# **ERATELLE** TOGETHER EVERYTHING CONNECTS

# 01

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# ©2 ■ INTRODUCTION DELIVERING SOLUTIONS, CREATING CONNECTIONS

Superfast connectivity is becoming an increasingly essential part of our daily lives. As technology capabilities expand, the global connectivity expectations grow in tandem. Whether it be for home office, wifi supply, streaming services, remote calling and much more, it's an essential requirement that 21st century lives cannot live without a superfast, quality and reliable connection.

Without optical fibre, such a feat would not be possible. Optical fibre brings a variety of benefits compared to more conventional cabling methods including; increased bandwidth capabilities, faster speeds, improved reliability, and further flexibility for the future. To effectively combat the ever-growing connectivity requirements - with more and more fibre deployments being rolled out across the globe daily - there is a high reliance on ensuring optical fibre deployments are easy-to-install, efficient, and futureproof.

The complete Emtelle solution delivers this and more. The innovative direction of Emtelle FibreFlow, QWK and FIT solution ranges, enable operators to utilise a fully compatible, fully tested, and fully futureproof solution, aiding and enhancing in fibre optic rollouts. Having assisted a high proportion of the key players with quality and reliable fibre and duct solutions for deployments worldwide over the last 40 years, the proof is in Emtelle's positioning, providing a premium end-to-end product solution, to a long list of global projects.

On the following pages you will find out more on why Emtelle are the supplier of choice, and how the Emtelle product solution library enhances global fibre roll-outs.

# GLOBAL MANUFACTURER OF PRE-CONNECTORISED, BLOWN FIBRE CABLE & DUCTED NETWORK SOLUTIONS



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With operations in UK, Germany and Denmark, as well as sales offices in The Netherlands, Sweden, Eastern Europe & Malaysia, Emtelle serves over 100 countries globally, combining proven knowledge with continuous innovation for the last 40 years.

#### AN ESTABLISHED INDUSTRY LEADER

Having dominated the blown fibre & ducted solution manufacturing space since its inception, Emtelle have pioneered some of the most innovative solutions within the industry as the company has advanced over the past four decades. Ranging from standard fibre, microduct and tube bundle products to pre-fibred and preconnectorised solutions, they focus on creating the best value, reducing total project costs, and minimizing installation time and disruption.

#### THE FULL SOLUTION PROVIDER

Supplying a unique and complete solution to an ever-expanding market is more pertinent now than ever.

Emtelle acknowledge the challenges that providers and operators face when combining all the different components within a passive network, and ensuring efficient delivery of all at the right time. Emtelle with it's one-stop-shop ethos is all about providing customers with one direct route to sourcing a complete end-toend solution; from microducts to fibre cables, from connectors to closures, from tools to blowing equipment. It's a way of making our customers' lives easier, enabling them to focus on what is paramount - creating connections effectively and efficiently.

#### **OFFERING SUPERIOR SUPPORT**

Emtelle offer the full solution in terms of solution supply, customer service, support and training, from initial concept to installation and beyond. The highest standard of excellence is provided by Emtelle throughout all its activities by using the company's production capacity and technical knowledge to develop, perfect & sustain the optimum solutions; the entire Emtelle offering adds value to FTTX networks around the world.

























# ()**PROVIDING THE FULL SOLUTION**





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At Emtelle we are always looking at ways to improve the FTTH network and provide high-quality solutions for our customers. Compliment your network with the full Emtelle solution, from

connectivity solutions to blowing equipment. This brochure will inform you of our vast product range and explain each of our solutions' benefits.









# ()**BLOWN FIBRE**

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Our Fibre Unit (FU) is an Emtelle developed and patented blown fibre micro cable, containing a state-of-theart, specifically designed polymeric sheath, optimised for smooth blowing installations. The Fibre Unit meets the requirements of today, in which the cable dimensions are getting smaller and smaller - Fibre Units are characterised by their low weight, small outer diameter, easy handling and long lifetime.

