

Broadband Connectivity Product Catalogue

Better Technology through Innovation



Welcome to HellermannTyton



Closure Selection Guide

HellermannTyton have created a closure selection guide to help customers understand which closures and splice trays would be best suited to their project or installation.

See page 12.



1.0 UFC Closures

The UFC closure is the largest in the HellermannTyton range with 28 round ports and 2 oval ports. Available in both IR and tubed versions, the UFC offers a maximum splice capacity of up to 1440 fibres (using 3A splices).

See page 17.



2.0 FDN Closures

The FDN is a medium sized oval closure available in 2 base types, the 59 port and the 16 Port. Supplied in both IR and tubed versions, the FDN offers a maximum splice capacity of up to 864 fibres (using 3A splices).

See page 45.



3.0 FML Closures

The FML is a medium sized round closure with 12 round ports and 1 oval port. Supplied in both IR and tubed versions, the FML offers a maximum splice capacity of up to 864 fibres (using 3A splices).

See page 91.



4.0 FRBU Closures

The FRBU is a compact closure from HellermannTyton with 2 base sizes available, the 9 port and the 11 port. With 8 or 10 round ports and 1 oval port, the FRBU offers a maximum splice capacity of up to 144 fibres (using 3A splices).

See page 105.



5.0 FST Closures

The FST closure is the smallest in the HellermannTyton range with 2 base sizes available, the 4 port and the 13 port. With 3 or 12 round ports and 1 oval port, the FST closure offers a maximum splice capacity of up to 36 fibres (using 3A splices).

See page 113.



6.0 Connectorised Closures

The connectorised solution is available in FDN, FRBU and FST closures as standard. Using fibre connectors with fibre pigtails, these pre-configured closures allow for quick customer connection or disconnection.

See page 119.



7.0 Pre-assembled Closures

HellermannTyton offer a number of bespoke, customised solutions to suit a customer's specific requirements. Pre-tubed and pre-fibred closures are just some of the options available.

See page 127.



8.0 Blown Fibre Joint Closure

The Blown Fibre Joint (BFJ) is a round ready access closure with a 12 port configuration, suitable for use in FTTH access and trunk networks.

See page 131.



9.0 Copper Jointing Closures

HellermannTyton offer a range of 3 compact ready-access copper jointing closures, designed for use in underground and aerial installations.

See page 135.



10.0 Enclosures

HellermannTyton offer a range of enclosures and wall boxes used for the protection and management of fibre optic splices in street cabinets and multi-dwelling unit (MDU) style environments.

See page 141.



11.0 Cablelok

Cablelok is HellermannTyton's patented 100% mechanical seal. Cablelok is a faster and safer alternative to heatshrink sealing methods.

See page 149.



12.0 Fibre Optic Splice Trays

HellermannTyton offer a wide selection of fibre optic splice trays which are compatible with the range of broadband closure and enclosures in this catalogue.

See page 161.



13.0 Accessories

This chapter includes the full range of Broadband accessories from HellermannTyton including Anchor Kits, Mounting Brackets and Fibre Manifolds.

See page 179.



14.0 RapidNet Fibre

RapidNet is HellermannTyton's high performance, pre-terminated connectivity solution. Included in this chapter is a range of RapidNet fibre options for use in fibre broadband/FTTX applications.

See page 195.



15.0 Appendix

Includes Terms and Conditions, Numerical and Alpha Numerical indexes as well as global contact details for HellermannTyton.

See page 209.

Broadband Connectivity



Delivering Fibre Optic Network Solutions

HellermannTyton Broadband Connectivity – Leaders in Fibre Management

HellermannTyton is an established and innovative global leader in the provision of network infrastructure cabling solutions, offering a broad range of quality, high performance connectivity for both residential and commercial use.

HellermannTyton's Broadband solutions include a comprehensive range of fibre splicing closures for the external and internal plant that you would find in any typical wide area (WAN), metro (MAN) or access network including fibre to the home (FTTX) applications.

The sealed fibre splice closures from HellermannTyton protect the fibre management systems from adverse environmental conditions whilst maintaining ready access for effective cable installation. The fibres are housed in space saving modular units that minimise network disruption and have been designed to allow further modules to be added at a later date for increased capacity, ensuring a future proof design.

More customers are demanding maximum flexibility and a modular approach to cable management systems that will fit into existing and future networks. All closures have therefore been designed to cater for this requirement to accommodate the wide variety of fibre optic cables that are now available including slotted core, loose tube, compact, ribbon and blown fibre / cable applications.

