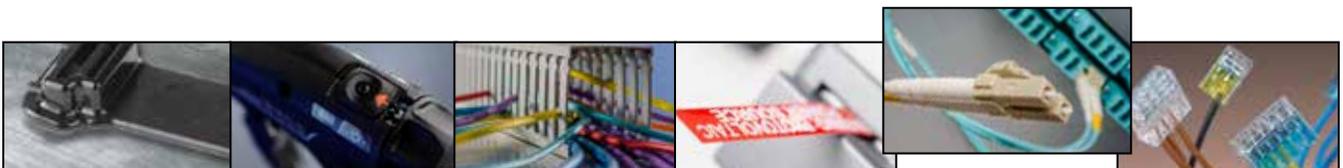




Broadband Solutions



Welcome to HellermannTyton



Broadband Connectivity Introduction See page 4



CCE Indoor/Outdoor Enclosures

The gray UV resistant wall closure is available configured with four splice holders and a selection of connection options, allowing for the quick provisioning or disconnection of fibers using connectorized fiber pigtailed or field terminated connectors within an SDU network.

See page 14



S1 Enclosures

The S1 small wall enclosure has been designed to provide a pluggable Fiber Connection Point. The gray indoor/outdoor enclosure provides 24-splice capacity and 8x SC Simplex, LC Duplex or LC Simplex customer connection points.

See page 15



S3 Enclosures

This 96-splice wall enclosure is designed for distribution within the last mile of the FTTx network. It can be used as a mid-sized entrance facility or floor distributor and accommodates up to 24 pluggable connection points, PLC splitters, pigtailed and adapters.

See page 17



S5 Enclosures

A 432-splice wall enclosure designed for distribution within the last mile of the FTTx network. This enclosure can be used as a larger building entrance facility or for point-to-point distribution accommodating up to 96 pluggable connection points, PLC splitters, pigtailed and adapters.

See page 19



CCP Enclosures

The Customer Connection Point is a fully water-sealed closure designed for external building entry point connections. The closure can be wall mounted or underground within a handhole (located at the property boundary or just outside the point of access) providing an external building entry point, outdoor accessory connection and network test point.

See page 22



CCE Outdoor Enclosures

The black UV resistant wall closure is available configured with four splice holders and a selection of connection options allowing for the quick provisioning or disconnection of fibers using connectorized fiber pigtailed or field terminated connectors within an SDU network.

See page 23



FFE Enclosures

The Fiber Façade Enclosure has been designed to provide a pluggable Fiber Connection Point. The closure can be building/façade or pole mounted and provides 8x SC Simplex, LC Duplex or LC Simplex customer connection points.

See page 24



AFN Enclosures

The Aerial Fiber Node has been designed for deployment within the last mile of an FTTx network. The enclosure can be used in a Point-to-Point (P2P) or Point-to-Multipoint/GPON (P2MP) network when used with optical splitters. The AFN is provided with 24 LC simplex adapters and is available with pigtailed installed.

See page 25



FST Closures

The FST closure is the smallest within the HellermannTyton Broadband Closure range with two base sizes available, the 4-port and 13-port. With three or 12 round ports and one oval port, the FST closure offers a maximum splice capacity of up to 72 fibers.

See page 26



FRBU Closures

The FRBU is a compact closure featuring more traditional long splice trays with two base sizes available, the 9-port and the 11-port. With eight or 10 round ports and one oval port, the FRBU offers a maximum splice capacity of up to 144 fibers.

See page 30



FDN Integrated Routing Closures

The FDN is a medium sized oval closure designed to accommodate larger fiber cables with the 16-port base or up to 52 discrete drop cables with the 59-port option. The FDN offers a maximum splice capacity of up to 864 fibers.

See page 36



UFC Integrated Routing Closures

The UFC closure is the largest in the HellermannTyton range with 28 round ports and two oval ports. Suitable for ribbon or stranded fiber cables, the UFC offers a maximum splice capacity of up to 1440 single fiber splices.

See page 40



Cable Seals

Cablelok is HellermannTyton's patented 100% mechanical seal. Cablelok is a faster and safer alternative to heat shrink and mechanical sealing methods and performs with all broadband closure options. Heat Shrink kits are also available for use with select enclosures.

See page 43



Tools & Accessories

Broadband tools and accessories from HellermannTyton aid in the installation and provisioning of closures, including port opening tools, anchor kits, mounting brackets, splice trays, fiber pigtailed and adapters.

See page 47

Broadband Connectivity



Delivering Fiber Optic Network Solutions

HellermannTyton Broadband Connectivity – Leaders in Fiber Management

HellermannTyton, an established and innovative global leader in delivering network infrastructure cabling solutions, offers a broad range of quality, high-performance connectivity for both residential and commercial use.

This includes fiber splicing closures for the outside plant as well as indoor distribution applications supporting typical wide area (WAN), metro (MAN) or access networks including fiber to the home (FTTx) and enterprise needs.

Our sealed fiber splice closures protect against extreme weather while maintaining ready access for effective cable installation. Fibers are housed in space-saving units that minimize network disruption and provide easy re-entry when changes or additions are necessary, ensuring a future-proof design.

Customers demand maximum flexibility and a modular approach to cable management systems that will fit into existing and future networks. All closures have been designed to accommodate the wide variety of fiber-optic cables available including slotted core, loose tube, compact, ribbon and blown, pushed and pulled fiber and cable applications.

Designed with the contractor in mind, quick installation and simple deployment provides the reliability needed for today's network buildouts, small or large.

Engineered solutions for your business

HellermannTyton is a member of the Fiber Broadband Association and has extensive experience across the fiber broadband sector, allowing you to benefit from our knowledge and capability in product development. Through HellermannTyton's understanding of the fiber-optic industry, customers can choose from a complete range of unique solutions to meet project-specific requirements.

Quality and Safety

Our quality management is certified to ISO 9001. In addition, our environmental management complies with the requirements of ISO 14001.

Industry Affiliations



AFCON



BICSI



The Fiberoptic Industry Association (FIA)



Fiber Broadband Association (FBA)



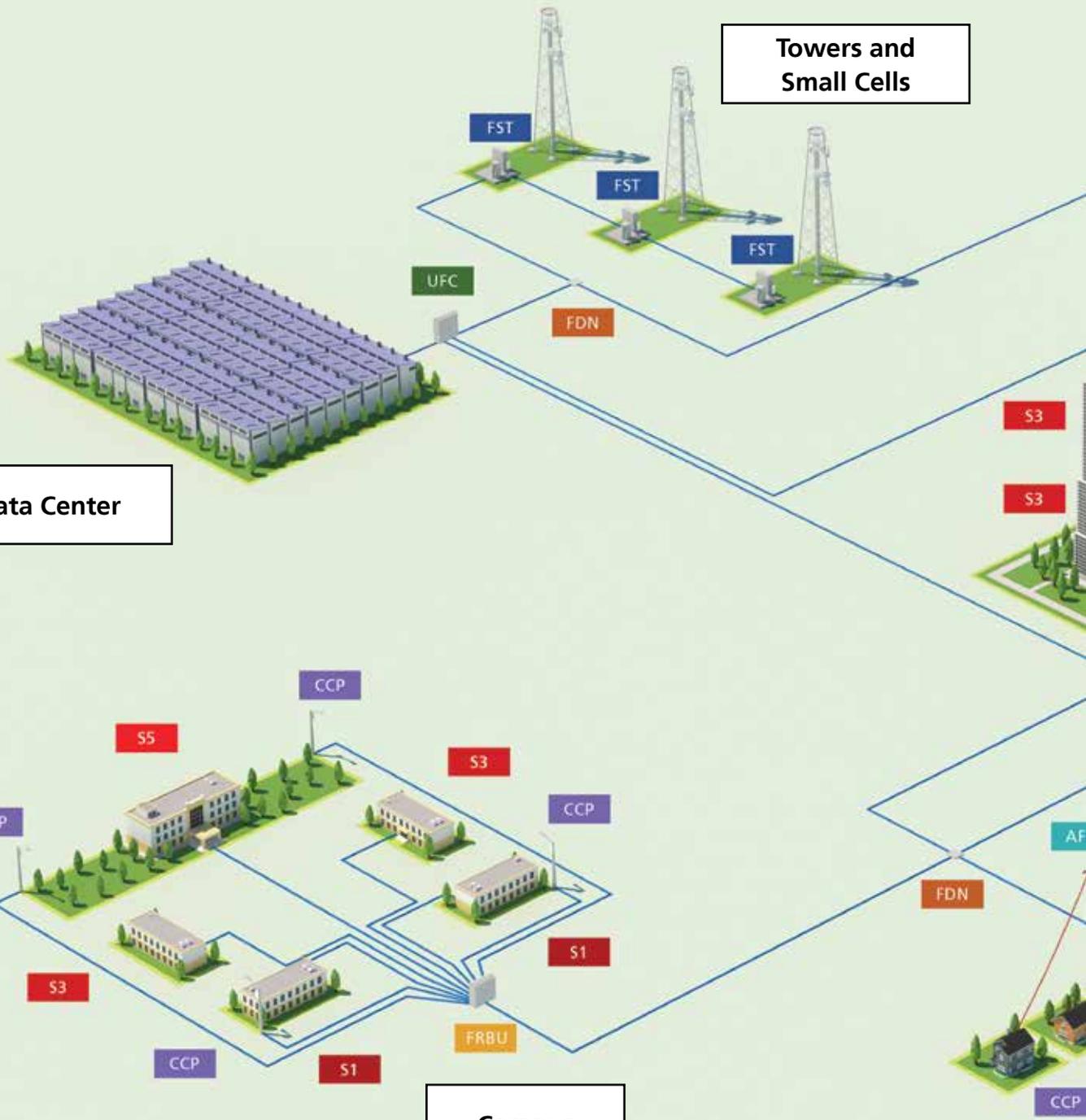
The FTTH Council Europe

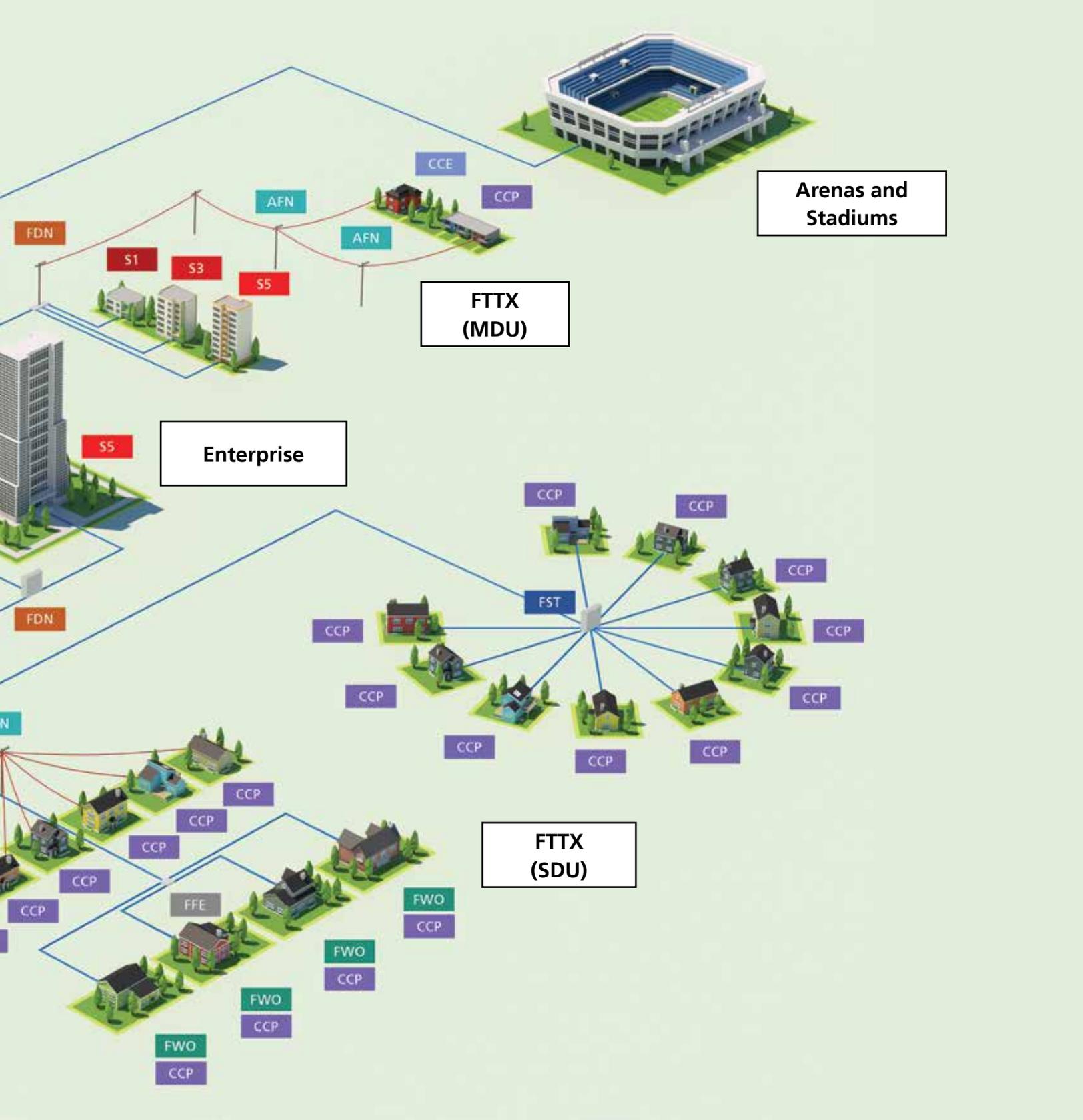
Broadband Solutions

Data Center

Towers and Small Cells

Campus





Arenas and Stadiums

FTTX (MDU)

Enterprise

FTTX (SDU)

Broadband and FTTx Applications



Delivering fiber to the...

FTTx is the blanket term used to describe fiber deployed in various applications or scenarios. Fiber-optic connectivity can be found in almost every sector, and demand is growing at a swift pace. HellermannTyton offers an extensive range of fiber solutions, including closures, wall boxes and fiber distribution enclosures, all designed to perform in a wide range of Broadband Transport connections and FTTx access applications.



Highways

Private companies, cities and states own and sometimes operate networks that connect thousands of roadside devices to a network of control centers across the country. Largely made up of fiber-optic cables that run along the length of the highways and roads, the network links message signs, emergency telephones, CCTV cameras and traffic monitoring systems to the control centers. Fiber-optic closures are used to distribute the fiber connections between the control centers and the monitoring and communications equipment



Wind/Solar Farms

Wind turbines and solar panels are widely used in the renewable energy market. Wind turbines use a wide range of sensors that monitor wind speed, direction and temperature. This information is recorded and sent back to a control station where the positioning of the turbine can be managed. Similarly, solar panel sensors report back a range of information including the amount of electricity generated, as well as solar strength to adjust panels for maximum performance.



Metropolitan

In built-up town and city locations, where multiple fibers are required to service residential and business properties, HellermannTyton offers a number of aerial, burial and wall box solutions to meet these demands.



Home - Rural

Rural Fiber to the Home delivery has seen rapid growth over recent years. Across the country, there are thousands of homes and businesses in remote rural locations that cannot be connected by the mainstream service providers. Independent service providers and municipal co-ops have been formed to deliver fiber broadband to these rural locations by working closely with the local communities and land owners.



Fiber to the Antenna

Fiber to the Antenna enables high capacity and flexible LTE and 5G deployment to meet the rapidly growing high bandwidth demands of today's mobile networks. Fiber to the Antenna can also be a cost-effective solution to the rural broadband challenge, providing an efficient way to deliver fast internet access to locations with low population density.



Railway

Fiber within rail networks has become an integral component for signaling and monitoring hardware. High-performing fiber is essential for rail signaling, providing a safe and efficient service for passengers. Fiber is also used to relay data from sensors that monitor the condition and performance of the physical rail tracks. HellermannTyton fiber-optic closures can distribute fiber connectivity to the active equipment up and down the railway network.

Solutions for Broadband Distribution and FTTx Deployments

HellermannTyton broadband products can be found in all FTTx applications including Fiber to the Home (FTTH), Fiber to the Curb (FTTC), Fiber to the Antenna (FTTA), 5G and Fiber to the Building (FTTB). Optical distribution within an FTTx network can face many competing technologies including Point-to-Point Fiber, Shared Fiber, Active Optical Networks (AONs) and Passive Optical Networks (PONs).

Point-to-Point fiber is possibly the simplest form of optical distribution. Each fiber leaving the Point-of-Presence (PoP) goes to only one customer. This dedicated type of network provides excellent bandwidth.

Our wide range of fiber closures can be applied across all areas of FTTx applications. Many of the sealed closures lend themselves to a PON architecture, allowing up to 1440 fibers in the largest UFC closure, down to 12 fibers with the compact FST closure.

Multi Dwelling Units (MDUs)

The term MDU covers a variety of property types including apartment complexes, condominiums, townhouses, converted factories and multiuse business or residential properties.