They are compatible with industry standard blowing equipment and are tested on our blowing tracks as well as in practice (blowing lengths of over 2000m with a 12 FU in the Gotthard tunnel in Switzerland). Further tests have shown that the sheath in combination with the single-layer resin, improves blowing performance by up to 50%.

The Fibre Unit is straight forward to use and handle, stripping the fibre can be done quickly with increased reliability.

The Fibre Units are delivered in small fibre pans, coiled at an elliptical angle which ensures that the fibre unit can be pulled out smoothly during the blowing process. The fibre pans are lightweight, compact and stackable and - in contrast to a cable drum - can easily be transported in a car.

Emtelle FibreFlow ABF (fibre bundle) products are the subject of United Kingdom patents GB2409908C & GB2409909C, European patents EP1600801B1 & EP3073305B1, European patent application EP3270203A1 and corresponding patents in other countries. All rights reserved





• Fibre Flow





#### ❀ EMTELLE





#### • EASE OF HANDLING AND DURABILITY

- COMPATIBLE WITH INDUSTRY-STANDARD BLOWING EQUIPMENT
- LOW FRICTION COATING FOR BEST BLOWING RESULTS
- PROVEN IN MANY WORLDWIDE PROJECTS
- SUPPLIED IN A FIBRE PAN TO EASE FIBRE HANDLING
- FIBRE BEADS SUPPLIED IN PAN TO ENABLE BLOWING THROUGH CONNECTORS
- UPTO 2000M BLOWING DISTANCE
- SUPPLIED IN LENGTHS OF UPTO 12,000 METRES
- DRY FILLER ENABLING FAST STRIPPING & HANDLING
- LIGHT-WEIGHT AND DIELECTRIC DESIGN

# **BLOWN FIBRE OPTIONS**

	2	2 F	2 Fibre 4	Fibre 6	6 Fibre	8 Fibre	12 Fibre	24 Fibre
Breakout Typically 2 mins for 3m	1.	1.1	1.1 mm 1.	.1 mm 1	.3 mm 🧳	1.5 mm	1.6mm	2.05mm
	1.	1.0	1.0 g/m 1.	.0 g/m 1	.6 g/m	1.8 g/m	2.2 g/m	2.8g/m
Blowing distance up to 2000m dependent on microduct size				Тур	pically 2 mins fo	r 3m		
				up to 2000m	dependent on r	nicroduct size		
Minimum bore size 2.1mm 2.1mm 2.5mm 3.5mm 3.5		2.1	2.1mm 2		2.5mm	3.5mm	3.5mm	3.5mm

⊙ FibreFlow<sup>™</sup>





Scan QR code for datasheet



Datasheet

#### The Microcable Fibre Unit is extremely easy to use and handle compared to other methods, stripping the fibre can be done quickly with greater reliability.

No.	1	2	3	4	5	6	7	8	9	10	11	12
Colour	Blue	Orange	Green	Red	Grey	Yellow	Brown	Violet	Black	Aqua	Pink	White
Packaging					F	ibre roset	te into par	ו				
Fibre Types		Single mo	de ITU-T	G.652d •	Single m	ode ITU-T	G.657A1	G.657A2	• Single	mode ITU	-T G.655	
i bie Types			Mult	i mode 62	2.5/125 O	M1 • Mult	i mode 50	/125 OM2	2, OM3, O	M4		





# **EMTELLE BLOWN FIBRE**

#### **OPTICAL FIBRE**

#### **ACRYLATE COATING**

#### LOW FRICTION JACKET

# 06

# **PRE-CONNECTORISED**

 $\bigotimes$ 

Are you looking for high-speed installations and Plug & Play? Emtelle has fibre termination facilities that create pre-connectorised solutions according to the customer's requirements. Our pre-connectorised QWK-range comes with connectors on one or both ends and has been deployed globally across the fibre and duct industry. Choosing a Preconnectorised solution offers all the benefits of blown fibre without the need for splicing. The solutions focus on creating the best value, reducing total project costs, and minimising time and disruption.