Engineered solutions for your business

HellermannTyton have extensive experience across the fibre broadband sector, allowing you to benefit from our knowledge and capability in product development. Through HellermannTyton's understanding of the fibre optic industry, it is possible to offer customers a complete range of unique solutions to meet your individual 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 Accreditations

HellermannTyton are members of:



The FTTH Council
Europe

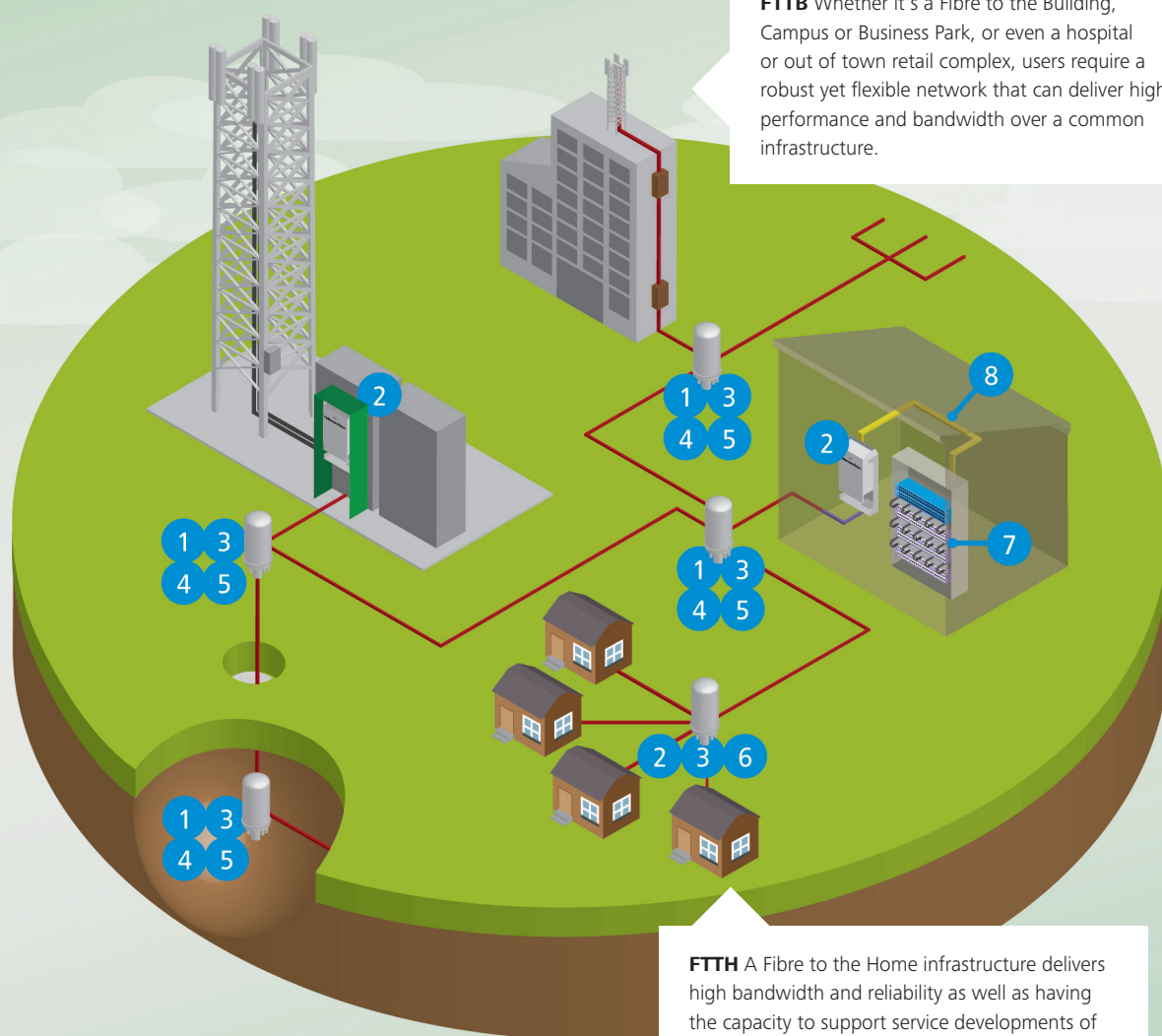


The Fibreoptic Industry
Association (FIA)

Fibre to the X

FTTM Fibre to the Mast enables high capacity and flexible LTE deployment. It can be a cost effective solution to the rural broadband challenge, providing an efficient way of delivering fast internet access to locations with low population density.

FTTB Whether it's a Fibre to the Building, Campus or Business Park, or even a hospital or out of town retail complex, users require a robust yet flexible network that can deliver high performance and bandwidth over a common infrastructure.



FTTH A Fibre to the Home infrastructure delivers high bandwidth and reliability as well as having the capacity to support service developments of the future.

FTTK Fibre to the Kerb is a telecommunications system where the fibre runs to a platform or cabinet that serves a number of customers. It is the final leg of the infrastructure running over existing copper that helps an FTTK network cost less to deploy.

