Key Features

- Robust molded glass-filled propylene housing
- 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

Parameter	FSDC-16	FSDC-G	FSDC-Mini
Use case	SC drops	Separated Splice and Drop Sections	Use with SC drops
Dimensions L x W x H	15" x 9.6" x 5.1" (380 x 245 x 130 mm)		10.1" x 6.6" x 3.4" (257 x 168 x 86 mm)
Feed cable	Dual port : 0.315" – 0.689" OD (8 – 17.5 mm)		Dual port : 0.315" – 0.689" (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 (24 port option) 3mm, 5mm, or flat drop		8 drop ports 3mm, 5mm, or flat drop
Adapters	16 SC/APC adapters	4, 8, 16 SC adapters	Internal 8 SC panel
Splices	Up to 48	Up to 48	Up to 24
Splitters	Optional 1x2, 1x4, 1,8 or 1x16		Optional 1x2, 1x4, or 1x8
Mounting	Aerial, pole, pedestal, or below grade		
Rating	IP68		

Fiber Sealed Drop Closure-H (FSDC-H) for Hardened Drops

Amphenol Charles fiber optic sealed drop closures provide a versatile, functional, and cost-effective solution for FTTH network connections to the subscriber. The FSDC-H series has an OptiTap compatible interface for a simple plug and play connection of pre-connectorized drops without the need to open the case in the field. Fully sealed units can be deployed anywhere, on a strand, on a pole, in a pedestal, or below grade in a hand-hole.

Key Features

- Robust molded glass-filled propylene housing
- Up to 48 single fusion splices
- Store 12 buffer tubes (144 cables)
- Easy add subscribers without opening the case in the field
- Environmentally sealed and IP68 rated
- Aerial, pole, pedestal, or below-grade mountable
- Fits splitters and optical tap trays for any architecture
- Cost-effective compression grommet sealing

Parameter	FSDC-H (1)	FSDC-H (2)
Use case	Use with OptiTap drops	Use with OptiTap drops
Dimensions: L x W x H	15" x 9.6" x 5.1" 380 x 245 x 130mm	15" x 9.6" x 6.1" 380 x 245 x 154mm
Feed cable	Dual port : 0.315" – 0.689" OD (8 – 17.5 mm)	Dual port : 0.315" – 0.689" OD (8 – 17.5 mm)
Branch ports	N/A	One ports: 0.315" – 0.689" OD (8 – 17.5 mm)
Drop ports	2, 4, or 8 OptiTap compatible ports	12 or 16 OptiTap compatible ports
Splices	48 splice (Two 24 splice trays available)	48 splice (Two 24 splice trays available)
Splitters	1x2, 1x4, 1x8 splitter available	1x8, 1x16 splitter available
Mounting	Aerial, pole, pedestal, or below grade	
Rating	IP68	

Fiber in-Line Sealed Closure for Hardened Drops (FISC-H)

Amphenol Charles Industries Fiber In-line splice closures are versatile and functional fiber splicing and FTTP distribution solutions. The FISC-H comes with up to 16 OptiTap compatible to SC adapters for easy plug and play connections without in-field drop cable field splicing. Additional subscribers can be added without the need to open the case. FISC utilizes easy to use cost effective grommet cable sealing technology. There are three cable ports on each to support either straight through or butt splicing. Includes additional ports available for branch cables. These ports can accommodate 3 to 7, 7 to 13, or 12 to 16 mm cables, depending on grommet selection.

Key Features

- Robust glass filled polypropylene housing
- Either straight through or butt splicing
- Available with 2, 4, 8, 10, 12, or 16 OptiTap compatible ports
- Cost effective reliable grommet sealing
- Can accommodate 1x4, 1x8, or 1x16 splitters
- IP68 rated for below grade deployments and can also be deployed aerially or mounted on a pole or wall or in a pedestal

Parameter	FISC-H
Use case	Aerial with Hardened Drops
Dimensions: L x W x H	14.2" x 7.9" x 5.7" 360 x 200 x 145mm
Feed cable	3 port each end 0.118" – 0.630" (3 – 16mm)
Drop ports	2, 4, 8, 12, or 16 OptiTap compatible ports
Splice capacity	Up to 72 splice
Splitters	Optional 1x2, 1x4, 1x8, 1x16 splitters
Mounting	Aerial, pole, pedestal, or below grade
Rating	IP68

Fiber Optic Dome Closures (FODC)

Amphenol 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. There are three size domes available.