#### ⊗ EMTELLE



- QWKLINK IS BLOWN INTO EMTELLE'S 3.5MM- 4.0MM BORED MICRODUCTS
- CAN BE CONNECTORISED AT ONE END OR BOTH ENDS
- SC & LC APC CONNECTOR OPTIONS AVAILABLE
- NO FIBRE SPLICING REQUIRED FOR THE CUSTOMER DROP
- EXTREMELY SMALL STORAGE AREA FOR THE EXCESS FIBRE
- REDUCED SKILL SET & TRAINING REQUIRED FOR THE INSTALL
- MASSIVELY REDUCED CAPEX FOR INSTALLATION EQUIPMENT
- COST (AND SPACE) EFFECTIVE COMPARED TO SIMILAR PRODUCTS IN THE MARKET

# **QWKLINK OPTIONS**

Fibre Type	Fibre Count	Cable Diameter
	2f	
G.652.D —	4f	-
0.057.44	2f	-
G.657.A1 —	4f	- 1.1mm
0.057.40	2f	-
G.657.A2	4f	-

⊖ FibreFlow





Datasheet



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QWKlink is our patented fibre bundle pre-connectorised during manufacture The pre-connectorised fibre bundle allows for fibre connectors of specific types



#### 2-4F BUNDLE

#### 



- UNIVERSAL USES FROM DIRECT BURY, DUCTED, FAÇADE & AERIAL
- FIBRE PRE-INSTALLED CAN BE CONNECTORISED AT ONE END OR BOTH ENDS
- SC AND LC APC CONNECTOR OPTIONS AVAILABLE
- NO BLOWING OR FIBRE SPLICING REQUIRED FOR THE CUSTOMER DROP
- EXTREMELY SMALL STORAGE AREA FOR EXCESS FIBRE
- REDUCED SKILL SET & TRAINING REQUIRED FOR THE INSTALL
- MASSIVELY REDUCED CAPEX FOR INSTALLATION EQUIPMENT
- COST (AND SPACE) EFFECTIVE COMPARED TO SIMILAR PRODUCTS IN THE MARKET

# **QWKCONNECT OPTIONS**

Dimension	Application	Connector	Length	Cable Diameter
5/3,5 HDPE	Outdoor	LC/APC or SC/APC	25-300m	1.1mm
7/4 HDPE	Outdoor	LC/APC or SC/APC	25-300m	1.1mm
5/3,5 LFH	Indoor	LC/APC or SC/APC	25-300m	1.1mm
7/4 LFH	Indoor	LC/APC or SC/APC	25-300m	1.1mm
6/3,2 HDPE	Aerial	LC/APC or SC/APC	25-300m	1.1mm
7/3,7 HDPE	Aerial	LC/APC or SC/APC	25-300m	1.1mm

LC/APC OR SC/APC Connector

G652.D, G.657.A1, G.657.A2 Fibre options available LFH is CPR rated







#### Datasheet

#### UK\_DS\_QWKCONNECT

Scan QR code for datasheet



#### HDPE MICRODUCT





QWKconnect is effectively pre-connectorised fibre within a FibreFlow microduct that is pre-installed during the manufacturing process that gives a dedicated pathway to each home



#### ⊗ EMTELLE





- PRODUCT PRE-CONNECTORISED WITH LC/APC OR SC/APC CONNECTORS
- STRONG FLEXIBLE PE BLACK OUTER SHEATH (COLOUR OPTIONS)
- DISCREET, SMALL AND FLEXIBLE LFH INNER SHEATH
- QUICK INSTALLATION
- LOW SKILL RESOURCE REQUIREMENT
- LOW INSTALLATION EQUIPMENT COST
- THE ONLY SOLUTION ON THE MARKET WITH SLIDEABLE & ADJUSTABLE EXTERNAL SHEATH ON AN **INTERNAL CABLE!**