Solutions for FTTX Applications

HellermannTyton broadband products can be found in all FTTX applications including Fibre to the Home (FTTH), Fibre to the Kerb (FTTK), Fibre to the Mast (FTTM) and Fibre to the Building (FTTB). Optical distribution within a FTTX network can face a number of competing technologies including Direct Fibre, Shared Fibre, Active Optical Networks (AON's) and Passive Optical Networks (PON's).

Direct fibre is possibly the simplest form of optical distribution. In this architecture, each fibre leaving the Point of Presence (PoP) goes to only one customer. This type of network provides the customer with excellent bandwidth as they have their own dedicated fibre.

HellermannTyton manufacture a wide range of fibre closures that can be applied across all areas of FTTX applications. Many of the sealed closures lend themselves to a PON architecture allowing up to 1440 fibres in the largest UFC closure all the way down to 36 fibres with the FST closure.

1 FST - Small Fibre Optic Closure

See Page 113



- Small size makes it ideal for Distributed Antenna Systems (DAS) and Remote Radio Head (RRH/RRU) applications
- Aerial mounting or direct burial
- Mid span possible for simple routing for 1 to N developments
- Easy installation and re-entry for on-going applications

2 IR Enclosures - Street Cabinet Fibre Splicing Enclosure

See Page 141



- Easy access for fibre splicing
- Positive fibre management and protection of exposed fibres
- Street cabinet and wall mounting options

3 FML - Mid Sized Fibre Optic Closure

See Page 91



- Larger Capacity for Base Station Controller (BSC) and 1 to N connections
- Can be used for connection with the Remote Fibre Feeder (RFF) in the core or access networks
- Choice of fibre management systems to suit the deployment including blown fibre
- Mid span and butt end catered for

4 FDN – Mid Sized Multi-Drop Fibre Optic Closure

See Page 45



- 52 drop ports ideal for FTTH applications
- Oval shaped for use where space is limited
- Fibre loop storage basket for loop through installations

5 UFC – Large Sized Fibre Optic Closure

See Page 17



- Ideal for high fibre count FTTX and trunk applications
- Double stacked splice trays for additional fibre installation
- Tubed and IR versions available

6 Connectorised Closures - Pre-configured with Fibre Connectors

See Page 119



- Speed up deployments by pre-connectorising joint ready for the drop cables
- A range of configurations available to suit connector type and density
- Suitable for blown fibre applications

7 RapidNet - Pre-terminated Fibre Solution

See Page 195



- Speed up deployment in the BSC or Base Transceiver Station (BTS)
- Pre-terminated and tested
- Up to 24 LC connections per cassette (96 per U)
- External grade cable suitable for direct burial or ducts

8 LightGuide 2 - Fibre Optic Ducting System

See LightGuide 2 Product Catalogue



- Management of fibre within BTS, PoP, hub or head end
- Clearly identifies fibre routes within the installation
- Simple and flexible configurations to suit any site
- Overhead or under floor installations possible
- Provides complete protection for the fibre cables

To truly excel, you need to
keep improving all the time
Our Corporate Philosophy



HellermannTyton: A powerful partner to meet your high expectations

You are our
first priority

Your satisfaction is our goal:

Our professional customer service and the high quality of our products shape the foundation of your trust in us. We are always working to make our services even better.

You can connect
with us worldwide

Perfect service wherever you need it:

Use our global strength to your local advantage. Our direct representatives in 35 countries and sales partners around the globe are happy to assist you wherever you need our support.

Experience always puts
us one step ahead

Innovation as a key to success:

Our many years of experience creates the foundation for our wide range of innovations. The expertise and experience of our employees helps us to develop perfect solutions for you worldwide.

Not just good –
we strive to be the best

With our passion for perfection:

We are always working on finding creative and precise solutions for you – quickly, effectively and to successfully meet your needs.

You can rely
on us

Partnership as a mutual foundation:

Strong teamwork is the primary focus of our relationship with our customers, suppliers and employees. Long lasting, reliable partnerships are what counts for us most, along with the durability of our products.

Setting new standards
of quality

Security at its highest level:

From manufacturing through to delivery, we meet the highest standards of quality, driven by a quality management system that we implement throughout all of our production processes.