Large Multi Dwelling Unit (MDU) – The large MDU is typically a multi-tenant apartment complex with many living units over multiple floors within the building. A common MDU FTTH application will be designed with a single building entry point, a connectorized or spliced fiber distribution enclosure and drop cabling connecting the floor distribution to the optical telecommunications outlet at each apartment. The drop cables may be pre-terminated to the optical telecommunications outlet or at both ends for connection into the floor distributor.

Small Multi Dwelling Unit (MDU) – A small MDU applies to a residential complex with a low number of apartments, typically over two or three floors. A small MDU would use a lower capacity building entry point than the large MDU, directly connected to the optical telecommunications outlet with no separate floor distribution. With fewer living units to service, the cabling would be a smaller fiber count cable and may be pre-terminated.

Fiber to the Building (FTTB)

Fiber to the Building refers to a number of fibers to a single building or property. In this deployment, multiple businesses operate out of the building and therefore require dedicated fibers. Using either a façade box or S-Series enclosure to distribute the fiber is an excellent solution to manage individual fiber connections.

Single Dwelling Unit (SDU)

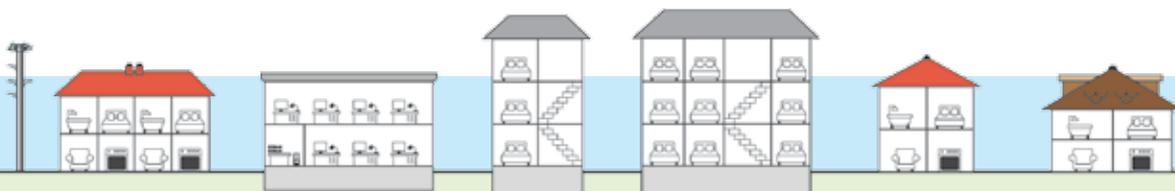
An SDU refers to a single house or stand-alone property. In this FTTH scenario, the building entry point is often a small unit such as the HellermannTyton customer connection point. This takes a drop cable from the fiber concentration point and distributes fiber directly into the property to an optical telecommunications outlet. The final drop to the customer premises may be underground or aerial and can be pre-terminated.

Outdoor distribution, networks and data connections

Connecting 4G, 5G and wireless access points to support consumer need for data requires an ever-increasing amount of optical fibers and distribution routes. Facilitating municipal, private, internet content and service provider distribution needs can significantly increase the value of a facility or local area. Many wireless network radios mounted on poles, building sides and rooftops require direct fiber drops to provide their services.

Rural

Fiber to rural locations is often delivered over large distances to small communities. This type of fiber deployment can see anything between a single resident or an entire town connected to a fiber broadband service. The size of the deployment will determine the types of product required to deliver the fiber. A single property could benefit from a customer connection point whereas multiple properties could use the façade box or a smaller fiber-optic closure such as the FST or FRBU.



Closure Selection Guide

HellermannTyton offers two ways to easily choose the right closure and splice tray configuration:

- by the maximum number of fiber splices planned
- by the number and size of the fiber cables being deployed



Closure required: based on number of splices

To determine the appropriate closure for a particular application, consider the number of fibers to be spliced, the number and diameter of cables entering and exiting the closure and the type of fiber management system best suited to the application. The following tables identify possible closures and tray types based on the number of splices required. After identifying a short list of possible closures, use the tables on the following pages to narrow down the selection based on the number and size of cables.

Fiber-optic Splice Trays. There are several splice tray options available, depending on the closure type selected. More information on splice trays can be found in the Tools and Accessories section.

Hellapon		IR	
Small (Sm)	Medium (Med) Style C	SE	SC-B
			
FST Closures, Page 26	FRBU Closures, Page 30	Page 54	Page 55

Heat Shrink Splice Capacity Table

Splice Capacity	Closure Range			
	UFC-IR	FDN-IR	FRBU	FST
1440	C-Length Double-Sided 120x SC-B-IR Tray			
864	BC-Length Double-Sided 72x SC-B-IR Tray	C-Length 72x SC-B-IR Tray		
720	C-Length 60x SC-B-IR Tray C-Length Double-Sided 60x SE-IR Tray			
576	B-Length Double-Sided 48x SC-B-IR Tray	B-Length 48x SC-B-IR Tray		
432	BC-Length 36x SC-B-IR Tray BC-Length Double-Sided 36x SE-IR Tray	C-Length 36x SE-IR Tray		
360	C-Length 30x SE-IR Tray			
288	B-Length 24x SC-B-IR Tray B-Length Double-Sided 24x SE-IR Tray	AB-Length 24x SC-B-IR Tray B-Length 24x SE-IR Tray		
216	BC-Length 18x SE-IR Tray			
144	B-Length 12x SE-IR Tray	A-Length 12x SC-B-IR Tray AB-Length 12x SE-IR Tray		
72		A-Length 6x SE-IR Tray	A-Length 6x Hellapon Tray B-Length 6x Hellapon Tray	
36			A-Length 3x Hellapon Tray B-Length 3x Hellapon Tray	3x Hellapon Small Tray
24				2x Hellapon Small Tray
12				1x Hellapon Small Tray

NOTE: Splice quantities shown represent single-layer splice capacity. The Hellapon and SE-IR trays have the ability to install two splices, double stacked, in each splice position.



Closure required: based on quantity and size of cables

After identifying a short list of possible closures based on the number of splices required (previous section), these tables can help narrow down the selection based on the number and diameter of cables entering and exiting the closure. If the number of ports required is the most critical factor, use these tables first before refining a selection based on the number of splices.

Fiber Splice Closures: These tables list the fiber splice closures available and their port counts. The port count, along with the table below listing the port cable sizes, assist in determining which closure will work best for an application. Port counts with additional numbers denote ports with multiple port size options. For example, an oval port can present 1 x L-Port or 2 x S-Ports. Please refer to base port diagrams on the product pages for further explanation.

CLOSURE RANGE								
		FST		FRBU		FDN		UFC
Total Port Count		13	4	11	9	59	16	30
								
		Page 26		Page 30		Page 36	Page 37	Page 40
Oval Port	L	0	0	0	1	0/1	0/1	0/1
	LM	1	1	1	0	0	0	1
Round Port	T	0	0	0	0	0/2	0/2	0/2
	S	0	0	0	0	2/4	9	8/10
	B	2	3	2	4	0/2	0/4	16
	R	10	0	8	4	52	0	0

Port Type and Cable Size: The table below shows the port types and the cable sizes that can be used in that port using Cablelok and heatshrink sealing methods.

PORT TYPE		CABLE RANGE	
		CABLELOK	HEATSHRINK
Oval Port	L	2 x 5.5 - 20.0 mm	2 x 12.0 - 24.0 mm
	LM	2 x 4.0 - 15.0 mm	2 x 8.0 - 22.0 mm
Round Port	T	15.5 - 29.0 mm	12.0 - 35.0 mm
	S	5.0 - 20.0 mm	12.0 - 26.0 mm
	B	4.8 - 16.5 mm	6.0 - 19.0 mm
	R	1.7 - 9.5 mm	4.0 - 11.0 mm (FRBU only)

Integrated Routing Closure Construction

The Integrated Routing system from HellermannTyton delivers industry leading fiber management within high fiber count dome closures.

Speed, ease and quality of installation matter when implementing large scale fiber-optic projects, particularly in FTTx access networks. HellermannTyton's Integrated Routing system is simple to use, quick to install and provides excellent fiber protection, management and distribution within the closure.

Easy Tray Management

- Trays can be easily clipped onto the backplane.
- Dedicated location slots for single element trays to ensure they are correctly positioned.

Tray Support Mechanism

- A clip on the strap attaches to the underside of the tray to hold the stack out of the way while the lower tray is being worked on.

Quality Moldings

- No sharp corners.
- All fiber facing edges are radiused to prevent snagging and macrobending.

Fiber Retention

- Incoming fiber elements are held in place with a fiber retaining block.
- Dense foam secures the fibers and can be sized to accommodate different cable diameters.

Color Coded Parts

- Components are color coded to make the closure easy to work with in the field. If it is not white, it can be removed.

Clear Entry Area

- Uncluttered space between the closure base and entry module gives easy access.
- Stainless steel or anodized aluminum components ensure no corrosion over time.

On/Off Fiber Routing

- Fiber is actively managed between the tray and the backplane to prevent snagging and macrobending.
- Left and right entry points on each tray.

Bi-Directional Fiber Routing

- The backplane enables fiber to be routed both up and down for tray-to-tray applications or when using splitters.

Splitter Accommodation

- Optical splitters can be accommodated in the single element tray.

Positive Fiber Management

- Both splice tray and backplane designs incorporate positive fiber management, ensuring a minimum 30 mm bend radius is always maintained.

Fiber Storage

- The Fiber Storage Unit has a large capacity for storing spare fiber.
- Fiber can be managed and routed to either side of the backplane module.

Splice Capacity

- Different splice bridges accommodate a range of splice types or splitters on the trays.
- Two splice bridges per SE tray with up to 12 splices per bridge mean a maximum of 24 splices per SE tray can be achieved (double stacking on tray).



Indoor/Outdoor Enclosures

HellermannTyton manufactures a wide range of fiber closures and accessories that can be applied across all FTTx applications. For connecting drop cables to the premise, HellermannTyton indoor/outdoor enclosures are purpose designed to facilitate easy provisioning and decommission. The S-Series family of enclosures offer splice and patch capabilities suited for either externally or internally accessed connections. These include allowing the provider convenient access from outside the building, or providing a more secure and friendly environment within the building, to access and provision for Multiple Dwelling Units (MDU) like apartment buildings or condominiums or business suite applications such as strip malls, office buildings or hotels. Designed to accommodate splicing, patching or a combination of both, installations utilizing blown fibers, pushed or pulled fibers, or traditional cables can be connected, distributed and provisioned with ease.

CCE – Indoor/Outdoor Customer Connection Enclosure.....	14
S1 – Small Indoor/Outdoor MDU Connection Enclosures.....	15
S3 – Medium Indoor/Outdoor MDU Connection Enclosures	17
S5 – Large Indoor/Outdoor MDU Connection Enclosures.....	19

Broadband Enclosures and Accessories

CCE – Indoor/Outdoor Customer Connection Enclosure

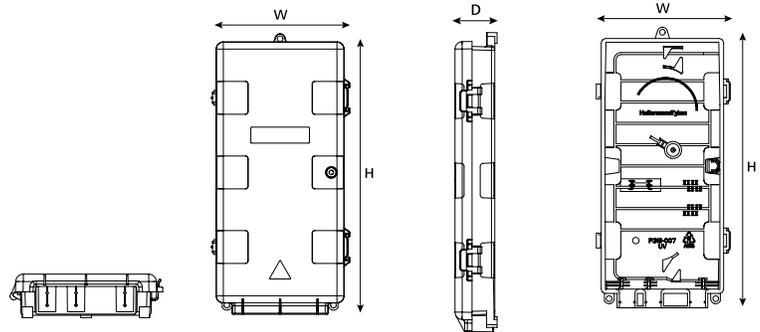
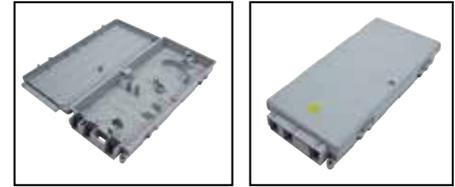
The Customer Connection Enclosure (CCE) is designed as a Building Entry Point (BEP) to provide a fiber termination and network demarcation point in a Fiber to the Home (FTTH) network. A loop-through facility allows single fiber elements to be removed and spliced while remaining fiber can be fed on to the next connection point. A single port in the rear allows fiber to be passed through the wall into the customer premises. Supplied cable ties secure all incoming/outgoing cables and blown fiber ducts and provide strain relief where necessary. The CCE can be supplied pre-loaded with fiber adapters and pigtails as required.

- 2x SC Simplex/LC Duplex customer connections
- 4x heat shrink splices
- 6x incoming/outgoing ports and through-the-wall port
- Suitable for cables or ducts up to a maximum diameter of 7 mm
- Store up to a maximum of 50 m of 1.1 mm cable



Features and Benefits

- UV stable enclosure with IP54 (NEMA 3S) sealing rating for long-term outdoor performance.
- Internal positive fiber management and fiber retention clips maintain a minimum 30 mm bend radius throughout, ensuring reliable data throughput.
- Hinged lid allows quick and clear access to internal fiber for splicing and termination.



PART NO.	Max. Cable Diameter mm	Connector Type	Width (W) in.	Depth (D) in.	Height (H) in.	Installed Adapters	Installed Pigtails	Number of Cable Entries	Splice Quantity
CCE-1111LX-G	8.5	LC	5.1	1.5	10.4	1	0	6	4
CCE-1111AX-G	8.5	LC-APC	5.1	1.5	10.4	1	0	6	4
CCE-1111SX-G	8.5	SC	5.1	1.5	10.4	1	0	6	4
CCE-1111TX-G	8.5	SC-APC	5.1	1.5	10.4	1	0	6	4
CCE-1111L1-G	8.5	LC	5.1	1.5	10.4	1	1	6	4
CCE-1111A1-G	8.5	LC-APC	5.1	1.5	10.4	1	1	6	4
CCE-1111S1-G	8.5	SC	5.1	1.5	10.4	1	1	6	4
CCE-1111T1-G	8.5	SC-APC	5.1	1.5	10.4	1	1	6	4
CCE-111XXX-G	8.5	-	5.1	1.5	10.4	0	0	6	4

Broadband Enclosures and Accessories

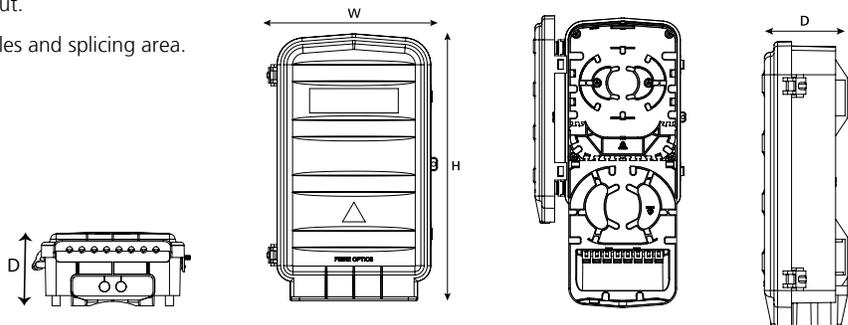
S1 – Small Indoor/Outdoor MDU Connection Enclosure (with Adapters)

The S1 enclosure is designed for wall-mounted distribution, featuring separate areas for inbound cable, fiber splice management and drop cable (customer connection) management. The inbound cable management area has a dedicated cable entry port, supporting both cable end and mid-span applications with loop storage capacity for up to 1.5 m of excess fiber. The tray features a crossover facility allowing for alternative routing direction and a fiber storage capacity of 1.5 m of 250µm fiber and 1.0 m of 900µm fiber. Inside drop cable management area can accommodate a PLC splitter (60 mm x 7 mm x 4 mm). Adapters are angled and spaced to allow for inspection prior to connection. Eight anchor guides are provided for securing the drop cables (maximum diameter 6.0 mm or flat drop cables).

- Door and splice tray cover have feature to allow locking
- 2 inbound/pass-thru and 8 drop cables
- 8x SC or LC adapters for connection to industry standard pre-terminated drop cables
- 24-fiber splice capacity (double stacked)
- Separation of inbound fiber from splicing and connectorized drop cables

Features and Benefits

- Enclosure is sealed to maintain the IP55 (NEMA 4) rating for long-term outdoor performance.
- Internal positive fiber management maintains a minimum 30 mm bend radius throughout, ensuring reliable data throughput.
- A hinged cover prevents access to the network cables and splicing area.



PART NO.	Feeder Cable Range	Connector Type	Width (W) in.	Depth (D) in.	Height (H) in.	Installed Adapters	Splice Capacity*	Color
MDU-S1-2LSA	2x 7-10 mm Ports	LC	6.1	2.8	9.5	8	12	Gray
MDU-S1-2LAA	2x 7-10 mm Ports	LC-APC	6.1	2.8	9.5	8	12	Gray
MDU-S1-2SSA	2x 7-10 mm Ports	SC	6.1	2.8	9.5	8	12	Gray
MDU-S1-2SAA	2x 7-10 mm Ports	SC-APC	6.1	2.8	9.5	8	12	Gray
MDU-S1-1LSA	2x 10-15 mm Ports	LC	6.1	2.8	9.5	8	12	Gray
MDU-S1-1LAA	2x 10-15 mm Ports	LC-APC	6.1	2.8	9.5	8	12	Gray
MDU-S1-1SSA	2x 10-15 mm Ports	SC	6.1	2.8	9.5	8	12	Gray
MDU-S1-1SAA	2x 10-15 mm Ports	SC-APC	6.1	2.8	9.5	8	12	Gray

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

Broadband Enclosures and Accessories

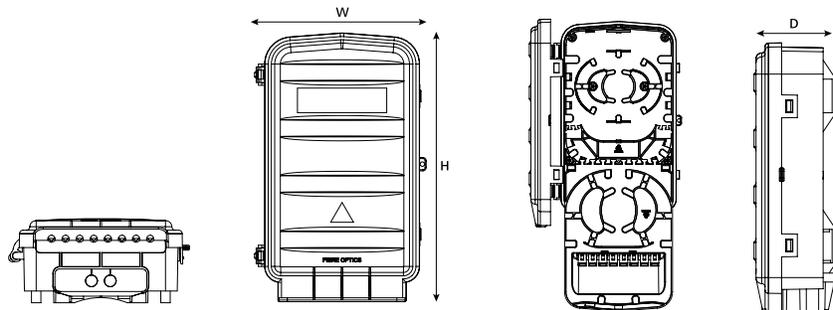
S1 – Small Indoor/Outdoor MDU Connection Enclosure (Adapters & Pigtails)

The S1 enclosure is designed for wall-mounted distribution, featuring separate areas for inbound cable, fiber splice management and drop cable (customer connection) management. The inbound cable management area has a dedicated cable entry port, supporting both cable end and mid-span applications with loop storage capacity for up to 1.5 m of excess fiber. The tray features a crossover facility allowing for alternative routing direction and a fiber storage capacity of 1.5 m of 250µm fiber and 1.0 m of 900µm fiber. Inside drop cable management area can accommodate a PLC splitter (60 mm x 7 mm x 4 mm). Adapters are angled and spaced to allow for inspection prior to connection. Eight anchor guides are provided for securing the drop cables (maximum diameter 6.0 mm or flat drop cables).