# HOMECONNECT OPTIONS

Dimension	Application	Connector	Length
5/3,5 HDPE	Indoor/Outdoor	LC/APC - Bare	5-50m
5/3,5 HDPE	Indoor/Outdoor	SC/APC - Bare	5-50m

Internal Cable is CPR rated



⊖ FibreFlow

HDPE MICRODUCT

LC/APC OR SC/APC

CONNECTOR



This product is intended for use where an installer needs a quick and easy one stop solution for an internal/external drop cable installation. The product comes pre-terminated with a LC or SC connector at the house end.



# 07

# $\bigotimes$ **PRE-FIBRED**

The FIT-range combines Emtelle's core fibre and duct products and offers factory pre-installed microducts and bundles. Pre-installed solutions provide the benefits of blown fibre without the need of blowing on-site so you can achieve a fully "blown" network from Day 1 of installation. These solutions reduce the total costs of a project, minimise time, install equipment, and eliminate the expenses associated with blowing. The FIT (Fibre-in-Tube) range offers high-speed installation and "FTTH in ONE DIG".















#### ❀ EMTELLE



- REDUCE CAPEX PER HOME PASSED AND HOME CONNECTED ON DAY 1
- EASY TO INSTALL, ASSEMBLE AND USE PRODUCTS
- REDUCE THE SKILL REQUIREMENTS
- MINIMISE INSTALLATION TIME AND REDUCE FAILURE RATE
- INCREASE ROLL OUT SPEED
- LOWER UPGRADE AND MAINTENANCE COSTS FOR THE LIFE TIME OF THE NETWORK
- ADAPTED FOR LOW COST CONSTRUCTION TECHNIQUES
- A DEDICATED PATHWAY TO EACH HOME

# **MULTIFU OPTIONS**

	ibre Unit	12/19/22/24 Way - Supply Length					
E I		4/2.1 mm	4/2.5 mm	7/4 mm	8/5 mm	10/6 mm	12/8 mm
	2 & 4	800	1,200	2,000	2,000	2,000	2,000
	6	500	1,000	1,500	1,500	1,500	1,500
	8	-	-	1,000	1,000	1,500	1,500
	12	-	-	1,000	1,000	1,500	1,500
	24	-	-	1,300	1,300	1,000	1,500







Datasheet

Scan QR code for datasheet



OUTER SHEATH

**PRE-INSTALLED FIBRE** 

Multifu is a tube bundle – a duct with microducts pre-installed with a Fibre Unit – ensuring fibre and duct can be installed in one process.







#### 12/19/22/24-WAY MULTIFU

#### 

- FIBRE TUBES (WITHIN THE RTRYVA) CAN VARY FROM 2-12 FIBRES PER TUBE
- HIGH SPEED INSTALLATION AND CONNECTIVITY WITH NO SPECIALIST TRAINING
- NO BLOWING EQUIPMENT IS NEEDED DURING INSTALLATION
- PULL BACK DISTANCE CAN BE UP TO 150M \*DEPENDANT ON EXACT ROUTE
- GRP STRENGTH MEMBERS TO OFFER ADDITIONAL STRENGTH AND LONGEVITY
- A MIX OF FIBRE COUNTS ARE AVAILABLE TO COVER MANY CONNECTION REQUIREMENTS
- FULLY COMPATIBLE WITH THE EMTELLE EMU BOX (4 CUSTOMER DROPS)
- CUSTOMER DROPS CAN HAVE PRE-INSTALLED DRAW STRING TO AID FIBRE INSTALLS TO THE HOME
- VARIATIONS CAN BE INSTALLED INTO EXISTING DUCTS, OVERHEAD, ON FACADE & IN-BUILDING (CPR RATED)