Whenever you need us

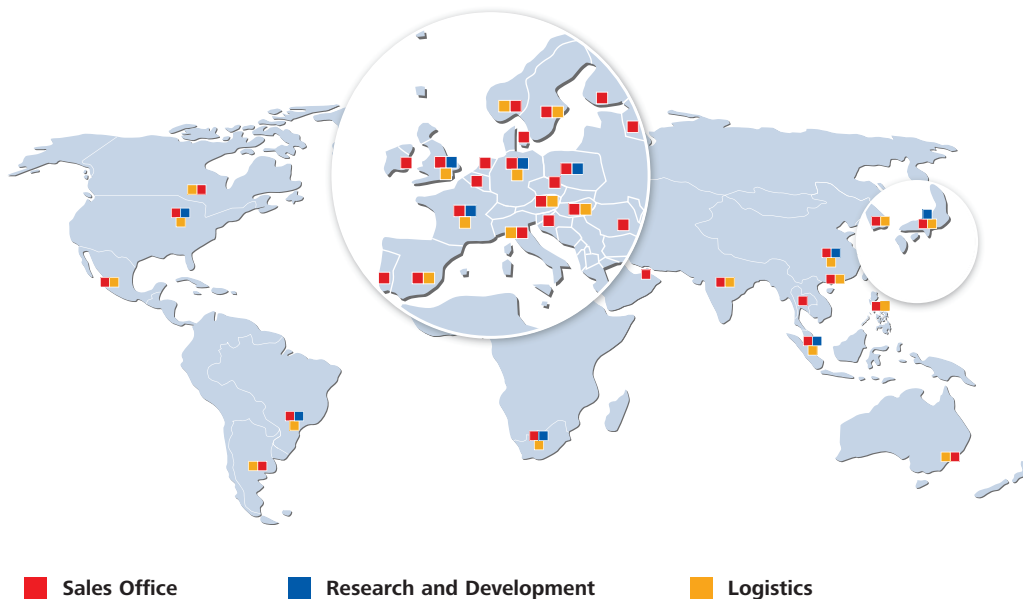
Think global, act local

If you have a particular problem that you would like us to help you with then please contact us.

We are part of the global HellermannTyton group, who are market leaders in cable management serving the communications, construction, utility, automotive and aerospace markets and have operations in 35 countries. With our vast experience and practically unlimited technical capabilities we are confident of being able to help you find a solution.

Remember, we are a service provider and not just a supplier. Give us a call! Here are your contacts for enquiries and orders. For all product information please visit our website www.htdata.co.uk


HellermannTyton: Locally in 35 countries



Expertise worldwide

You will find your local contact here:

Europe

 **HellermannTyton GmbH – Austria**
Rennbahnweg 65
1220 Vienna
Tel: +43 12 59 99 55-0
Fax: +43 12 59 99 11
E-Mail: office@HellermannTyton.at
www.HellermannTyton.at

 **HellermannTyton – Czech Republic**
E-Mail: officeCZ@HellermannTyton.at
www.HellermannTyton.cz

 **HellermannTyton – Denmark**
Industrivej 44A, 1.
4000 Roskilde
Tel: +45 702 371 20
Fax: +45 702 371 21
E-Mail: htdk@HellermannTyton.dk
www.HellermannTyton.dk

 **HellermannTyton – Finland**
Sähkötie 8
01510 Vantaa
Tel: +358 9 8700 450
Fax: +358 9 8700 4520
E-Mail: myynti@HellermannTyton.fi
www.HellermannTyton.fi

 **HellermannTyton S.A.S. – France**
2 rue des Hêtres, C.S. 80543
78197 Trappes Cedex
Tel: +33 1 30 13 80 00
Fax: +33 1 30 13 80 60
E-Mail: info@HellermannTyton.fr
www.HellermannTyton.fr

 **HellermannTyton GmbH – Germany**
Großer Moorweg 45
25436 Tornesch
Tel: +49 4122 701-0
Fax: +49 4122 701-400
E-Mail: info@HellermannTyton.de
www.HellermannTyton.de

 **HellermannTyton KFT – Hungary**
Kisfaludy u. 13
1044 Budapest
Tel: +36 1 369 4151
Fax: +36 1 369 4151
E-Mail: officeHU@HellermannTyton.at
www.HellermannTyton.hu


 **HellermannTyton Ltd – Ireland**
Unit 77 Cherry Orchard
Industrial Estate
Ballyfermot, Dublin 10
Tel: +353 1 626 8267
Fax: +353 1 626 8022
E-Mail: sales@HellermannTyton.ie
www.HellermannTyton.co.uk

 **HellermannTyton S.r.l. – Italy**
Via Visco, 3/5
35010 Limena PD
Tel: +39 049 767 870
Fax: +39 049 767 985
E-Mail: info@HellermannTyton.it
www.HellermannTyton.it

 **HellermannTyton B.V. – Belgium/Netherlands**
Vanadiumweg 11-C
3812 PX Amersfoort
Tel: +31 33 460 06 90
Fax: +31 33 460 06 99
E-Mail (NL): info@HellermannTyton.nl
E-Mail (BE): info@HellermannTyton.be
www.HellermannTyton.nl
www.HellermannTyton.be

 **HellermannTyton AS – Norway**
PO Box 240 Alnabru
0614 Oslo
Tel: +47 23 17 47 00
Fax: +47 22 97 09 70
E-Mail: firmapost@HellermannTyton.no
www.HellermannTyton.no