- 2 Inbound/pass-thru and 8 Drop cables
- 8x SC or LC adapters and internal fiber pigtails for connection to incoming cable and industry standard pre-terminated drop cables
- 24 heat shrink fiber splice capacity
- Separation of inbound fiber from splicing and connectorized drop cables

Features and Benefits

- Enclosure is sealed to maintain the IP55 (NEMA 4) rating for long-term outdoor performance.
- Internal positive fiber management maintains a minimum 30 mm bend radius throughout, ensuring reliable data throughput.
- A hinged cover prevents access to the network cables and splicing area.



PART NO.	Feeder Cable Range	Connector Type	Width (W) in.	Depth (D) in.	Height (H) in.	Installed Adapters	Splice Capacity*	Color
MDU-S1-2LSP	2x 7-10 mm Ports	LC	6.1	2.8	9.5	8	12	Gray
MDU-S1-2LAP	2x 7-10 mm Ports	LC-APC	6.1	2.8	9.5	8	12	Gray
MDU-S1-2SSP	2x 7-10 mm Ports	SC	6.1	2.8	9.5	8	12	Gray
MDU-S1-2SAP	2x 7-10 mm Ports	SC-APC	6.1	2.8	9.5	8	12	Gray
MDU-S1-1LSP	2x 10-15 mm Ports	LC	6.1	2.8	9.5	8	12	Gray
MDU-S1-1LAP	2x 10-15 mm Ports	LC-APC	6.1	2.8	9.5	8	12	Gray
MDU-S1-1SSP	2x 10-15 mm Ports	SC	6.1	2.8	9.5	8	12	Gray
MDU-S1-1SAP	2x 10-15 mm Ports	SC-APC	6.1	2.8	9.5	8	12	Gray

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

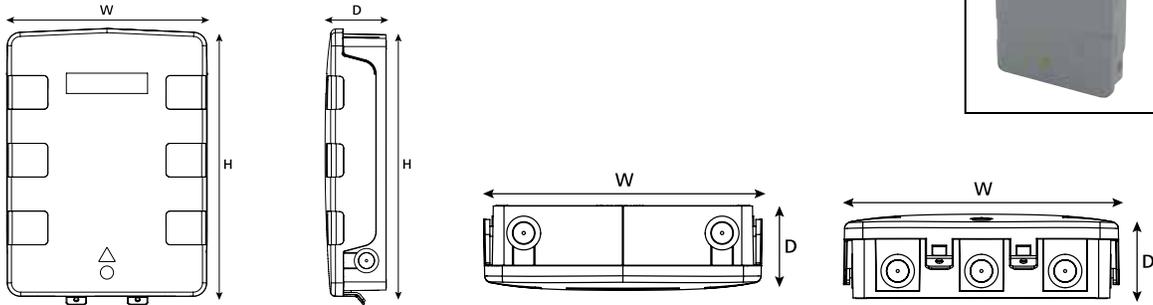
Broadband Enclosures and Accessories

S3 – Medium Indoor/Outdoor MDU Connection Enclosure (Splice Only)

The S3 enclosure is designed for wall-mounted distribution, configured with the HellermannTyton 250µm IR Management System. The management system accommodates four or eight splice trays giving a maximum of 48 or 96 heat shrink splices and 3 PLC splitters. The position of the fiber management system allows easy access for the routing of fiber to the trays. Fiber slot retaining blocks guide the fiber elements on to the IR system; the foam pad on the retainer is partially cut through to accommodate a range of fiber counts. Designed with seven input/output ports; three across the bottom, two on top and one on each side; each port will accommodate a 20 mm cable gland.

Features and Benefits

- UV stable enclosure with IP54 (NEMA 3S) sealing and IK08 impact rating for long-term outdoor performance.
- Multiple input/output points to run to multiple locations from one box.
- Supports cabled, blown, pushed and pulled fiber deployments to accommodate any construction style.



PART NO.	Width (W) in.	Depth (D) in.	Height (H) in.	Splice Quantity*	Basket Size	Tray Quantity	Tray Type	Color
MDUS3-B1SP	9.7	3.0	13.4	48	Small	4	Integrated Routing SE	Gray
MDUS3-B2SP	9.7	3.0	13.4	96	Small	8	Integrated Routing SC-B	Gray
MDUS3-X1SP	9.7	3.0	13.4	48	-	4	Integrated Routing SE	Gray
MDUS3-X2SP	9.7	3.0	13.4	96	-	8	Integrated Routing SC-B	Gray

*Splice quantities shown indicates single stack, trays are capable of double-stack splice.

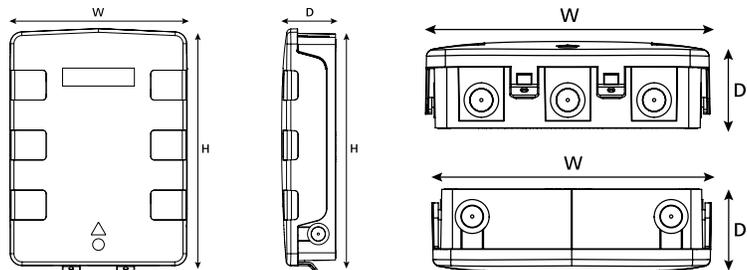
Broadband Enclosures and Accessories

S3 – Medium Indoor/Outdoor MDU Connection Enclosure (Splice & Patch)

The S3 enclosure is designed for wall-mounted distribution, configured with the HellermannTyton 250µm IR Management System and patching bay. The management system accommodates four splice trays giving a maximum of 48 heat shrink splices and 3 PLC splitters. The position of the fiber management system allows for easy access for the routing of fiber to the trays. Fiber slot retaining blocks guide the fiber elements on to the IR system; the foam pad on the retainer is partially cut through to accommodate a range of fiber counts. An LC Duplex adapter connection plate is fitted with LC duplex adapters and pigtails to provide customer connection points. The LC pigtails are routed on to the fiber management trays to be spliced to the incoming fiber. Designed with seven input/output ports; three across the bottom, two on top and one on each side; each port will accommodate a 20 mm cable gland.

Features and Benefits

- UV stable enclosure with IP54 (NEMA 3S) sealing rating for long-term outdoor performance.
- Multiple input/output points to run to multiple locations from one box.
- Supports cabled, blown, pushed and pulled fiber deployments to accommodate any construction style.



PART NO.	Connector Type	Width (W) in.	Depth (D) in.	Height (H) in.	Installed Adapters	Splice Quantity*	Basket Size	Tray Quantity	Tray Type	Color
MDUS3-B1LDP	LC-APC	9.7	3.0	13.4	12	48	Small	4	Integrated Routing SE	Gray
MDUS3-X1LDP	LC-APC	9.7	3.0	13.4	12	48	-	4	Integrated Routing SE	Gray
MDUS3-X2LDP	LC-APC	9.7	3.0	13.4	24	48	-	4	Integrated Routing SE	Gray
MDUS3-B2LDP	LC-APC	9.7	3.0	13.4	24	48	Small	4	Integrated Routing SE	Gray

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

Broadband Enclosures and Accessories

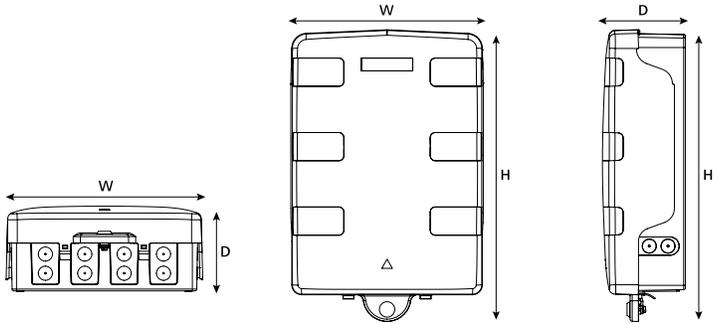
S5 – Large Indoor/Outdoor MDU Connection Enclosure (Splice Only)

The large S5 enclosure is designed for wall-mount distribution, configured with the HellermannTyton IR Management System. The management system accommodates 18 900µm trays or 36 250µm trays, for a maximum of 216x 900µm heat shrink splices or 432x 250µm heat shrink splices. The position of the fiber management system allows easy access for the routing of fiber on to the trays. The trays and fiber-optic routing modules are white, making it easy to see the color of the fiber elements as they are routed through the positive fiber management system. Fiber slot retaining blocks guide the fiber elements on to the IR system; the foam pad on the retainer is partially cut through to accommodate a range of fiber counts. A loop storage basket provides space for the storage of fiber loops. Designed with eight dual input/output ports; four across the bottom, two on top and two on each side; each port will accommodate a 20 or 25 mm cable gland.



Features and Benefits

- High fiber splice capacity to accommodate large MDUs or be used as a Building Entry Point (BEP).
- UV stable enclosure with IP54 (NEMA 3S) sealing and IK08 impact rating for long-term outdoor performance.
- Supports cabled, blown, pushed and pulled fiber deployments to accommodate any construction style.



PART NO.	Width (W) in.	Depth (D) in.	Height (H) in.	Splice Quantity*	Tray Quantity	Tray Type	Color
MDUS5-LL1SP	9.7	6.5	22.4	216	18	Integrated Routing SE	Gray
MDUS5-LL2SP	9.7	6.5	22.4	432	36	Integrated Routing SC-B	Gray

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

Broadband Enclosures and Accessories

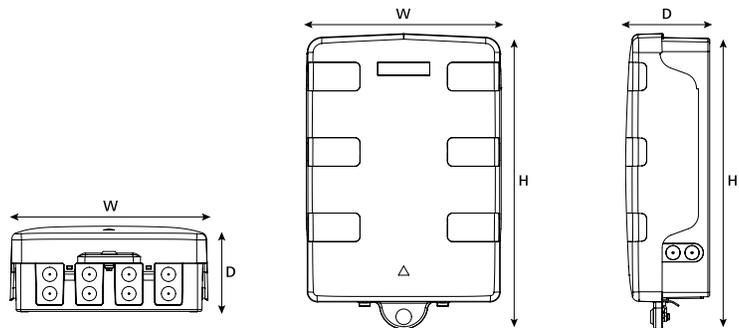
S5 – Large Indoor/Outdoor MDU Connection Enclosure (Splice & Patch)

The large S5 enclosure is for wall-mount distribution, configured with the HellermannTyton IR Management System. The management system accommodates 6x 900µm trays or 18x 250µm trays, for a maximum of 96x 900µm heat shrink splices or 216x 250µm heat shrink splices. The position of the fiber management system allows easy access for the routing of fiber on to the trays. The trays and fiber-optic routing modules are white, making it easy to see the color of the fiber elements as they are routed through the positive fiber management system. Fiber slot retaining blocks guide the fiber elements on to the IR system; the foam pad on the retainer is partially cut through to accommodate a range of fiber counts. Fiber management cassettes are fitted with LC/APC simplex adapters and pigtails to provide customer connection points. The LC/APC pigtails are routed on to the fiber management trays to be spliced to the incoming fiber. A loop storage basket provides space for the storage of fiber loops. Designed with eight dual input/output ports; four across the bottom, two on the top and two on each side; each port will accommodate a 20 or 25 mm cable gland.



Features and Benefits

- High fiber splice capacity to accommodate large MDUs or be used as a Building Entry Point (BEP).
- UV stable enclosure with IP54 (NEMA 3S) sealing and IK08 impact rating for long-term outdoor performance.
- Supports cabled, blown, pushed and pulled fiber deployments to accommodate any construction style.



PART NO.	Connector Type	Width (W) in.	Depth (D) in.	Height (H) in.	Installed Adapters	Splice Quantity*	Tray Quantity	Tray Type	Color
MDU55-BX1QSP	LC	9.7	6.5	22.4	24	216	18	Integrated Routing SE, 250µm	Gray
MDU55-BX3QAP	LC-APC	9.7	6.5	22.4	48	96	6	Versatile Routing ME, 900µm	Gray
MDU55-BL3QAP	LC-APC	9.7	6.5	22.4	24	96	6	Versatile Routing ME, 900µm	Gray

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

Outdoor Enclosures

HellermannTyton's extensive portfolio of fiber closures and accessories can be applied across all areas of Broadband and FTTx applications. Offering a broad range of quality, high-performance connectivity for both residential and commercial use, broadband solutions include a comprehensive range of sealed fiber splicing closures suited for the outside plant environment. They support Point-to-Point (P2P) or Passive Optical Network (PON) installation within aerial, pole, pedestal, vault or direct burial topologies. The HellermannTyton Cablelok system provides a range of mechanical boots that offer significant labor reductions, improved performance consistency and higher base densities, further enhancing the ease and usability of the offering. Alternatively, traditional heat shrink sealed enclosures are available, so common practices and materials can be used for installation with most designs. With support for one to over 1440 fibers, HellermannTyton has an OSP solution to fit any size buildout or upgrade.

CCP – Customer Connection Points	22
CCE – Outdoor Customer Connection Enclosures	23
FFE – Fiber Façade Enclosures	24
AFN – Aerial Fiber Nodes.....	25
FST – Small Fiber-Optic Closures.....	26
FRBU – Mid-Sized Long Tray Fiber-Optic Closures.....	30
FDN – Mid-Sized Multi-Drop Fiber-Optic Closures.....	36
UFC – Large Sized Fiber-Optic Closures	40

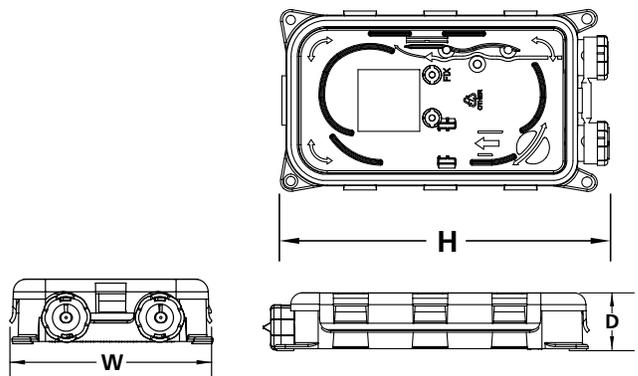
Broadband Enclosures and Accessories

CCP – Customer Connection Point

The Customer Connection Point (CCP) is manufactured from UL 94 V-0 and UV stable black polycarbonate and has a fully detachable snap-on lid. The closure has two separate cable access points, which are sealed with a silicon cable entry kit (cable diameter range 4.6 mm - 5.6 mm) to maintain the IP68 rating. A GORE-TEX breather membrane is fitted to the lid to prevent condensation forming in the base of the closure. The unit can be supplied with one SC Simplex or LC Duplex and matching pigtails and provides splice management for two heat shrink splices. Internal fiber management features ensure that a 30 mm minimum bend radius is maintained within the closure and provides fiber storage capacity for any excess fiber.

Features and Benefits

- Fully water sealed, achieving an IP-68 (NEMA 6P) rating, for use in wall or handhole installations.
- Separate inbound/outbound access points ensure cable sealing and segregation.
- Single subscriber splice or patch to connect a home or outdoor device.