# **RTRYVA OPTIONS**

RTRYVA Size	Sheath M	laterial	Fibre	Fibre Count Options		
Options (mm)	External Solution	Internal Solution	2f Elements	4f Elements	12f Elements	
8/5	MDPE	LFH	12 x 2f	12 x 4f	6 x 12f	
10/6	MDPE	LFH	14 x 2f	14 x 4f	8 x 12f	
12/8	MDPE	LFH	24 x 2f	24 x 4f	14 x 12f	
15/9	MDPE	LFH	48 x 2f	48 x 4f	30 x 12f	
16/10	MDPE	LFH	48 x 2f	48 x 4f	30 x 12f	





CP2509 Scan QR code for datasheet

Datasheet



RTRYVA

RTRYVA is a high-density fibre pull back cable constructed of pre-installed loose Fibre Units, protected within a PE microduct.





#### ⊛ EMTELLE



- DESIGNED FOR USE WITHIN PROTECTED MICRODUCT DESIGNS AND AS A STAND ALONE MICRODUCT
- HIGH SPEED INSTALLATION AND CONNECTIVITY WITH NO SPECIALIST TRAINING
- NO BLOWING EQUIPMENT REQUIRED
- LOW FRICTION SHEATH
- QUICK TO REPAIR AND REPLACE FIBRES EVENT WHERE PHYSICAL DAMAGE HAS OCCURRED
- CAPABLE OF DIRECT BURIAL INTO SUITABLY PREPARED GROUND

# PIFU OPTIONS

Product Code	Description	Low Friction FU Sheath	Туре	Fibre Colour	Standard Length
60963	8/3.5mm + 2 PIFU MM OM3 x 1000m	yes	MM OM3	blue, orange	1000m
8476	8/3.5mm + 2 PIFU G652d x 1000m	yes	G652d	blue, green	1000m
8497	8/3.5mm + 4 PIFU G652d x 1000m	yes	G652d	blue, orange, green, red	1000m
60982	8/3.5mm + 2 PIFU G657A1 x 2000m	yes	G657A1	blue, green	2000m





Datasheet









#### PIFU is an ideal product for FTTH drops to homes as it is quick to repair and replace the fibres in an event where physical damage has occurred.



# ⊛ -MICRODUCTS

At the heart of the FibreFlow protected microduct system are the individual microducts themselves. We offer three different models of microducts: Standard Wall, Thick Wall and Low Fire Hazard (LFH). Our high-quality microducts come in a range of sizes from 3-16mm in diameter. All of our microducts, as standard, feature EM-Liner, a bonded dry low friction liner that greatly enhances fibre installation.















#### **EMTELLE**

- RIBBED AND SMOOTH OPTIONS AVAILABLE
- LDPE, MDPE, HDPE AND LFH VARIANTS AVAILABLE
- VARIETY OF SIZES AVAILABLE
- LOW FRICTION LINER EM-LINER AS STANDARD TO EASE FIBRE INSTALLATION
- VARIETY OF COLOURS AND STRIPES AVAILABLE (EIA-598 COLOUR CONFIGURATION AS STANDARD OR CUSTOM COLOURS AVAILABLE)
- STANDARD AND CUSTOM LENGTHS AVAILABLE
- CUSTOMER NAME, METRE, AND PRODUCT MARKING AS STANDARD ON ALL MICRODUCTS
- TESTED TO INDUSTRY STANDARD IEC60794







# OUR MICRODUCT

#### Standard & Thick Wall Microducts Available in EIA-598 Colour Configuration

# THIN WALL MICRODUCTS

⊗ EMTELLE

LFH MICRODUCTS

Our LFH Microduct contains LFH material suitable for indoor fire regulation use, giving excellent performance in fire scenarios. The ducts have a solid, low friction liner for best installation performance.

	Datasheet
MHT2630	<b>E</b> 143
Scan QR code fo latasheet	· 28

best installation performance.