 **HellermannTyton Sp. z o.o. – Poland**
ul. Berdychów 57A
62-410 Zagorów
E-Mail: info@HellermannTyton.pl
www.HellermannTyton.pl


 **HellermannTyton – Romania**
E-Mail: officeRO@HellermannTyton.at
www.HellermannTyton.at

 **OOO HellermannTyton – Russia**
40/4, Pulkovskoe road
BC Technopolis Pulkovo, office A 8081
196158, St. Petersburg
Tel: +7 812 386 00 09
Fax: +7 812 386 00 08
E-Mail: info@HellermannTyton.ru
www.HellermannTyton.ru

 **HellermannTyton – Slovenia**
Branch Office Ljubljana
Podružnica Ljubljana, Leskoškova 6
1000 Ljubljana
Tel: +386 1 433 70 56
Fax: +386 1 433 63 21
E-Mail: officeSI@HellermannTyton.at
www.HellermannTyton.si

 **HellermannTyton España S.L. – Spain/Portugal**

Avda. de la Industria 37 2º 2
28108 Alcobendas, Madrid
Tel: +34 91 661 2835
Fax: +34 91 661 2368
E-Mail:
HellermannTyton@HellermannTyton.es
www.HellermannTyton.es

 **HellermannTyton AB – Sweden**
Isafjordsgatan 5, Box 7037
16407 Kista, Sweden
Tel: +46 8 580 890 00
Fax: +46 8 580 890 01
E-Mail: support@HellermannTyton.se
www.HellermannTyton.se

 **HellermannTyton Ltd – UK**
William Prance Road
Plymouth International Medical
and Technology Park
Plymouth, Devon PL6 5WR
Tel: +44 1752 701 261
Fax: +44 1752 790 058
E-Mail: info@HellermannTyton.co.uk
www.HellermannTyton.co.uk

 **HellermannTyton Ltd – UK**
Sharston Green Business Park
1 Robeson Way
Altrincham Road, Wythenshawe
Manchester M22 4TY
Tel: +44 161 947 2200
Fax: +44 161 947 2220
E-Mail: sales@HellermannTyton.co.uk
www.HellermannTyton.co.uk

 **HellermannTyton Ltd – UK**
Main Contact for Customer Service
Wharf Approach
Aldridge, Walsall, West Midlands
WS9 8BX
Tel: +44 1922 458 151
Fax: +44 1922 743 053
E-Mail: info@HellermannTyton.co.uk
www.HellermannTyton.co.uk

 **HellermannTyton Data Ltd – UK**
Cornwell Business Park
Salhouse Road, Brackmills
Northampton NN4 7EX
Tel: +44 1604 707 420
Fax: +44 1604 705 454
E-Mail: sales@htdata.co.uk
www.htdata.co.uk

Middle East

 **HellermannTyton – UAE**
Email: info@HellermannTyton.ae
www.HellermannTyton.ae

North America

 **HellermannTyton – Canada**
Tel: +1 905 726 1221
Fax: +1 905 726 8538
E-Mail: sales@HellermannTyton.ca
www.HellermannTyton.ca

 **HellermannTyton – Mexico**
Tel: +52 333 133 9880
Fax: +52 333 133 9861
E-Mail: info@HellermannTyton.com.mx
www.HellermannTyton.com

 **HellermannTyton – USA**
Tel: +1 414 355 1130
Fax: +1 414 355 7341
E-Mail: corp@htamericas.com
www.HellermannTyton.com

South America


 **HellermannTyton – Argentina**
Tel: +54 11 4754 5400
Fax: +54 11 4752 0374
E-Mail: ventas@HellermannTyton.com.ar
www.HellermannTyton.com.ar

 **HellermannTyton – Brazil**
Tel: +55 11 4815 9000
Fax: +55 11 4815 9030
E-Mail: vendas@HellermannTyton.com.br
www.HellermannTyton.com.br

Asia-Pacific

 **HellermannTyton – Australia**
Tel: +61 2 9525 2133
Fax: +61 2 9526 2495
E-Mail: cservice@HellermannTyton.com.au
www.HellermannTyton.com.au

 **HellermannTyton – China**
Tel: +86 510 8528 2536
Fax: +86 510 8528 2731
E-Mail: cservice@HellermannTyton.com.cn
www.HellermannTyton.com.cn

 **HellermannTyton – Hong Kong**
Tel: +852 2832 9090
Fax: +852 2832 9381
E-Mail: cservice@HellermannTyton.com.hk
www.HellermannTyton.com.sg

 **HellermannTyton – India**
Tel: +91 120 413 3384
Bangalore: +91 776 001 0104
Chennai: +91 996 264 3939
Faridabad: +91 971 851 7797
Ghaziabad: +91 93 1354 1671
Pune: +91 727 601 2200
E-Mail: cservice@HellermannTyton.co.in
www.HellermannTyton.co.in