PART NO.	Max. Cable Diameter mm	Min. Cable Diameter mm	Connector Type	Width (W) in.	Depth (D) in.	Height (H) in.	Installed Adapters	Pigtails Installed	Splice Quantity	Color
CCP-E-W	5.6	4.6	-	3.5	1.1	6.3	0	0	2	White
CCP-SAP-W	5.6	4.6	SC-APC	3.5	1.1	6.3	1	1	2	White
CCP-SAA-W	5.6	4.6	SC-APC	3.5	1.1	6.3	1	0	2	White
CCP-SAP	5.6	4.6	SC-APC	3.5	1.1	6.3	1	1	2	Black
CCP-SAA	5.6	4.6	SC-APC	3.5	1.1	6.3	1	0	2	Black
CCP-E	5.6	4.6	-	3.5	1.1	6.3	0	0	2	Black

Broadband Enclosures and Accessories

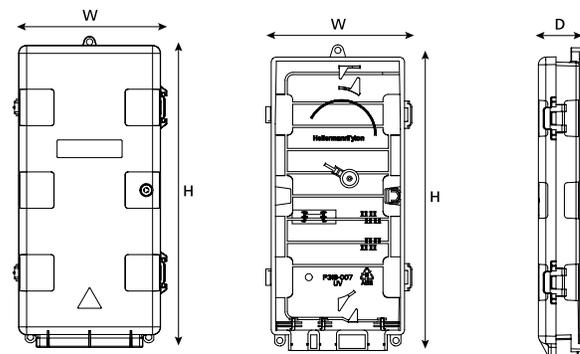
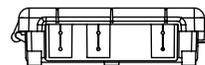
CCE – Outdoor Customer Connection Enclosure

The Customer Connection Enclosure (CCE) is a Building Entry Point (BEP), providing a fiber termination and network demarcation point external to the connected premise in a Fiber to the Home (FTTH) network. In addition to providing an external test point, the enclosure stores up to 50 m of 1.1 mm cable. A loop-through facility allows for single fiber elements to be removed and spliced while the remaining fiber can be fed on to the next connection point. A single port in the rear of the enclosure allows fiber to be passed through the wall into the customer premises. Supplied cable ties secure all incoming/outgoing cables/blown fiber ducts and provide strain relief where necessary. The CCE can be supplied pre-loaded with fiber adapters and pigtails as required.

- 2x SC Simplex/LC Duplex customer connections for redundancy or multiple connections.
- 4x heat shrink splices accommodate connections to the adapters or drop cables.
- 6 incoming/outgoing ports and through-the-wall port to support multiple incoming and drop cables up to 7 mm in diameter.
- Can store up to a maximum of 50 m of 1.1 mm cable.

Features and Benefits

- Black, UV stable enclosure with IP54 (NEMA 3S) sealing rating for long-term outdoor performance.
- Internal positive fiber management and fiber retention clips maintain a minimum 30 mm bend radius throughout, ensuring reliable data throughput.
- Hinged lid allows quick and clear access to internal fiber for splicing and termination.
- CCE is same width as a brick blow-out cover to mask any bricks damaged by drilling.



PART NO.	Max. Cable Diameter mm	Min. Cable Diameter mm	Connector Type	Width (W) in.	Depth (D) in.	Height (H) in.	Installed Adapters	Pigtails Installed	Number of Cable Entries	Splice Quantity	Color
CCE-111XXX-B	8.5	2.5	-	5.1	1.5	10.4	0	0	6	4	Black
CCE-111LX-B	8.5	2.5	LC	5.1	1.5	10.4	1	0	6	4	Black
CCE-111AX-B	8.5	2.5	LC-APC	5.1	1.5	10.4	1	0	6	4	Black
CCE-111SX-B	8.5	2.5	SC	5.1	1.5	10.4	1	0	6	4	Black
CCE-111TX-B	8.5	2.5	SC-APC	5.1	1.5	10.4	1	0	6	4	Black
CCE-111L1-B	8.5	2.5	LC	5.1	1.5	10.4	1	1	6	4	Black
CCE-111S1-B	8.5	2.5	SC	5.1	1.5	10.4	1	1	6	4	Black
CCE-111T1-B	8.5	2.5	SC-APC	5.1	1.5	10.4	1	1	6	4	Black
CCE-111A1-B	8.5	2.5	LC-APC	5.1	1.5	10.4	1	1	6	4	Black

Broadband Enclosures and Accessories

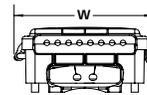
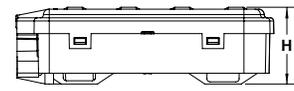
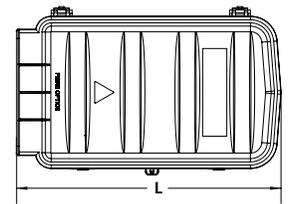
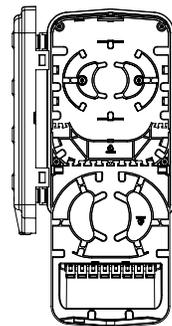
FFE – Fiber Façade Enclosure

The Fiber Façade Enclosure (FFE) features three separate areas to manage inbound cable, fiber splices and drop cables (customer connection). The inbound cable area has a dedicated entry port, supporting both cable end and mid-span applications with loop storage capacity for up to 1.5 m of excess fiber. The fiber splice area has capacity for a maximum of 24x heat shrink splices and maintains positive fiber management (30 mm minimum bend radius) throughout. The tray has a crossover facility that allows for alternative routing requirements and a fiber storage capacity of 1.5 m for 250µm fiber and 1.0 m of 900µm fiber. A PLC splitter (60 mm x 7 mm x 4 mm) can be fitted on the inside of the management area. The adapters are angled and spaced to allow for inspection prior to connection. Eight included anchor guides secure the drop cables (maximum diameter 6.0 mm).

- 8x SC/LC Simplex or LC Duplex customer connections.
- Two inbound/pass-thru and 8 Outbound SC or LC Adapter ports support smaller MDU or SFU installations.

Features and Benefits

- UV stable enclosure with IP55 sealing rating for long-term outdoor performance.
- Detachable lid prevents access and can also be snapped back to allow unrestricted access inside.
- Separation of inbound fiber from connectorized drop cables keeps fragile areas protected.
- Pole or building/façade mounted to provide connections where they are needed.



PART NO.	Feeder Cable Range	Connector Type	Width (W) in.	Height (H) in.	Length (L) in.	Installed Adapters	Pigtails Installed	Splice Quantity*	Color
FFE-2LAA	2x 7-10 mm Ports	LC-APC	6.1	2.8	9.5	8	0	12	Black
FFE-1LAA	2x 10-15 mm Ports	LC-APC	6.1	2.8	9.5	8	0	12	Black
FFE-2LAP	2x 7-10 mm Ports	LC-APC	6.1	2.8	9.5	8	8	12	Black
FFE-1LAP	2x 10-15 mm Ports	LC-APC	6.1	2.8	9.5	8	8	12	Black
FFE-2SSA	2x 7-10 mm Ports	SC	6.1	2.8	9.5	8	0	12	Black
FFE-1SSA	2x 10-15 mm Ports	SC	6.1	2.8	9.5	8	0	12	Black
FFE-2SSP	2x 7-10 mm Ports	SC	6.1	2.8	9.5	8	8	12	Black
FFE-1SSP	2x 10-15 mm Ports	SC	6.1	2.8	9.5	8	8	12	Black
FFE-1SAA	2x 10-15 mm Ports	SC-APC	6.1	2.8	9.5	8	0	12	Black
FFE-2SAA	2x 7-10 mm Ports	SC-APC	6.1	2.8	9.5	8	0	12	Black
FFE-1SAP	2x 10-15 mm Ports	SC-APC	6.1	2.8	9.5	8	8	12	Black
FFE-2SAP	2x 7-10 mm Ports	SC-APC	6.1	2.8	9.5	8	8	12	Black

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

Broadband Enclosures and Accessories

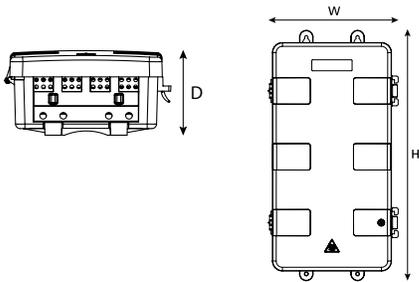
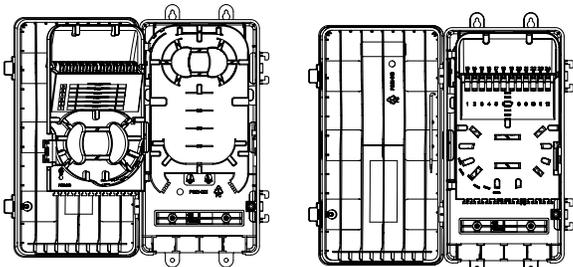
AFN – Aerial Fiber Node

The Aerial Fiber Node (AFN) is a wall or pole mounted distribution enclosure. It features three separate areas to manage inbound cable, fiber splices and drop cables (customer connection). The dedicated cable entry port supports both cable end and mid-span applications with loop storage capacity for up to 4 m of 144-fiber cable. The fiber splice management area has capacity for a maximum of 48 heat shrink splices. The tray features a crossover facility allowing for alternative routing direction and a fiber storage capacity of 1.5 m for 250µm fiber. The drop cable management area supports a maximum of 6 PLC splitters (60 mm x 7 mm x 4 mm). The adapters are angled and spaced to allow for inspection prior to connection. Twelve anchor guides are provided for securing the drop cables (maximum diameter 4.2 mm).

- 24-port capacity to support larger MDU applications.
- Supports outdoor distribution and Passive Optical Network (PON) connections to accommodate any installation type.

Features and Benefits

- UV stable enclosure with IP55 (NEMA 4) sealing rating for long-term outdoor performance.
- Detachable lid prevents access and can also be snapped back to allow unrestricted access inside.
- Internal positive fiber management and fiber retention clips maintain a minimum 30 mm bend radius throughout, ensuring reliable data throughput.
- Separation of inbound fiber from connectorized drop cables keeps fragile areas protected.



PART NO.	Max. Cable Diameter mm	Connector Type	Pigtails Installed	Width (W) in.	Depth (D) in.	Height (H) in.	Splice Quantity*	Color
AFN-LSA	7.2	LC	0	7.0	3.5	13.5	24	Black
AFN-LAA	7.2	LC-APC	0	7.0	3.5	13.5	24	Black
AFN-LSP	7.2	LC	24	7.0	3.5	13.5	24	Black
AFN-LAP	7.2	LC-APC	24	7.0	3.5	13.5	24	Black

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

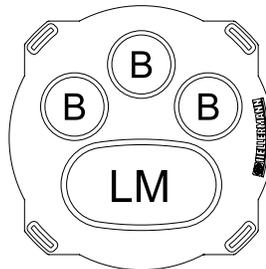
FST Closures

Introduction

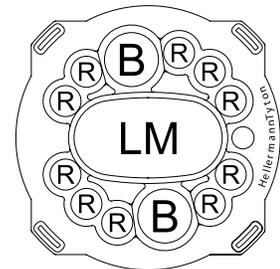
The FST is a compact, cap-ended, ready-access fiber-optic splice closure for use in aerial, underground and direct buried installations. Its small size, port flexibility and value make the FST popular for splicing low fiber count distribution cables in FTTH, FTTC, trunk and campus networks, CATV and CCTV installations. Two base configurations are available with the FST, a 4-port and 13-port base, which offer three or 12 round ports and one oval port for loop-through applications. The cover is environmentally sealed to the base using a rolling O-ring. The cable entry/exit points in the base are environmentally sealed using either Cablelok mechanical seals or heat-shrink sleeves depending on the base selected.

Features and Benefits

- Ideal for FTTH, FTTC, trunk and campus networks, CATV and CCTV installation.
- 2 base configurations offering 3 or 12 round ports and 1 oval port (for loop-through cable).
- Suitable for blown fiber/cable applications.
- Accommodates up to 3 Hellapon Small trays.
- Fiber loop storage basket available with Hellapon Small 1-tray version.
- Cablelok-compatible for all port sizes.
- For use in underground, direct burial and aerial applications.
- Wall mounting bracket available.



FST 4 Port Base Configuration



FST 13 Port Base Configuration
(Cablelok only)

PORT TYPE		CABLE RANGE	
		CABLELOK	HEATSHRINK
Oval Port	LM	2 x 4.0 - 15.0 mm	2 x 8.0 - 22.0 mm
	Round Port	B	4.8 - 16.5 mm
	R	1.7 - 9.5 mm	-

Broadband Enclosures and Accessories

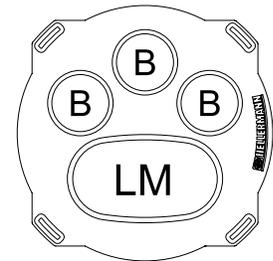
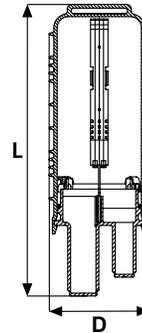
FST – Small Fiber-Optic Closure (4-port Base)

The FST is a compact, cap-ended, ready-access, fiber-optic splice closure for use in aerial, underground and directly buried installations. Its small size, port flexibility and value make the FST popular for splicing low fiber count distribution cables in FTTH, FTTC, trunk and campus networks, as well as CATV and CCTV installations.

The 4-port base configuration offers three round ports and one oval port for loop-through applications. Cover is environmentally sealed to the base using a rolling O-ring. Cable entry/exit points in the base are environmentally sealed using either Cablelok mechanical seals or heat-shrink sleeves.

Features and Benefits

- Compact size makes it ideal for restoration use, distribution drops, Distributed Antenna Systems (DAS) and Remote Radio Head (RRH/RRU) applications.
- Aerial mounting, underground vault or direct burial for installation where fibers are needed.
- Mid-span possible for simple routing within Passive Optical Networks (PON).



Port-base configuration

PART NO.	Basket Size	Closure Length (L) in.	Diameter (D) in.	Method of Sealing	Port Count	Port Type	Tray Quantity	Splice Quantity*	Tray Type
FSTTBAXXFA11	None	12.2	4.3	Cablelok, Heatshrink	1, 3	LM, B	1	12	Hellapon Small
FSTTBAXBFA11	Small	12.2	4.3	Cablelok, Heatshrink	1, 3	LM, B	1	12	Hellapon Small
FSTTBAXXFA21	None	12.2	4.3	Cablelok, Heatshrink	1, 3	LM, B	2	24	Hellapon Small

*Splice quantities shown indicates single stack, trays are capable of double-stack splice.

Broadband Enclosures and Accessories

FST – Small Fiber-Optic Closure (13-port Base)

The FST is a compact, cap-ended, ready-access, fiber-optic splice closure for use in aerial, underground and directly buried installations. Its small size, port flexibility and value make the FST popular for splicing low fiber count distribution cables in FTTH, FTTC, trunk and campus networks, as well as CATV and CCTV installations.

The 13-port base configuration offers 12 round ports and one oval port for loop-through applications. Cover is environmentally sealed to the base using a rolling O-ring. Cable entry/exit points in the base are environmentally sealed using Cablelok mechanical seals to maintain density and sealing.

Features and Benefits

- Compact size makes it ideal for up to 12 drops, Distributed Antenna Systems (DAS) and Remote Radio Head (RRH/RRU) applications.
- Aerial mounting, underground vault or direct burial for installation where fibers are needed.
- Mid-span possible for simple routing within Passive Optical Networks (PON).



Port Base Configuration

PART NO.	Basket Size	Closure Length (L) in.	Diameter (D) in.	Method of Sealing	Port Count	Port Type	Tray Quantity	Splice Quantity*	Tray Type
FSTTBAXBTA11	Small	12.2	4.3	Cablelok	1, 2, 10	LM, B, R	1	12	Hellapon Small
FSTTBAXXTA21	None	12.2	4.3	Cablelok	1, 2, 10	LM, B, R	2	24	Hellapon Small
FSTTBAXXTA31	None	12.2	4.3	Cablelok	1, 2, 10	LM, B, R	3	36	Hellapon Small

*Splice quantities shown indicates single stack, trays are capable of double-stack splice.



FRBU Closures

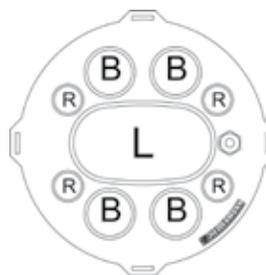
Introduction

The FRBU is a compact, cap-ended, ready-access fiber-optic splice closure for use in underground, direct burial and aerial installations. The mid-range capacity and port flexibility offered by the FRBU make it suitable for FTTC, trunk networks and CATV installation. There are two base configurations available with the FRBU, a 9-port and 11-port base, offering eight or 10 round ports and one oval port for loop-through applications. The closure cover is available in two lengths depending on the number, type and configuration of the tray selected. The FRBU is environmentally sealed to the base using an O-ring and quick-release clamp and can be fitted with a pressure release valve or grounding feed-through. The cable entry/exit points in the base are environmentally sealed using either Cablelok mechanical seals or heat-shrink sleeves.

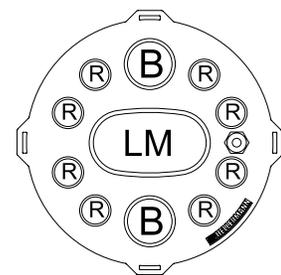


Features and Benefits

- Ideal for FTTC network, trunk applications and CCTV installations.
- 2 base configurations offer 8 or 10 round ports and 1 oval port (for loop-through cable).
- Suitable for blown, pushed or pulled fiber/cable applications.
- Accommodates up to 6 Hellapon Medium trays.
- Trays configured in a stacked or side-hinged format.
- Available in 2 different lengths.
- Fiber loop storage basket available with Hellapon Medium side-hinged 3-tray option.
- Cablelok compatible for all port sizes.
- Flash test release valve and grounding feed-through options.
- Quick release cover clamp.
- For use in underground, direct burial and aerial applications.
- Wall mounting bracket available.