Key Features

- Robust glass-filled polypropylene housing
- Integrated O-ring to facilitate ease of re-closing
- Branch port grommets common between each series
- Closures are aerial, pole, wall, or below grade mountable
- Environmentally sealed and IP68 rated for below grade use

Parameter	FODC-AS	FODC-A	FODC-B	FODC-C
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)	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)	0.394" – 1.0" (10 – 25 mm)
Branch cables	4 ports: 0.315" – 0.689" (8 – 17.5 mm) Or multi-cable :	4 ports: 0.315" – 0.689" (8 – 17.5 mm) Or multi-cable	6 ports: 0.315" – 0.689" (8 – 17.5 mm) & Or multi-cable	6 ports: 0.315" – 0.689" (8 – 17.5 mm) Or multi-cable
Splice capacity	36 w/splitter 48 w/out splitter	Up to 144 single fusion splices	Up to 288 single fusion splices	576 single splices 3,456 mass fusion
Splice Trays	splice tray & splitter splice tray	Four 36 splice capacity trays included	Six 48 splice capacity trays included	One 72 splice included. up to 8 total optional
Grounding	Single grounding point			Ground stud for each cable
Mounting	Aerial, pole, pedestal, or below grade. Mounting kits sold separately			
Rating	IP68			

Fiber Optic Round Closure (FORC)

Amphenol 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 are IP 68 and can be directly buried or place in a below grade enclosure. They are 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 small drop closure.

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

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" OD (10 – 17 mm)
Branch ports	2 ports, for 8 - 12mm (0.472"- 0.669") or 12 - 17mm (0.315" - .472") cables Multi-cable grommets available for: 4x 5-7mm, 8x 3-5mm, or 2x flat drop cables
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

Charles Fiber Aerial Splice (CFAS)


Drop Side

Splice Side

Amphenol 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 is ideally suited for outside plants, 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
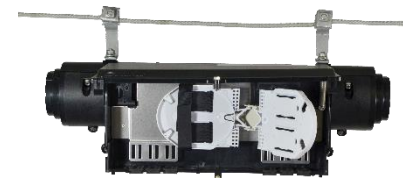
| Parameter	Specification
Dimensions: L x W x H	8.5" x 25.3" x 5.4" (216 x 642 x 137 mm)
Feed cable	0.393" – 0.669" OD (10 – 17 mm)
Cable size accommodation	3 ports per end Port 1: 0.6" – 2.2" (15 – 55mm) Ports 2&3: 0.2" – 1.4" (5.0 – 35mm)
Drop ports	12 ports: 3-8mm or flat drop 0.118" – 0.315"
Adapters	Drop configuration comes with 12 SC/APC
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)

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.
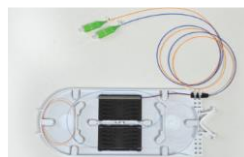
Series	CFST-S Splitter	CFST-A Tap	Fiber Fan-out	Fiber Pigtail Kit
Description	Splitter in 4" x 6" splice tray	Optical tap in 9"x 4" splice tray	Fiber fan-out assembly	Color coded fiber pigtail kit
Platform compatibility	FSDC	FSDC	FSDC,	FSDC, FSDC-M
Split ratios available	1x2, 1x4, 1x8, 1x16	30 tap options available	8, 12, 16 fiber	2, 4, 8, 12 fiber
Wavelength	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
Input	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	250µm bare fiber for through 900µm SC/APC pigtail drops	900 µm SC/APC pigtails	900 µm SC/APC pigtails
Size	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-20-CORE GR-326-CORE	GR-20-CORE GR-326-CORE

Protecting the connections that bring people together

Visit www.charlesindustries.com to see our full line of products
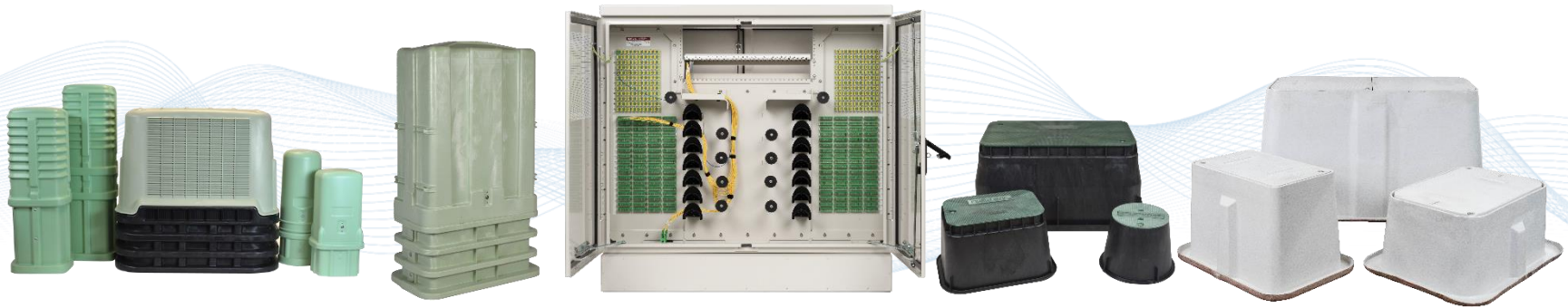
For standard part number and further information please contact Amphenol Charles at:

Charles Industries, LLC
An Amphenol Company
1450 American Lane, 20th Floor, Schaumburg, IL 60173

✉ mktserv@charlesindustries.com

📞 (847) 806-6300

L-OSP011-I23