 **HellermannTyton – Japan**
Tel: +81 3 5790 3111
Fax: +81 3 5790 3112
E-Mail: cservice@HellermannTyton.co.jp
www.HellermannTyton.co.jp


 **HellermannTyton – Republic of Korea**
Tel: +82 31 388 8012
Fax: +82 31 388 8013
E-Mail: cservice@HellermannTyton.co.kr
www.HellermannTyton.co.kr

 **HellermannTyton – Philippines**
Tel: +63 2 752 6551
Fax: +63 2 752 6553
E-Mail: cservice@HellermannTyton.com.ph
www.HellermannTyton.com.ph

 **HellermannTyton – Singapore**
Tel: +65 6 852 8585
Fax: +65 6 756 6798
E-Mail: cservice@HellermannTyton.sg
www.HellermannTyton.com.sg

 **HellermannTyton – Thailand**
Tel: +662 237 6702 / 266 0624
Fax: +662 266 8664
E-Mail: cservice@HellermannTyton.co.th
www.HellermannTyton.com.sg

Africa

 **HellermannTyton – South Africa**
Tel: +27 11 879 6680
Fax: +27 11 879 6601
E-Mail: sales.jhb@Hellermann.co.za
www.HellermannTyton.co.za

Closure Selection Guide

HellermannTyton have designed two selection models over the following 3 pages to help make choosing the right closure and splice tray configuration quicker and easier; by the **maximum number of fibre splices planned (tables below and right)** or by the **number and size of the fibre cables being used (tables overleaf)**.



Fibre splices required
Page 12-13



Cable size or no. of cables
Page 14



Closure required: based on number of splices











To determine the most appropriate closure for your application you need to consider the number of fibres you wish to splice, the number and diameter of cables entering and exiting the closure and the type of fibre management system best suited to your needs. The tables below and opposite identify possible closures and tray types based on the number of splices required and the type of splice protector being used (either 3A heatshrink, Multi-Ribbon or ANT crimp style). Once you have identified 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 and fibre management system.

3A and Multi-Ribbon Splice Capacity Table

SPICE CAPACITY	CLOSURE RANGE							
	UFC		FDN		FML		FRBU	FST
	IR	TUBED	IR	TUBED	IR	TUBED		
	PAGE 17	PAGE 30	PAGE 45	PAGE 64	PAGE 91	PAGE 100	PAGE 105	PAGE 113
1728		C-Length DS 72x SMF SE-A						
1440	C-Length DS 120x IR SC-B							
1152								
864	BC-Length DS 72x IR SC-B	C-Length 36x SMF SE-A BC-Length DS 36x SMF SE-A C-Length DS 72x NZDF SE-A	C-Length 72x IR SC-B	C-Length 36x SMF SE-A		C-Length 36x SMF SE-B		
720	C-Length 60x IR SC-B C-Length DS 60x IR SE				C-Length 60x IR SC-B			
576	B-Length DS 48x IR SC-B	C-Length 4x Hellamass Large	B-Length 48x IR SC-B	B-Length 24x SMF SE-A	BC-Length 48x IR SC-B	B-Length 24x SMF SE-B		
480	C-Length DS 120x IR SC							
432	BC-Length 36x IR SC-B BC-Length DS 36x IR SE	C-Length 36x NZDF SE-A BC-Length DS 36x NZDF SE-A	C-Length 36x IR SE	AB-Length 18x SMF SE-A C-Length 36x NZDF SE-A	B-Length 36x IR SC-B	C-Length 36x NZDF SE-B		
360	C-Length 30x IR SE				C-Length 30x IR SE			
288	B-Length 24x IR SC-B B-Length DS 24x IR SE BC-Length DS 72x IR SC	BC-Length 12x SMF SE-A	B-Length 24x IR SE AB-Length 24x IR SC-B C-Length 72x IR SC	A-Length 12x SMF SE-A B-Length 24x NZDF SE-A	BC-Length 24x IR SE	C-Length 2x Hellamass Large B-Length 12x Hellapon Med C* B-Length 24x NZDF SE-B		
240	C-Length 60x IR SC				C-Length 60x IR SC			
216	BC-Length 18x IR SE	C-Length 18x MR		AB-Length 18x NZDF SE-A C-Length 18x MR	B-Length 18x SE-IR			
192	B-Length DS 48x IR SC		B-Length 48x IR SC		BC-Length 48x IR SC			
144	B-Length 12x IR SE BC-Length 36x IR SC	BC-Length 12x NZDF SE-A A-Length 6x SMF SE-A	AB-Length 12x IR SE A-Length 12x IR SC-B	A-Length 12x NZDF SE-A B-Length 12x MR	B-Length 36x IR SC	A-Length 6x SMF SE-B	A and B-Length 6x Hellapon Med C*	
108				AB-Length 9x MR				
96	B-Length 24x IR SC		AB-Length 24x IR SC					
72		A-Length 6x NZDF SE-A BC-Length 6x MR	A-Length 6x IR SE	A-Length 6x MR		A-Length 6x NZDF SE-B	B-Length 6x Hellapon Sm	
48			A-Length 12x IR SC					
36		A-Length 3x MR						A-Length 3x Hellapon Sm

* Hellapon Medium splice capacity achieved when double stacking on a tray

Fibre Optic Splice Trays. There are a number of splice tray options available, depending on the closure type selected and the splice type required. More information on splice trays can be found in Chapter 12 on Page 161.