FRBU 9 Port Base Configuration



FRBU 11 Port Base Configuration

PORT TYPE		CABLE RANGE	
		CABLELOK	HEATSHRINK
Oval Port	L	2 x 5.5 - 20.0 mm	2 x 12.0 - 24.0 mm
	LM	2 x 4.0 - 15.0 mm	2 x 8.0 - 22.0 mm
Round Port	B	4.8 - 16.5 mm	6.0 - 19.0 mm
	R	1.7 - 9.5 mm	4.0 - 11.0 mm

Broadband Enclosures and Accessories

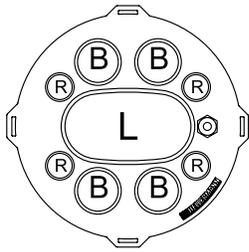
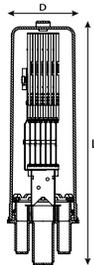
FRBU – Mid-sized Long Tray Fiber-Optic Closure (A-Length 9-port)

The FRBU is a compact, cap-ended, ready-access, fiber-optic splice closure for use in underground, direct burial and aerial installations. The mid-range capacity and port flexibility make it suitable for FTTC, trunk networks and CATV installation.

The FRBU is environmentally sealed to the base using an O-ring and quick-release clamp and can be fitted with a pressure release valve and grounding feed-throughs. The cable entry/exit points in the base are environmentally sealed using either Cablelok mechanical seals or heat-shrink sleeves.

Features and Benefits

- More traditional long trays accommodate fiber storage and splicing.
- 9-Port base configuration offers eight round ports and one oval port for loop-through applications.
- Supports blown, pushed or pulled fiber/cable deployments to accommodate most construction styles.



Port-base configuration

PART NO.	Basket Size	Closure Length (L) in.	Diameter (D) in.	Method of Sealing	Port Count	Port Type	Tray Quantity	Splice Quantity*	Tray Type
FRBTBAXXNA61	None	17.1	5.1	Cablelok, Heatshrink	1, 4, 4	L, B, R	6	72	Hellapon Small
FRBTBAXXNB6X	None	17.1	5.1	Cablelok, Heatshrink	1, 4, 4	L, B, R	6	72	Hellapon Medium

*Splice quantities shown indicates single stack, trays are capable of double-stack splice.

Broadband Enclosures and Accessories

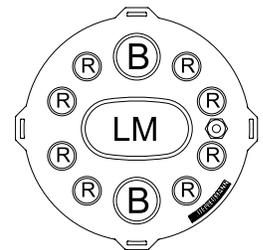
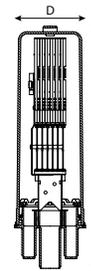
FRBU – Mid-sized Long Tray Fiber-Optic Closure (A-Length 11-port)

The FRBU is a compact, cap-ended, ready-access, fiber-optic splice closure for use in underground, direct burial and aerial installations. The mid-range capacity and port flexibility offered by the FRBU make it suitable for FTTC, trunk networks and CATV installation.

The FRBU is environmentally sealed to the base using an O-ring and quick-release clamp and can be fitted with a pressure release valve and grounding feed-throughs. The cable entry/exit points in the base are environmentally sealed using either Cablelok mechanical seals or heat-shrink sleeves.

Features and Benefits

- More traditional long trays accommodate fiber storage and splicing.
- 11-Port base configuration offers 10 round ports and one oval port for loop-through applications.
- Supports blown, pushed or pulled fiber/cable deployments to accommodate most construction styles.



Port-base configuration

PART NO.	Basket Size	Closure Length in.	Diameter (D) in.	Method of Sealing	Port Count	Port Type	Tray Quantity	Splice Quantity*	Tray Type
FRBTBAXBEC3X	Medium	17.1	5.1	Cablelok, Heatshrink	1, 2, 8	LM, B, R	3	36	Hellapon Medium Side Hinged
FRBTBAXXEA61	None	17.1	5.1	Cablelok, Heatshrink	1, 2, 8	LM, B, R	6	72	Hellapon Small
FRBTBAXXEB6X	None	17.1	5.1	Cablelok, Heatshrink	1, 2, 8	LM, B, R	6	72	Hellapon Medium

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

Broadband Enclosures and Accessories

FRBU – Mid-sized Long Tray Fiber-Optic Closure (B-Length 9-port)

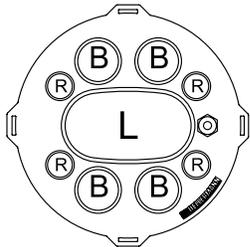
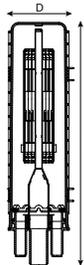
The FRBU is a compact, cap-ended, ready-access, fiber-optic splice closure for use in underground, direct burial and aerial installations. The mid-range capacity and port flexibility offered by the FRBU make it suitable for FTTC, trunk networks and CATV installation.

The FRBU is environmentally sealed to the base using an O-ring and quick-release clamp and can be fitted with a pressure release valve and grounding feed-throughs. The cable entry/exit points in the base are environmentally sealed using either Cablelok mechanical seals or heat-shrink sleeves.

B-Length enclosure supports tray-to-tray fiber routing common in PON applications.

Features and Benefits

- More traditional long trays accommodate fiber storage and splicing
- 9-Port base configuration offers eight round ports and one oval port for loop-through applications; accommodates tray-to-tray fiber routing typical in PON networks.
- Supports blown, pushed or pulled fiber/cable deployments to accommodate most construction styles.



Port-base configuration

PART NO.	Basket Size	Closure Length (L) in.	Diameter (D) in.	Method of Sealing	Port Count	Port Type	Tray Quantity	Splice Quantity*	Tray Type
FRBTBBXBNC3X	Medium	19.9	5.1	Cablelok, Heatshrink	1, 4, 4	L, B, R	3	36	Hellapon Medium
FRBTBBXXNC6X	None	19.9	5.1	Cablelok, Heatshrink	1, 4, 4	L, B, R	6	72	Hellapon Medium

*Splice quantities shown indicates single stack, trays are capable of double-stack splice.

Broadband Enclosures and Accessories

FRBU – Mid-sized Long Tray Fiber-Optic Closure (B-Length 11-port)

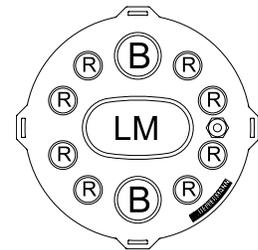
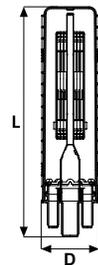
The FRBU is a compact, cap-ended, ready-access, fiber-optic splice closure for use in underground, direct burial and aerial installations. The mid-range capacity and port flexibility offered by the FRBU make it suitable for FTTC, trunk networks and CATV installation.

The FRBU is environmentally sealed to the base using an O-ring and quick-release clamp and can be fitted with a pressure release valve and grounding feed-throughs. The cable entry/exit points in the base are environmentally sealed using either Cablelok mechanical seals or heat-shrink sleeves.

B-Length enclosure supports tray-to-tray fiber routing common in PON applications.

Features and Benefits

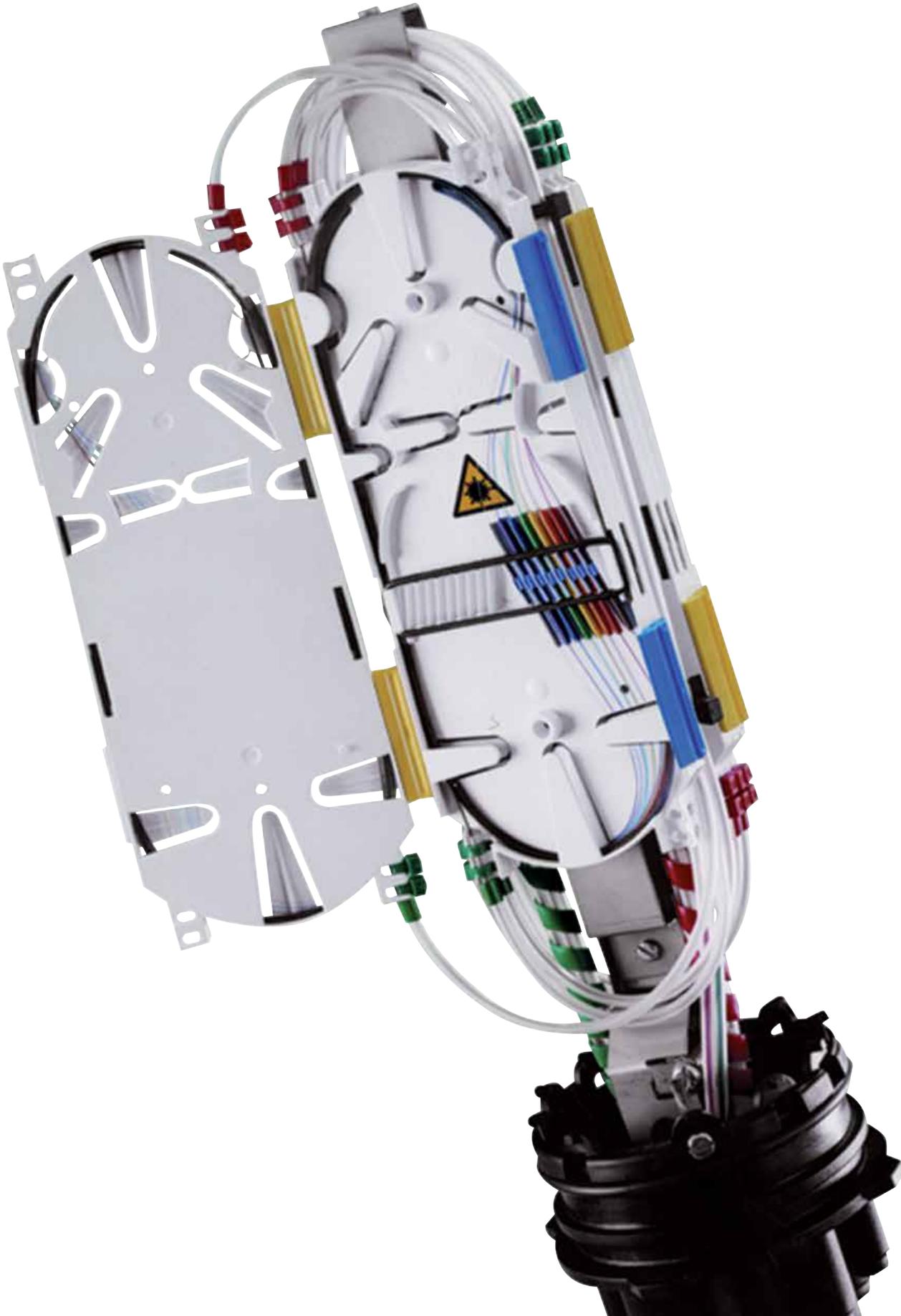
- More traditional long trays accommodate fiber storage and splicing.
- 11-Port base configuration offers 10 round ports and one oval port for loop-through applications; accommodates tray-to-tray fiber routing typical in PON networks.
- Supports blown, pushed or pulled fiber/cable deployments to accommodate most construction styles.



Port-base configuration

PART NO.	Basket Size	Closure Length (L) in.	Diameter (D) in.	Method of Sealing	Port Count	Port Type	Tray Quantity	Splice Quantity*	Tray Type
FRBTBBXBEC3X	Medium	19.9	5.1	Cablelok, Heatshrink	1, 2, 8	LM, B, R	3	36	Hellapon Medium Side Hinged
FRBTBBXXEC6X	None	19.9	5.1	Cablelok, Heatshrink	1, 2, 8	LM, B, R	6	72	Hellapon Medium Side Hinged

*Splice quantities shown indicates single stack, trays are capable of double-stack splice.



FDN Integrated Routing Closures

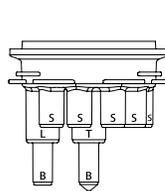
Introduction

The FDN from HellermannTyton is a medium-sized, oval, fiber-optic splice closure. With two different base types, the FDN offers multiple uses in different applications. The 16-port FDN, with its larger ports, can be used in FTTx and trunk applications. The 59-port FDN closure, with its high drop port count, is particularly suited for use in FTTH access networks.

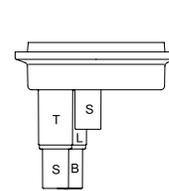
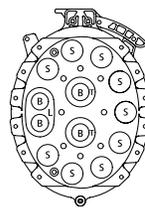
The oval shape of the FDN closure allows it to be installed in areas where space is restricted. The Integrated Routing (IR) FDN closure has a modular fiber management system and is available in a range of lengths to suit the number of fibers and splices required. The IR system has been designed to ensure positive fiber management throughout the closure. The components ensure a 30 mm bend radius can be maintained from cable entry all the way up onto the splice trays. The IR system offers a number of configurations and splice tray options. Supplied in packs of 12 (SC-B Trays) or six (SE Trays), the trays can be easily installed onto the IR backplane. The splice trays can accommodate heat-shrink fusion splice sleeves, and the SE trays support a selection of fiber-optic splitters. The FDN IR closure has a maximum splice capacity of 864 fibers using the SC-B trays. The closure cover is environmentally sealed with a high-quality clamp and seal. The cable ports can be sealed using either Cablelok mechanical seals or heat-shrink sleeves. The closure can be fitted with a flash test valve and/or grounding feed through.

Features and Benefits

- Ideal for FTTH network applications, especially the last mile.
- 58 or 15 round ports and 1 oval port (for loop-through cable).
- Suitable for blown, pushed or pulled fiber/cable applications.
- Accommodates up to 36 single element or 72 single circuit trays or a combination of both.
- Can be configured with a fiber loop storage basket for loop-through applications.
- Available in 4 lengths.
- Cablelok compatible.
- Oval shape for use where space is limited.
- Quick release cover clamp.
- For use in underground, direct burial and aerial applications.
- Wall mounting brackets and stainless-steel wall mounting strap kits available.



FDN 16-Port Base Configuration



FDN 59-Port Base Configuration

PORT TYPE		Number of Ports		CABLE RANGE	
		59	16	CABLELOK	HEATSHRINK
Oval Port	L	1	1	2 x 5.5 - 20.0 mm	2 x 12.0 - 24.0 mm
	T	2	2	15.5 - 29.0 mm	12.0 - 35.0 mm
Round Port	S	4	9	5.0 - 20.0 mm	12.0 - 26.0 mm
	B	2	4	4.8 - 16.5 mm	6.0 - 19.0 mm
	R	52	-	1.7 - 9.5 mm	-

Broadband Enclosures and Accessories

FDN – Mid-Sized Multi-Drop Fiber-Optic Closure (16 port)

The 16-port FDN is a medium-sized, oval, fiber-optic splice closure. Its larger ports make it ideal for use in FTTx and trunk applications.

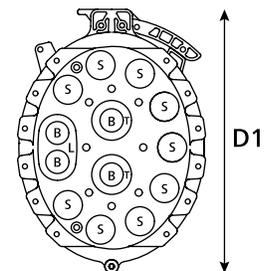
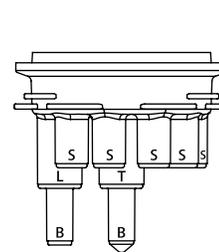
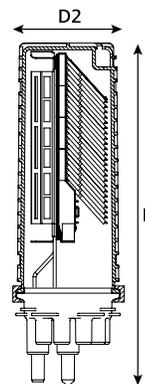
The Integrated Routing (IR) FDN closure has a modular fiber management system available in a range of lengths to suit the number of fibers and splices required. The IR system ensures positive fiber management; a 30 mm bend radius can be maintained from cable entry all the way up onto the splice trays.

Trays are supplied in packs of 12 (SC-B) or six (SE), available in multiple colors for color coding within the enclosure, can be easily installed onto the IR backplane as needed and can be configured to accommodate heat shrink fusion splice sleeves and/or a selection of fiber-optic splitters.

Closure has a maximum splice capacity of 864 fibers using SC-B trays and can be fitted with a flash test valve and/or grounding feed through. Its cover is environmentally sealed with a high-quality clamp and seal. Cable ports can be sealed using either Cablelok mechanical seals or heat-shrink sleeves.

Features and Benefits

- 11 drop ports and one oval port (for loop-through cable); ideal for FTTx and trunk applications.
- Oval-shaped body for installation where space is limited.
- Fiber loop storage basket for loop-through installations.
- Closure cover is environmentally sealed with a high-quality clamp and seal.



PART NO.	Basket Size	Closure Length in.	Closure Width (D1) in.	Closure Width (D2) in.	Method of Sealing	Port Count	Port Type	Tray Qty	Splice Qty*	Tray Type
FDNIRAXBAXX	Small	17.9	12.3	8.7	Cablelok, Heatshrink	1, 2, 4, 9	L, B, T, S	6	72	Integrated Routing SE
FDNIRABBAXX	Small	22.1	12.3	8.7	Cablelok, Heatshrink	1, 2, 4, 9	L, B, T, S	12	144	Integrated Routing SE
FDNIRAXBAXN	Small	17.9	12.3	8.7	Cablelok, Heatshrink	1, 2, 4, 9	L, B, T, S	12	144	Integrated Routing SC-B
FDNIRABBAXN	Small	22.1	12.3	8.7	Cablelok, Heatshrink	1, 2, 4, 9	L, B, T, S	24	288	Integrated Routing SC-B
FDNIRBxBAXX	Medium	26.1	12.3	8.7	Cablelok, Heatshrink	1, 2, 4, 9	L, B, T, S	24	288	Integrated Routing SE
FDNIRCxBAXX	Large	31.1	12.3	8.7	Cablelok, Heatshrink	1, 2, 4, 9	L, B, T, S	36	432	Integrated Routing SE
FDNIRBxBAXN	Medium	26.1	12.3	8.7	Cablelok, Heatshrink	1, 2, 4, 9	L, B, T, S	48	576	Integrated Routing SC-B
FDNIRCxBAXN	Large	31.1	12.3	8.7	Cablelok, Heatshrink	1, 2, 4, 9	L, B, T, S	72	864	Integrated Routing SC-B

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

Broadband Enclosures and Accessories

FDN – Mid-Sized Multi-Drop Fiber-Optic Closure (59 port)

The 59-port FDN is a medium-sized, oval, fiber-optic splice closure. Its high drop port count is particularly suited for use in FTTH access networks.

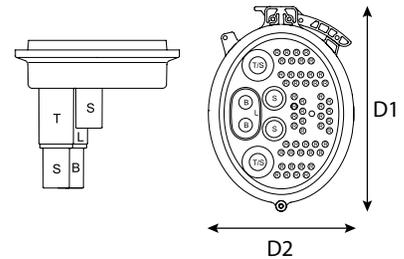
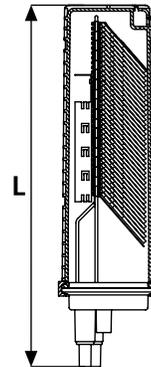
The Integrated Routing (IR) FDN closure has a modular fiber management system available in a range of lengths to suit the number of fibers and splices required. The IR system ensures positive fiber management; a 30 mm bend radius can be maintained from cable entry all the way up onto the splice trays.

Trays are supplied in packs of 12 (SC-B) or six (SE), available in multiple colors for color coding within the enclosure, can be easily installed onto the IR backplane as needed and can be configured to accommodate heat shrink fusion splice sleeves and/or a selection of fiber-optic splitters.

Closure has a maximum splice capacity of 864 fibers using SC-B trays and can be fitted with a flash test valve and/or grounding feed through. Its cover is environmentally sealed with a high-quality clamp and seal. Cable ports can be sealed using either Cablelok mechanical seals or heat-shrink sleeves.

Features and Benefits

- 56 drop ports and one oval port (for loop-through cable); ideal for FTTH access applications.
- Oval-shaped body for installation where space is limited.
- Fiber loop storage basket for loop-through installations.
- Closure cover is environmentally sealed with a high-quality clamp and seal.



PART NO.	Basket Size	Closure Length in.	Closure Width (D1) in.	Closure Width (D2) in.	Method of Sealing	Port Count	Port Type	Tray Qty	Splice Qty*	Tray Type
FDNIRXBCWX	Small	17.9	12.3	8.7	Cablelok	1, 2, 4, 2, 52	L, T, S, B, R	6	72	Integrated Routing SE
FDNIRABBCWX	Small	22.1	12.3	8.7	Cablelok	1, 2, 4, 2, 52	L, T, S, B, R	12	144	Integrated Routing SE
FDNIRXBCXN	Small	17.9	12.3	8.7	Cablelok	1, 2, 4, 2, 52	L, T, S, B, R	12	144	Integrated Routing SC-B
FDNIRABBCXN	Small	22.1	12.3	8.7	Cablelok	1, 2, 4, 2, 52	L, T, S, B, R	24	288	Integrated Routing SC-B
FDNIRBXCWX	Medium	26.1	12.3	8.7	Cablelok	1, 2, 4, 2, 52	L, T, S, B, R	24	288	Integrated Routing SE
FDNIRCXBCWX	Large	31.1	12.3	8.7	Cablelok	1, 2, 4, 2, 52	L, T, S, B, R	36	432	Integrated Routing SE
FDNIRBXCXN	Medium	26.1	12.3	8.7	Cablelok	1, 2, 4, 2, 52	L, T, S, B, R	48	576	Integrated Routing SC-B
FDNIRCXBCXN	Large	31.1	12.3	8.7	Cablelok	1, 2, 4, 2, 52	L, T, S, B, R	72	864	Integrated Routing SC-B

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.



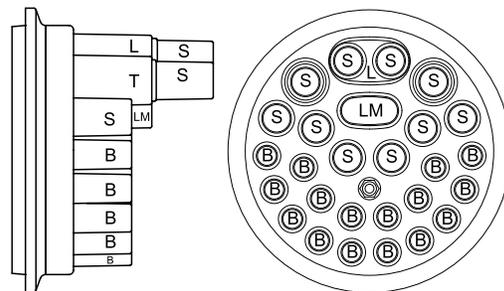
UFC Integrated Routing Closures

Introduction

The UFC from HellermannTyton is the largest fiber-optic splice closure in the range. Designed with 28 round ports and two oval ports, the UFC accommodates substantial amounts of fiber often found in FTTx and trunk applications. The Integrated Routing (IR) UFC closure has a modular fiber management system and is available in a range of lengths to suit the number of fibers and splices required. The IR system has been designed to ensure positive fiber management throughout the closure. The components ensure a 30 mm bend radius is maintained from cable entry all the way up onto the splice trays. The UFC IR solution is unique to the HellermannTyton range due to its larger size, it is possible to double stack the splice trays for twice the fiber capacity. The area between the two splice tray stacks offers a space for fiber loop storage. The double stack IR closure has a splice capacity of up to 1440 fibers. The IR system offers many configurations and splice tray options. Supplied in packs of 12 (SC-B Trays) or six (SE Trays), the trays can be easily installed onto the IR backplane. The splice trays can accommodate heat-shrink fusion splice sleeves, and the SE trays support a selection of fiber-optic splitters. The closure cover is environmentally sealed with a high-quality clamp and seal. The cable ports can be sealed using either Cablelok mechanical seals or heat-shrink sleeves. The closure can be fitted with a flash test valve and/or grounding feed through.

Features and Benefits

- Ideal for high fiber/splice count FTTx and trunk applications.
- 28 round ports and 2 oval ports (for loop-through cable).
- Accommodates up to 60 single element (SE-B) or 120 single circuit (SC) trays or a combination of both.
- Can be configured as a double tray stack for high splice counts.
- Fiber loop storage basket available with the single stack configuration.
- Available in 3 lengths.
- Cablelok compatible.
- Pressure release valve option.
- For use in underground, direct burial and aerial applications.
- Wall mounting brackets and stainless-steel wall mounting strap kits available.



UFC Port Base Configuration

PORT TYPE	Number of Ports	CABLE RANGE		
		CABLELOK	HEATSHRINK	
Oval Port	L	1	2 x 5.5 - 20.0 mm	2 x 12.0 - 24.0 mm
	LM	1	2 x 4.0 - 15.0 mm	2 x 8.0 - 22.0 mm
Round Port	T	2	15.5 - 29.0 mm	12.0 - 35.0 mm
	S	10	5.0 - 20.0 mm	12.0 - 26.0 mm
	B	18	4.8 - 16.5 mm	6.0 - 19.0 mm

Broadband Enclosures and Accessories

UFC – Large-Sized Fiber-Optic Closure (Single Stack)

The UFC is the largest fiber-optic splice closure in the range. With 24 round ports and 2 oval ports, it can accommodate substantial amounts of fiber often found in FTTx and trunk applications.

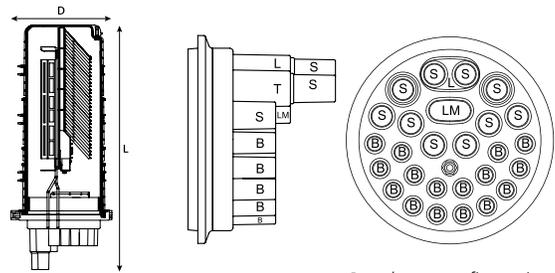
The Integrated Routing (IR) UFC closure has a modular fiber management system available in a range of lengths to suit the number of fibers and splices required. The IR system ensures positive fiber management; a 30 mm bend radius can be maintained from cable entry all the way up onto the splice trays.

Trays are supplied in packs of 12 (SC-B) or six (SE), available in multiple colors for color coding within the enclosure, can be easily installed onto the IR backplane as needed and can be configured to accommodate heat shrink fusion splice sleeves and/or a selection of fiber-optic splitters.

Its cover is environmentally sealed with a high-quality clamp and seal. Cable ports can be sealed using either Cablelok mechanical seals or heat-shrink sleeves. Closure can be fitted with a flash test valve and/or grounding feed through.

Features and Benefits

- Large size makes it ideal for high fiber count FTTx and trunk applications.
- Accommodates up to 720 fibers and 26 drops allowing high fiber count distribution routing.
- For use in underground, direct burial and aerial applications providing fiber connections and distribution where they are needed.



Port-base configuration

PART NO.	Basket Size	Closure Length in.	Diameter (D) in.	Method of Sealing	Port Count	Port Type	Tray Qty	Tray Type	Splice Qty*
UFCIRBXCWXX	Medium	21.6	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	12	Integrated Routing SE	144
UFCIRBCBCWXX	Medium	23.5	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	18	Integrated Routing SE	216
UFCIRBXCXN	Medium	21.6	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	24	Integrated Routing SC-B	288
UFCIRCXCWXX	Large	29.5	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	30	Integrated Routing SE	360
UFCIRBCXCXN	Medium	23.5	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	36	Integrated Routing SC-B	432
UFCIRCXCXN	Large	29.5	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	60	Integrated Routing SC-B	720

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

Broadband Enclosures and Accessories

UFC – Large-Sized Fiber-Optic Closure (Double Stack)

The UFC is the largest fiber-optic splice closure in the range. With 24 round ports and 2 oval ports, it can accommodate substantial amounts of fiber often found in FTTx and trunk applications.

The Integrated Routing (IR) UFC closure has a modular fiber management system available in a range of lengths to suit the number of fibers and splices required. The IR system ensures positive fiber management; a 30 mm bend radius can be maintained from cable entry all the way up onto the splice trays.

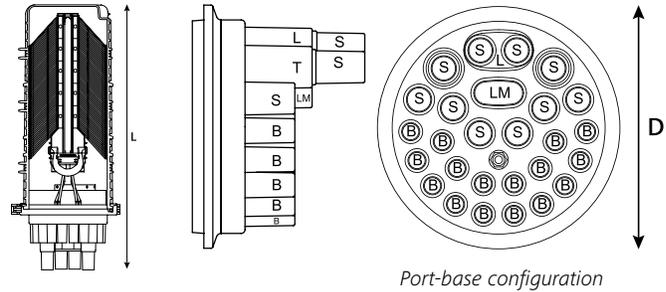
The UFC IR solution's larger size makes it possible to double stack the splice trays as well as double the fiber capacity. The area between the two splice tray stacks offers room for fiber loop storage. The closure has a splice capacity of up to 1440 fibers.

Trays are supplied in packs of 12 (SC-B) or six (SE), available in multiple colors for color coding within the enclosure, can be easily installed onto the IR backplane as needed and can be configured to accommodate heat shrink fusion splice sleeves, and the SE trays support a selection of fiber-optic splitters.

Its cover is environmentally sealed with a high-quality clamp and O-ring. Cable ports can be sealed using either Cablelok mechanical seals or heat-shrink sleeves. Closure can be fitted with a flash test valve and/or grounding feed through.

Features and Benefits

- Large size and capacity make it ideal for high fiber count FTTx and trunk applications.
- Accommodates up to 1440 single fiber splices and 26 drops providing fiber connections and distribution where needed.
- Double stacked splice trays keep enclosure size to a minimum.



Port-base configuration

PART NO.	Basket Size	Closure Length in.	Diameter (D) in.	Method of Sealing	Port Count	Port Type	Tray Qty	Tray Type	Splice Qty*
UFCIRBXDCWX	None	21.6	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	24	Integrated Routing SE	288
UFCIRBCDCWX	None	23.5	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	36	Integrated Routing SE	432
UFCIRBXDCXN	None	21.6	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	48	Integrated Routing SC-B	576
UFCIRCXDCWX	None	29.5	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	60	Integrated Routing SE	720
UFCIRBCDCXN	None	23.5	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	72	Integrated Routing SC-B	864
UFCIRCXDCXN	None	29.5	10.8	Cablelok, Heatshrink	1, 1, 2, 10, 16	L, LM, T, S, B	120	Integrated Routing SC-B	1440

*Splice quantities shown indicates single stack, SE trays are capable of double-stack splice.

Cable Seals



Cablelok 45
Heatshrink Sleeving..... 46

Cable Seals

Introduction

Cablelok 100% Mechanical Seal

Fiber engineers and network owners insist on 100 percent mechanically sealed closures. Traditional heat shrink methods can be time consuming, and the access required is not conducive for high port densities, particularly in today's Broadband Transport and FTTx environment. There are also serious health and safety concerns relating to gas bottle storage/transportation and confined space use.

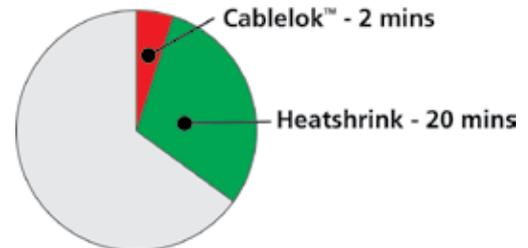
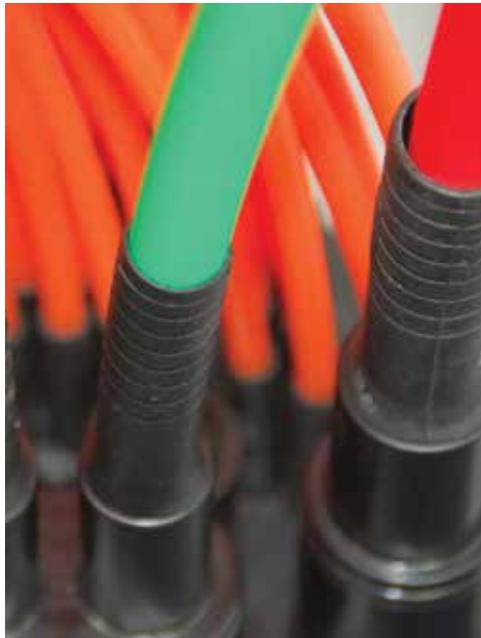
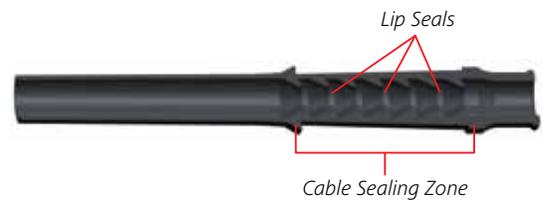
HellermannTyton's patented Cablelok mechanical seal enables fast, safe cable installation, providing a repeatable and consistent seal between the cable and the closure port with excellent non-leak performance. Installation times are typically reduced by up to 90 percent.

How does Cablelok work?

Cablelok is manufactured from an external grade of flexible polychloroprene. Sealing is achieved by multiple internal lip seals compressed onto the cable during installation.

Features and Benefits

- Rapid installation requiring no specialized tools saves time and money.
- Highly repeatable – the quality of the seal is not dependent on the skill of the engineer.
- Tested beyond a 20-foot water head (58.8kPa), exhibiting excellent sealing properties.
- Options to support flat drop cable designs.



Selecting the Correct Cablelok

Each port size on HellermannTyton closures has a unique identifier and a dedicated series of Cableloks (i.e., R, B, S, T, LM or L). Every Cablelok within a series is designed to accommodate a specific range of cable diameters. Achieving the required seal performance is simple:

STEP 1 Determine the diameter of the cable being used.

STEP 2 Choose the appropriate closure port to be used and hence, port identifier.

STEP 3 Identify the correct Cablelok using the port and cable ranges shown in the table.