IR			Hellipse				Hellapon		Hellamass	Multi-Ribbon (MR)
SC	SC-B	SE	SMF		NZDF		Small (Sm)	Medium (Med) Style C	Large	
			SE-A	SE-B	SE-A	SE-B				
										
Page 164	Page 165	Page 163	Page 170	Page 171	Page 167	Page 168	Page 175	Page 174	Page 173	

ANT Splice Capacity Table

SPICE CAPACITY	CLOSURE RANGE							
	UFC		FDN		FML		FRBU	FST
	IR	TUBED	IR	TUBED	IR	TUBED		
	PAGE 17	PAGE 30	PAGE 45	PAGE 64	PAGE 91	PAGE 100	PAGE 105	PAGE 113
ANT	1728	C-Length DS 72x NZDF SE-A						
	1440	C-Length DS 120x IR SC-B C-Length DS 60x IR SE						
	1152	C-Length 4x Hellamass Large						
	864	BC-Length DS 72x IR SC-B BC-Length DS 36x IR SE	C-Length 36x NZDF SE-A BC-Length DS 36x NZDF SE-A	C-Length 36x IR SE C-Length 72x IR SC-B	C-Length 36x NZDF SE-A	C-Length 36x NZDF SE-B		
	720	C-Length 60x IR SC-B C-Length 30x IR SE			C-Length 30x IR SE C-Length 60x IR SC-B			
	576	B-Length DS 48 x IR SC-B B-Length DS 24x IR SE	B-Length 48x IR SC-B B-Length 24x IR SE	B-Length 24x NZDF SE-A	BC-Length 24x IR SE BC-Length 48x IR SC-B	B-Length 24x NZDF SE-B C-Length 2x Hellamass Large		
	480	C-Length DS 120x IR SC						
	432	BC-Length 36x IR SC-B BC-Length 18x IR SE		AB-Length 18x NZDF SE-A	B-Length 18x IR SE B-Length 36x IR SC-B			
	360							
	288	B-Length 24x IR SC-B B-Length 12x IR SE BC-Length DS 72x IR SC	BC-Length 12x NZDF SE-A	AB-Length 12x IR SE AB-Length 24x IR SC-B C-Length 72x IR SC	A-Length 12x NZDF SE-A	B-Length 12x Hellapon Med C*		
	240	C-Length 60x IR SC			C-Length 60x IR SC			
	216							
	192	B-Length DS 48x IR SC	B-Length 48x IR SC		BC-Length 48x IR SC			
	144	BC-Length 36x IR SC	A-Length 6x NZDF SE-A	A-Length 12x IR SC-B A-Length 6x IR SE	B-Length 36x IR SC	A-Length 6x NZDF SE-B	A and B-Length 6x Hellapon Med C* B-Length 6x Hellapon Small	
	108							
	96	B-Length 24x IR SC	AB-Length 24x IR SC					
	72							A-Length 3x Hellapon Sm
	48		A-Length 12x IR SC					
	36							

* Hellapon Medium splice capacity achieved when double stacking on a tray

Closure Selection Guide









Closure Required: based on quantity and size of cables

Once you have determined a shortlist of possible closures based on the number of splices required (previous page), these tables can help you narrow down the selection based on the number and diameter of cables entering and exiting the closure.

If the number of ports required is your critical factor then use these tables first before refining your selection based on the number of splices.

Fibre Splice Closures: These tables list the fibre splice closures available and their port counts. The port count along with the table below listing the port cable sizes will help you in deciding which closure will work best for your 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							
		UFC	FDN		FML	FRBU		FST	
Total Port Count		30	59	16	13	11	9	13	4
									
		PAGE 17	PAGE 45	PAGE 64	PAGE 91	PAGE 105	PAGE 105	PAGE 113	PAGE 113
Oval	L	0 / 1	0 / 1	0 / 1	0 / 1	0	1	0	0
	LM	1	0	0	0	1	0	1	1
Round	T	0 / 2	0 / 2	0 / 2	0 / 2	0	0	0	0
	S	8 / 10	2 / 4	9	6	0	0	0	0
	B	16	0 / 2	0 / 4	2 / 4	2	4	2	3
	R	0	52	0	0	8	4	10	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.