Round Ports – R Port

Min. Cable Diameter mm	Max. Cable Diameter mm	Port Count	PART NO.	Pkg. Qty.
1.7	2.0	1	CL-R10-01	1
			CL-R10-10	10
		2	CL-R10D-01	1
			CL-R10D-10	10
3.0	3.8	1	CL-R20-01	1
			CL-R20-10	10
3.8	4.8	2	CL-R30D-01	1
			CL-R30D-10	10
	5.2	1	CL-R40-01**	1
			CL-R40-10**	10
			CL-R50-01	1
			CL-R50-10	10
6.0	8.5	1	CL-R70-01	1
8.0	9.5		CL-R70-10	10
			CL-R80-01	1

**R40 Cablelok supports both round and flat drop cable designs.

B Port

Min. Cable Diameter mm	Max. Cable Diameter mm	Port Count	PART NO.	Pkg. Qty.
4.8	9.0	1	CL-B10-01	1
			CL-B10-10	10
8.0	14.0		CL-B20-01	1
			CL-B20-10	10
13.0	16.5		CL-B30-01	1
			CL-B30-10	10

S Port

Min. Cable Diameter mm	Max. Cable Diameter mm	Port Count	PART NO.	Pkg. Qty.
5.0	8.5	1	CL-S10-01	1
			CL-S10-10	10
6.8	7.2	5	CL-S15M5-01	1
			CL-S15M5-10	10
8.0	12.0	1	CL-S20-01	1
			CL-S20-10	10
10.0	11.5	2	CL-S30D-01	1
			CL-S30D-10	10
12.0	16.0	1	CL-S40-01	1
			CL-S40-10	10
16.0	20.0		CL-S50-10	10
			CL-S50-01	1

T Port

Min. Cable Diameter mm	Max. Cable Diameter mm	Port Count	PART NO.	Pkg. Qty.
15.5	22.0	1	CL-T10-01	1
			CL-T10-10	10
20.0	23.5		CL-T20-01	1
			CL-T20-10	10
23.5	25.5		CL-T30-01	1
			CL-T30-10	10
24.5	29.0	CL-T40-01	1	
		CL-T40-10	10	

Oval Ports – L Port

Min. Cable Diameter mm	Max. Cable Diameter mm	Port Count	PART NO.	Pkg. Qty.
5.5	9.5	2	CL-L10C-01	1
			CL-L10C-10	10
9.0	12.5		CL-L20C-01	1
			CL-L20C-10	10
12.0	15.0		CL-L30C-01	1
			CL-L30C-10	10
15.0	18.5	CL-L40C-01	1	
		CL-L40C-10	10	
18.3	20.0	CL-L50C-01	1	
		CL-L50C-10	10	

LM Port

Min. Cable Diameter mm	Max. Cable Diameter mm	Port Count	PART NO.	Pkg. Qty.
4.0	6.5	2	CL-LM10C-01	1
			CL-LM10C-10	10
6.0	9.5		CL-LM20C-01	1
			CL-LM20C-10	10
9.0	12.5		CL-LM30C-01	1
			CL-LM30C-10	10
12.5	15.0	CL-LM40C-01	1	
		CL-LM40C-10	10	

Port Closure Plugs – For R, B, S, T, L and LM Ports

Variant	PART NO.	Pkg. Qty.
Round - R	CL-R99-01	1
	CL-R99-10	10
Round - B	CL-B99-01	1
	CL-B99-10	10
Round - S	CL-S99-01	1
	CL-S99-10	10
Round - T	CL-T99-01	1
	CL-T99-10	10
Oval - L	CL-L99C-01	1
	CL-L99C-10	10
Oval - LM	CL-LM99C-01	1
	CL-LM99C-10	10

Broadband Enclosures and Accessories

Heat Shrink Sleeving

HellermannTyton heat shrink kits are manufactured with crosslinked polyolefin and an internal lining of hot melt adhesive. The heat shrink sleeve has a coating of thermochromic paint, which changes color when the optimum temperature for shrinkage is achieved. The hot melt adhesive lining provides an environmental seal around the cable and port entry.

Features and Benefits

- Available in 3 diameters and 2 lengths to suit all port sizes.
- Internal lining of hot melt adhesive provides environmental seal.
- Visual correct shrinkage indication.



PART NO.	Max. Cable Diameter mm	Min. Cable Diameter mm	Content	Length (L) in.	Port Type	Qty. in Kit
HS-1902	45.0	12.0	Heatshrink (x 10.0) Abrasive Strips (x 10) Aluminium Foil (100 x 130mm) (x10) Isopropyl Alcohol Wipes (x 20)	5.9	S, T	10
HS-1908	60.0	16.0	Heatshrink (x10.0) Abrasive Strips (x10) Aluminum Foil (100 x 130mm)(x10) Tis Wipes (x20) BCL1983 Branch Clip (x10)	5.9	L, LM	10
HS-1910	60.0	16.0	Heatshrink (x1.0) Abrasive Strips (x1) Aluminum Foil (100 x 130mm)(x1) Tis Wipes (x2) BCL1983 Branch Clip (x1)	5.9	L, LM	1
HS-1899	33.0	6.0	Heatshrink (x 10.0) Abrasive Strips (x 10) Aluminium Foil (100 x 130mm) (x10) Isopropyl Alcohol Wipes (x 20)	5.9	R, B	10
HS-1903	45.0	12.0	Heatshrink (x 10.0) Abrasive Strips (x 10) Aluminium Foil (100 x 130mm) (x10) Isopropyl Alcohol Wipes (x 20)	7.1	S, T	10
HS-1909	60.0	16.0	Heatshrink (x10.0) Abrasive Strips (x10) Aluminum Foil (100 x 130mm)(x10) Tis Wipes (x20) BCL1983 Branch Clip (x10)	7.1	L, LM	10
HS-1911	60.0	16.0	Heatshrink (x1.0) Abrasive Strips (x1) Aluminum Foil (100 x 130mm)(x1) Tis Wipes (x2) BCL1983 Branch Clip (x1)	7.1	L, LM	1
HS-1900	33.0	6.0	Heatshrink (x 10.0) Abrasive Strips (x 10) Aluminium Foil (100 x 130mm) (x10) Isopropyl Alcohol Wipes (x 20)	7.1	R, B	10

Tools & Accessories



HellermannTyton tools and accessories complete the solution for installing fiber cables within a network. Aiding in assembly and reducing installation time, these purpose-designed solutions ensure the job will be swiftly and properly completed. Installation fixtures hold the enclosures during port opening and splicing activities. Port opening tools are used to cleanly open and allow installation of the heat shrink or Cablelok sealed cable boots into the enclosure bases, providing minimal surface roughness, which aids the sealing capabilities. Grounding lugs and anchor kits can be installed as needed to support any installation and assist in cable retention. Extra cleaning and lubricating wipes are available to support larger installation needs. Standard white or optional color-coded splice trays can be mixed and matched within an enclosure's integrated router to provide easy identification of system, type, route or customer access connections.

Branch Cable Sealing Clips.....	48
Port Opening Tools & Saw	49
Cover Release Tool.....	50
Universal Installation Bracket.....	50
FST/FRBU Wall Mounting Bracket.....	51
UFC/FDN Pole/Wall Mounting Bracket.....	51
FDN Wall Mounting Bracket.....	52
UFC Wall Mounting Bracket.....	52
Anchor Kits.....	53
FDN R Port Strain Relief Bracket	53
Grounding Kits	54
Cleaning & Cablelok Lubricant Wipes.....	54
Dessicant	54
Extended Length Ties	55
Aerial Support Ties.....	55
Splice Trays - SE	56
Splice Trays - SC-B	57
Pigtails	58
Adapters.....	59

Broadband Enclosures and Accessories

Branch Cable Sealing Clips BCL

The Branch Cable Sealing Clip is a U-shaped 2.5" clip manufactured from black, epoxy-coated aluminum. Used in conjunction with a single adhesive-lined heat shrink sleeving, it produces an environmental seal between two cables or in a loop-through application passing through the same port of a closure.

Features and Benefits

- Simple design, easy to use.
- Accommodates cable diameters from 5 to 28 mm.
- Aids heat transfer through to heat shrink sleeve and hot melt adhesive.



PART NO.	Description	Pkg. Type	Pkg. Qty.
BCL1938	Branch cable sealing clip	bag	50

Broadband Enclosures and Accessories

Adhesive Branch Cable Sealing Clips

This clip has three spurs and is made from black cast aluminum. The central spur is coated in an EVA/PA hot melt glue, which, when melted, provides additional protection at the seal area over the standard branching clip. Used in conjunction with a single adhesive-lined heat shrink sleeving, it produces an environmental seal between two cables or in a loop-through application passing through the same port of a closure.

Features and Benefits

- Simple design, easy to use.
- Integrated hot melt glue enhances seal protection.



PART NO.	Description	Pkg. Type	Pkg. Qty.
EBCL-10	Adhesive branch cable sealing clip	bag	10

Broadband Enclosures and Accessories

Port Opening Tools

HellermannTyton's Port Opening Tools are available in two styles. The "Top Hat" style is suitable for use with the 4-port FST, FRBU and FDN 16-port closures. The "Inset Disc" style is used with the 13-port FST, FDN and UFC closures.

Features and Benefits

- Quick and effective method saves time and is safer for installers.
- Consistent, smooth cut reduces the risk of damage to cables.
- Purpose-built design is ideal for Cablelok installations.



PART NO.	Description	Port Type	Color
TPC1940	A. Top Hat Port Opening Tool - B Port	B	Blue
TPC1939	A. Top Hat Port Opening Tool - R Port	R	Red
TPC1944	A. Top Hat Port Opening Tool - S Port	S	Yellow
TPC1942	B. Disc Port Opening Tool - B Port	B	Blue
TPC1941	B. Disc Port Opening Tool - R Port	R	Red
TPC1943	B. Disc Port Opening Tool - S Port	S	Yellow
SBT-B-01	C. Short Body Opening Tool - B Port	B	Metal
SBT-R-01	C. Short Body Opening Tool - R Port	R	Metal
SBT-S-01	C. Short Body Opening Tool - S Port	S	Metal

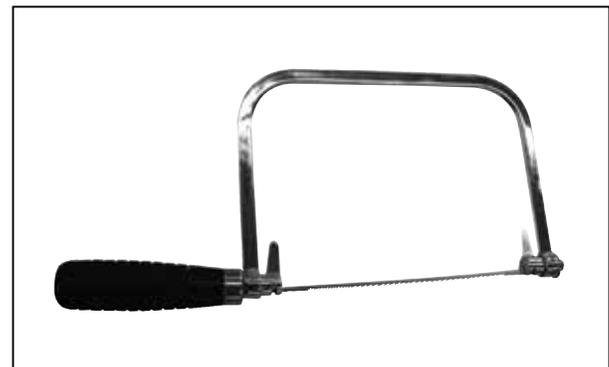
Broadband Enclosures and Accessories

Port Opening Saw

HellermannTyton's Port Opening Saw is applicable when using heat shrink sealing methods as well as to open L or LM oval ports and T Round ports on all enclosures.

Features and Benefits

- Quick and effective method saves time and is safer for installers.
- Consistent, smooth cut reduces the risk of damage to cables.



PART NO.	Description	Pkg. Type
TPC3337	Coping Saw Port Opening Tool - T, L, or LM Ports	box

Broadband Enclosures and Accessories

Cover Release Tool TCR

The TCR is a reusable, hand-operated tool manufactured from stainless steel. It aids in the opening of FST and FRBU closures.

Features and Benefits

- Easy to use, safer for installers.
- Specialized design prevents damage to closures.
- Stainless steel construction for lasting performance.



PART NO.	Description	Pkg. Type	Pkg. Qty.
TCR1726	Cover Release Tool	bag	2

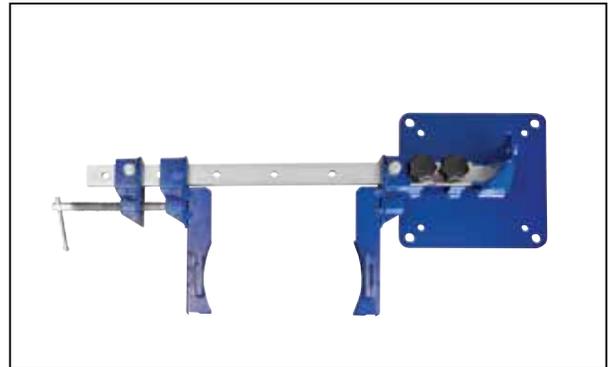
Broadband Enclosures and Accessories

Universal Installation Bracket

This bracket is designed for securing all HellermannTyton broadband closures. It is supplied with a single set of adjustable clamping jaws to accommodate the full range of closures from the largest UFC to the smallest FST. The bracket can be clamped to a suitable workbench surface or bolted in place using the mounting holes provided.

Features and Benefits

- Vertical or horizontal orientation for optimal access during installation or maintenance.
- Simple design is quick and easy to use.
- Manufactured from high-quality mild steel, zinc passivated and painted for a long service life.



PART NO.	Description	Pkg. Type	Pkg. Qty.
INSTALL-BRKT	Universal Installation Bracket	box	1

Broadband Enclosures and Accessories

FST/FRBU Wall Mounting Bracket

The FST/FRBU Wall Mounting Bracket is manufactured from polypropylene and offers an effective method of mounting for the HellermannTyton A-length FRBU and FST closures. The simple design of the mounting bracket allows for a quick and easy installation.

Features and Benefits

- Simple design, easy to install.



PART NO.	Description	Pkg. Type	Pkg. Qty.
ACC1037	Pole/Wall Mounting Bracket Kit for FRBU/FST	bag	1

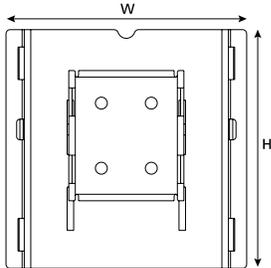
Broadband Enclosures and Accessories

UFC/FDN Pole/Wall Mounting Bracket

The HellermannTyton Pole/Wall Mounting bracket is suitable for mounting the UFC and FDN closures. The bracket is manufactured from stainless steel and the simple design makes it quick and easy to install.

Features and Benefits

- Simple design, easy to install.
- Manufactured from stainless steel, for long-lasting performance outdoors.
- Universal, strap-style wall mount provides versatile fit options.



PART NO.	Description	Width (W) in.	Height (H) in.	Pkg. Type	Pkg. Qty.
MB-LDC-PWB-001	Pole/Wall Mounting Brackets for UFC/FDN	4.4	4.3	bag	1

Broadband Enclosures and Accessories

FDN Wall Mounting Bracket

The FDN Wall Mounting Bracket is manufactured from powder coated stainless steel and is suitable for use with the FDN A length closure only. The wall mounting bracket offers an effective method of mounting the closure and is quick and easy to install.

Features and Benefits

- Simple design, easy to install.
- Manufactured from powder coated stainless steel, for long-lasting performance outdoors.



PART NO.	Description	Pkg. Type	Pkg. Qty.
FDNA3763	Wall Mounting Bracket for FDN	bag	1

Broadband Enclosures and Accessories

UFC Wall Mounting Bracket

The UFC Wall Mounting Brackets are suitable for use with the HellermannTyton range of UFC closures. Manufactured from powder coated cast aluminium, these brackets offer an effective method of mounting the closures and are simple and easy to install.

Features and Benefits

- Simple design, easy to install.
- Manufactured from powder coated cast aluminium, for long-lasting performance outdoors.



PART NO.	Description	Pkg. Type	Pkg. Qty.
UFCA2564	Wall Mounting Bracket for UFC	box	1

Broadband Enclosures and Accessories

Anchor Kits

This kit attaches the strength member within the cable to the mounting bracket inside the closure and ensures no undue stress is placed upon the fiber cables, which could affect optical performance.

Features and Benefits

- Provides strain relief to fiber-optic cables with solid or stranded strength members.
- Simple installation saves time.
- AK-10 suitable for use with UFC, FST and FRBU closures.
- AK-FDN-03 suitable for use with the FDN closure.



PART NO.	Pkg. Type	Pkg. Qty.
AK-10	bag	10
AK-FDN-03	bag	3

Broadband Enclosures and Accessories

FDN R-Port Strain Relief Kit

Designed for use with the HellermannTyton 59-Port FDN closure, this bracket provides additional support for the R-Ports. It is particularly suited for applications where drop cables may be subject to movement. It is supplied with 10x AK-10 anchor kits.

Features and Benefits

- Versatile design is suitable for solid or stranded cable strain relief.
- Simple design, easy to install.
- Stainless steel construction for lasting performance.



PART NO.	Description	Pkg. Type	Pkg. Qty.
SR-FDN-RP	R Port Strain Relief Bracket	bag	1

Broadband Enclosures and Accessories

Grounding Kits

Three kits suitable for grounding FRBU, FDN and UFC closures. The kits are designed to meet the bonding needs of fiber-optic cables, which contain metallic strength members or armored shielding.

Features and Benefits

- Simple design, easy to install.
- Versatile – each kit can facilitate bonding of up to three cables.



PART NO.	Description	Pkg. Type	Pkg. Qty.
EK-FML-FDN	Earth Kit for FDN Closure	bag	1
EK-FRBU	Earth Kit for FRBU Closure	bag	1
EK-UFC	Earth Kit for UFC Closure	bag	1

Broadband Enclosures and Accessories

Wipes and Dessicant

The cleaning wipe (IPA-10) is impregnated with isopropyl alcohol (IPA) and will remove contamination from the jacket or cable and will remove thixo-tropic gel or contamination from fiber elements prior to installation. The water-based lubrication wipes (P80-10) are used to lubricate the jacket of the cable, sealing O-rings and Cablelok, aiding installation.

Features and Benefits

- Each wipe supplied in individual, sealed packet for convenient use when needed.
- Isopropyl alcohol (IPA) wipe provides safe cleaning.
- Cablelok temporary lubricant wipe simplifies insertion of cables, grommets and covers.



PART NO.	Description	Pkg. Type	Pkg. Qty.
IPA-10	Alcohol Cleaning Wipes	bag	10
P80-10	P80 Cablelok Lubricant Wipes	bag	10
DESSI-10	Dessicant	bag	10

Broadband Enclosures and Accessories

Extended Length Ties

Extended Length Ties provide a high tensile strength strapping system consisting of a continuous strap and separate locking head making them suitable for any bundle diameter, eliminating waste. The smooth strap and specially designed heads with stainless steel pawls provide a strong grip on cables and wires without damage during vibration or in extreme environments. Spacers are available for dual bundle applications.



Features and Benefits

- Continuous strap and separate heads allow for any bundle diameter, eliminating waste.
- Smooth strap prevents cable damage.
- UV resistant materials contain an inhibitor which prolongs the life of the tie in outdoor environments.

PART NO.	TYPE	Description	Pkg. Type	Pkg. Qty.
TELS-1	EL-TY (TELS1)	1 - 50 ft. reel of strap and 30 heads	reel	1
TELS-H	EL-TY (TELSH)	Double entry and locking heads	bag	25
TELS-27	TELS-27	10 - 27" straps and 10 double-locking heads	pack	10
TELS-13	TELS-13	10 - 13.5" straps and 10 double-locking heads	pack	10
TELS-SPK2	EL-TY (TELS-SPK2)	EL-TY spacers	bag	50

Broadband Enclosures and Accessories

Aerial Support Ties

Aerial Support Ties feature a built-in spacer to separate cables from the support wire and prevent abrasion. A one-piece design, combining the tie and spacer into one part, reduces installation time and inventory costs. The outside serrations along the strap prevent damage to cables. Formulated from a special nylon blend, these ties are specifically suited for long-term outdoor use. The bent tail allows for quick and simple installation by hand.



Features and Benefits

- UV resistant materials contain an inhibitor which prolongs the life of the tie in outdoor environments.
- One-piece design reduces installation time.
- Outside serrations prevent cable damage.

PART NO.	TYPE	Min. Tensile Strength lbs.	Length in. (mm)	Max. Bundle Diameter in. (mm)	Width in. (mm)	Height in. (mm)	Pkg. Qty.
111-01671	TAS120M	120.0 (535.0)	12.4 (270.0)	2.7 (70.0)	0.5 (12.7)	0.8 (19.0)	500
111-01672	TAS120L	120.0 (535.0)	17.4 (420.0)	4.5 (114.0)	0.5 (12.7)	0.8 (19.0)	500

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.

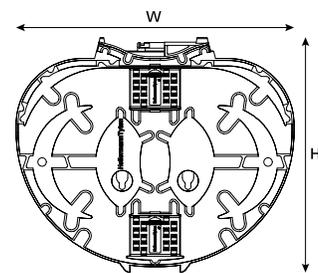
Broadband Enclosures and Accessories

Integrated Routing Fiber-Optic Splice Trays – Single Element SE

The Integrated Routing (IR) single element tray is manufactured from ABS and finished to a high specification to eliminate the risk of snagging or macrobends. All retaining tabs on the tray have radius edges and rounded corners where fiber may pass. Tray has a splice capacity of up to 24 fibers (double stacked) with heat shrink protectors up to 60 mm long. The IR single element tray is suitable for use in the UFC-IR or FDN-IR closures.

Features and Benefits

- Positive fiber management maintains a minimum bend radius of 30 mm.
- Trays are supplied in a package of six, with multiple colors available for color coding of the installation.
- Optional splitter tray accommodates a single optical splitter up to a maximum of 60 x 7 x 4 mm and up to 6 heat shrink splices single stacked or 12 heat shrink splices double stacked.



PART NO.	Content	Width (W) in.	Height (H) in.	Thickness in.	Splice Protector Type	Tray Quantity	Color
SEBIR-RB-3A-BK	6 x IR Single Element Splitter Trays, 6 x Mechanical/Ribbon and 6 x Heatshrink (3A) Splice Protector Holders	5.8	4.9	0.3	Heat Shrink Style, Splitter/Ribbon	6	Black
SEBIR-SP-3A-BK	6 x IR Single Element Splitter Trays, 6 x PLC and 6 x Heatshrink (3A) Splice Protector Holders	5.8	4.9	0.3	Heat Shrink Style, Splitter	6	Black
SEIR-SP-3A-W	6 x IR Single Element Trays, 6x PLC and 6 x Heatshrink (3A) Splice Protector Holders	5.8	4.9	0.3	Heat Shrink Style, Splitter	6	White
SEIR-3A-W	6 x IR Single Element Trays, 12 x Heatshrink (3A) Splice Protector Holders	5.8	4.9	0.3	Heat Shrink Style	6	White
SEIR-3A-BK	6 x IR Single Element Trays, 12 x Heatshrink (3A) Splice Protector Holders	5.8	4.9	0.3	Heat Shrink Style	6	Black
SEIR-3A-BL	6 x IR Single Element Trays, 12 x Heatshrink (3A) Splice Protector Holders	5.8	4.9	0.3	Heat Shrink Style	6	Blue
SEIR-3A-YL	6 x IR Single Element Trays, 12 x Heatshrink (3A) Splice Protector Holders	5.8	4.9	0.3	Heat Shrink Style	6	Yellow
SEIR-3A-RD	6 x IR Single Element Trays, 12 x Heatshrink (3A) Splice Protector Holders	5.8	4.9	0.3	Heat Shrink Style	6	Red
SEIR-MASS-W	6 x IR Single Element Trays, 12 x Mechanical/Ribbon Splice Protector Holders	5.8	4.9	0.3	Splitter/Ribbon	6	White
SEIR-3A-GN	6 x IR Single Element Trays, 12 x Heatshrink (3A) Splice Protector Holders	5.8	4.9	0.3	Heat Shrink Style	6	Green

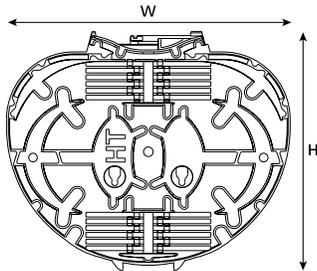
Broadband Enclosures and Accessories

Integrated Routing Fiber-Optic Splice Trays – Single Circuit SC-B

Integrated Routing (IR) single circuit SC-B trays are manufactured from ABS and finished to a high specification to eliminate the risk of snagging or macrobends. All retaining tabs on the tray have radius edges and rounded corners where fiber may pass. SC-B tray is suitable for use in UFC-IR and FDN-IR closures.

Features and Benefits

- Positive fiber management maintains a minimum bend radius of 30 mm.
- Trays are supplied in a package of 12, with multiple colors available for color coding of the installation.
- Molded splice holder fins accommodate up to 12 fibers per tray, with heat shrink protectors up to 60 mm long.



PART NO.	Content	Width (W) in.	Height (H) in.	Thickness in.	Splice Protector Type	Tray Quantity	Color
SCBIR-3A-BK	12 x IR Single Circuit Black SC-B Heatshrink (3A) Trays	5.8	4.9	0.1	Heat Shrink Style	12	Black
SCBIR-3A-BL	12 x IR Single Circuit Blue SC-B Heatshrink (3A) Trays	5.8	4.9	0.1	Heat Shrink Style	12	Blue
SCBIR-3A-GR	12 x IR Single Circuit Green SC-B Heatshrink (3A) Trays	5.8	4.9	0.1	Heat Shrink Style	12	Green
SCBIR-3A-RD	12 x IR Single Circuit Red SC-B Heatshrink (3A) Trays	5.8	4.9	0.1	Heat Shrink Style	12	Red
SCBIR-3A-W	12 x IR Single Circuit White SC-B Heatshrink (3A) Trays	5.8	4.9	0.1	Heat Shrink Style	12	White
SCBIR-3A-YL	12 x IR Single Circuit Yellow SC-B Heatshrink (3A) Trays	5.8	4.9	0.1	Heat Shrink Style	12	Yellow

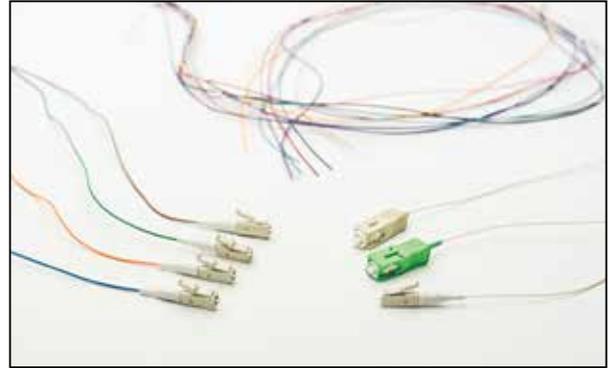
Broadband Enclosures and Accessories

Optical Fiber Pigtails

Optical Fiber Pigtails are used in place of field terminations to provide a reliable and high-performing pluggable connection for outdoor and higher fiber count feeder and trunk cables. The factory terminated and tested pigtails can be attached by fusion splice to provide a pluggable interface for the bulk optical cable or to create a discreet fiber breakout within an enclosure.

Features and Benefits

- Assembly with optical connector on only one end.
- Factory terminated and tested.
- Ideal for fusion splicing within FTTx applications.



PART NO.	Connector Type	Optical Performance	Performance Category	Length (L) ft.	Fiber Color	Pkg. Qty.
FALCX9OM43	LC	IL≤0.15	Multimode	3.0	White	1
FALCX9SM3	LC	IL≤0.15	Single Mode	3.0	White	1
FALCAX9SM3	LC-APC	IL≤0.15	Single Mode	3.0	White	1
FASCX9OM43	SC	IL≤0.50	Multimode	3.0	White	1
FASCX9SM3	SC	IL≤0.50	Single Mode	3.0	White	1
FASCAX9SM3	SC-APC	IL≤0.50	Single Mode	3.0	White	1

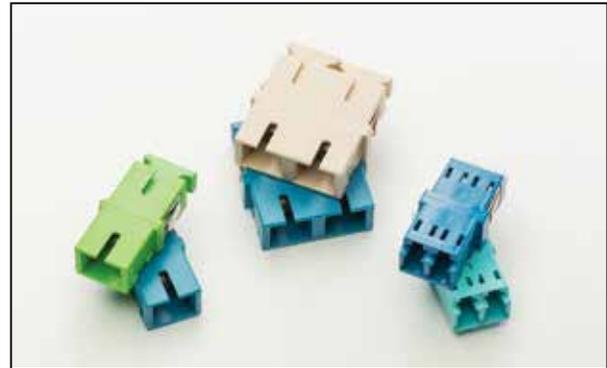
Broadband Enclosures and Accessories

Fiber-Optic Adapters

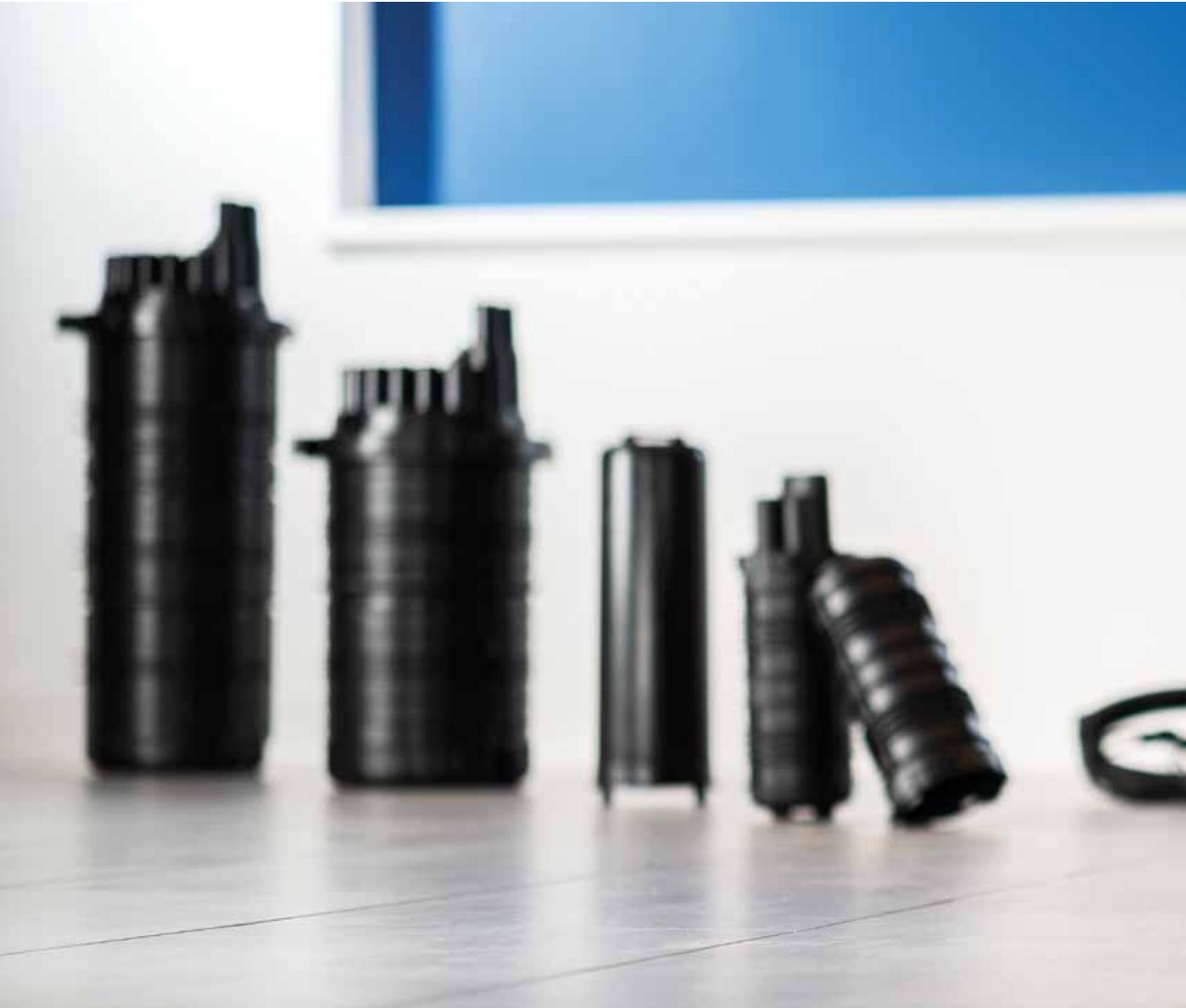
Fiber-Optic Adapters are designed to connect fiber-optic patch cords and pigtailed to each other. Connector ferrules are aligned with the internal precision alignment sleeve to provide optimal performance of the mated pair for data communications. Adapters are color coded to industry standards and provided with dust caps on both sides.

Features and Benefits

- Snap-in, no-flange design.
- Color coded for fiber/polish type.
- Dust caps included.



PART NO.	Description	Connector Type	Performance Category	Color	Pkg. Qty.
FALCDMM	LC Duplex, MM	LC	Multimode	Beige	1
FALCDMMA	LC Duplex, MM	LC	Multimode	Aqua	1
FALCDSM	LC Duplex, SM	LC	Single Mode	Blue	1
FALCMM	LC Simplex, MM	LC	Multimode	Beige	1
FALCMMA	LC Simplex, MM	LC	Multimode	Aqua	1
FALCSM	LC Simplex, SM	LC	Single Mode	Blue	1
FALCADSM	LC-APC Duplex, SM	LC-APC	Single Mode	Green	1
FALCASM	LC-APC Simplex, SM	LC-APC	Single Mode	Green	1
FASCDMM	SC Duplex, MM	SC	Multimode	Beige	1
FASCDMMA	SC Duplex, MM	SC	Multimode	Aqua	1
FASCDSM	SC Duplex, SM	SC	Single Mode	Blue	1
FASCMM	SC Simplex, MM	SC	Multimode	Beige	1
FASCMMMA	SC Simplex, MM	SC	Multimode	Aqua	1
FASCASM	SC Simplex, SM	SC	Single Mode	Blue	1
FASCADSM	SC-APC Duplex, SM	SC-APC	Single Mode	Green	1
FASCASM	SC-APC Simplex, SM	SC-APC	Single Mode	Green	1



**HellermannTyton North American
Corporate Headquarters**

7930 N. Faulkner Rd, PO Box 245017
Milwaukee, WI 53224-9517
Phone: (414) 355-1130, (800) 537-1512
Fax: (414) 355-7341, (800) 848-9866
email: corp@htamericas.com
www.hellermann.tyton.com

ISO/TS16949, AS9100, ISO 9001 and ISO14001 certified

HellermannTyton Canada

Unit #4, 205 Industrial Parkway North
Aurora, Ontario L4G 4C4 Canada
Phone: (800) 661-2461
Fax: (800) 390-3904
email: sales@hellermanntyton.ca

HellermannTyton Mexico

Anillo Periferico Sur 7980 Edificio 6A
Parque Industrial Tecnologico II
Santa Maria Tequepexpan
Tlaquepaque, Jalisco, Mexico 45601
Phone: 011-52-33-3-133-9880
Fax: 011-52-33-3-133-9861
email: info@htamericas.com.mx

ISO 9001 certified