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

Which Fibre Management System?

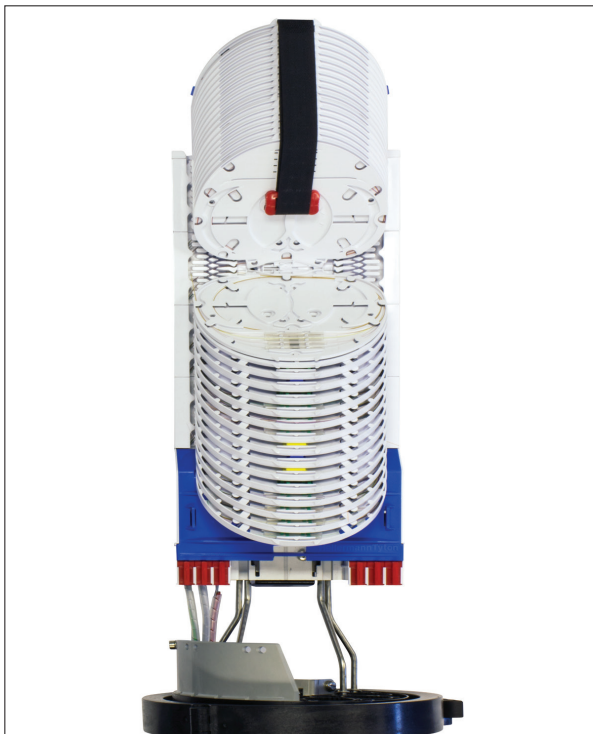
HellermannTyton offer two types of fibre management system - the Integrated Routing (IR) available on the largest closures (UFC, FDN and FML) and tubed systems available on all closures. Both systems deliver high quality fibre management.

Each type of fibre management system offers its own benefits to the end user or installer. The information below will help you identify which fibre management system is best suited to your needs.

Features and Benefits

- Positive bend radius limiting fibre management
- Good fibre protection
- Splitter accommodation
- A range of splice types (3A heatshrink or ANT crimp)
- Loop storage basket options
- High quality identification

Integrated Routing Closure



CLOSURE RANGE AVAILABLE		
UFC	FDN	FML
PAGE 17	PAGE 45	PAGE 91

Good for:

- Fast installation times
- Low installation cost
- Storing excess fibre in the fibre storage unit
- Bi-directional fibre routing
- Tray to tray fibre management
- Protection of individual fibres
- Interchangeable single element and single circuit trays
- Modular system can be extended if required

Tubed Closure



CLOSURE RANGE AVAILABLE				
UFC	FDN	FML	FRBU	FST
PAGE 30	PAGE 64	PAGE 100	PAGE 105	PAGE 113

Good for:

- Individual single element/single circuit protection
- Each tray has its own network - work on fibre circuits without disrupting adjacent fibres
- Blowing fibre directly to the tray
- High port count onto trays
- Large open access trays
- Connectorised closure options

Integrated Routing Closure Construction

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

Speed, ease and quality of installation have always been important when implementing large scale fibre optic networks. In today's environment, with the need for more fibre to be installed in less time at lower cost, particularly in FTTX access networks, quick cost effective deployment of fibre on a large scale is critical to the success of a project.

HellermannTyton's Integrated Routing system meets these needs. The system is simple to use, quick to install and provides excellent fibre protection, management and distribution within the closure.

Easy Tray Addition

- Additional trays can be easily clipped onto the back plane
- Dedicated location slots for single element and single circuit trays so that they cannot be incorrectly located

Tray Support Mechanism

- A clip on the strap attaches onto the underside of the tray above to hold the stack out of the way whilst the lower tray is being worked on

Quality Mouldings

- No sharp corners
- All fibre facing edges are radiused to prevent snagging and microbending

Fibre Retention

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

Colour Coded Parts

- Components are colour coded to make the closure easy to work with in the field

Clear Entry Area

- Uncluttered space between the closure base and entry module gives easy access
- Metal components are stainless steel or anodised aluminium ensuring there will be no corrosion over time

On/Off Fibre Routing

- Fibre is actively managed between the tray and the back plane to prevent snagging and microbending
- Left and right entry points onto each tray

Bi-directional Fibre Routing

- The back plane enables fibre to be routed both up and down for tray applications (eg: when using splitters)

Splitter Accommodation

- Optical splitters can be accommodated in the single element tray up to maximum dimensions of 70x20x6mm

Positive Fibre Management

- Both splice tray and back plane designs incorporate positive fibre management ensuring a minimum 30mm bend radius is always maintained

Fibre Storage

- The Fibre Storage Unit has a large capacity for storing spare fibre
- Fibre can be managed and routed to either side of the back plane module

Splice Capacity

- Different splice bridges means a range of splice types (up to 60mm in length) can be accepted 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.)