Outer Diameter/Inner Diameter (mm)				
3/2.1	8/6			
4/2.5	10/8			
 4/2.7	12/10			
 4/2.8	14/11.5			
 5/3.5	14/12			
 6/4.5	16/13			
 7/5.5				

Outer Diameter/Inner Diameter (mm)

10/6

12/8

14/10

16/12

16/10

Datasheet	Outer Diame	Outer Diameter/Inner Diameter (mm)		
	4/2.5	8/6		
ИНТ2680	5/3.5	8/5		
can QR code for atasheet	5/2.1	8/4		
atasrieet	6/3.8	10/6		
191-2	7/5.5	12/8		
一日に見ていた。	7/4	14/10		
LEI 2056	7/3.5	16/12		

### THICK WALL MICRODUCTS

at branch-off points, or inline connections. The ducts have a solid, low friction liner for best installation performance.

7/4

7/3.5

8/5

8/4

8/3.5

Thin Wall Microducts are normally installed in existing ducts with limited space and where thick-walled ducts will not fit. The

ducts are thinner in diameter and are suitable for installation of air blown fibre. The ducts have a solid, low friction liner for

### **UNIVERSAL DROP TUBE**

Emtelle Universal Drop Tube is used as a customer drop tube for a variety of installations - it can be used overhead, in duct, along walls or directly buried. With GRP strength members in the wall, the Universal Drop Tube is spade resistant and means contractors have the option to bury the product at a shallower depth due to added strength.

Da	atasheet	Outer Diameter/Inner Diameter (mm)
		6/3.2
MHT2806		7/3.7
Scan QR code for datasheet	A Design of the second s	8/4
		10/6
		16/10



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Thick Wall Microducts are exceptionally tough and can be directly buried without the need for additional protective closures

Datasheet

**MHT2643** Scan QR code for datasheet





#### FibreFlow () LFH









# **TUBE BUNDLES**

 $\bigotimes$ 

Our tube bundles are tightly protected microducts suitable for installation of Fibre Units containing between 1 to 24 fibres, as well as 24-144 fibres in Minicables. Our high-quality bundles come in a range of sizes from 3mm-16mm microduct outside diameters and contain up to 26 individual microducts. As standard, each of the microducts within every tube bundle we manufacture has a low friction liner on the inner sheath, which improves blowing performance.













#### **EMTELLE**

- SIZES FROM 3MM- 16MM MICRODUCT OUTSIDE DIAMETERS
- MEET & EXCEEDS THE REQUIREMENTS OF INDUSTRY STANDARD IEC60794
- CAN CONTAIN UP TO 26 INDIVIDUAL MICRODUCTS
- OVER 2000 SPECIFICATIONS AVAILABLE FOR A HUGE ARRAY OF APPLICATIONS
- CUSTOMISED TO MEET SPECIFIC CUSTOMERS' NEEDS
- A LOW FRICTION LINER ON THE INNER SHEATH WHICH IMPROVES BLOWING PERFORMANCE
- QUICK INSTALLATION
- AVAILABLE IN SEVERAL TYPES INCLUDING DIRECT BURY, DIRECT INSTALL AND LOW FIRE HAZARD
- SUITABLE FOR INSTALLATION OF FIBRE UNITS CONTAINING BETWEEN 1 24 FIBRES, AS WELL AS 24-144 FIBRES IN MINICABLES.



Our tube bundles are tight protected microducts suitable for installation of Fibre Units containing between 1 - 24 fibres, as well as 24-144 fibres in Minicables.





#### **OUTER SHEATH**

💮 Fibre**Flow** 

# EMTELLE TUBE BUNDLE

#### MICRODUCTS

# **DBMF - THICKWALL**

Datasheet

**MHT2804** 

datasheet

Scan QR code for

Fibre**Flow OB** 

10/6

12/8

14/10

16/12

16/10

Assemblies of direct burial microducts, each with low friction performance. Each assembly (tube bundle) is surrounded by a thin, tough sheath. These strong products are designed for direct burial installation into suitably prepared ground.

7/4

7/3.5

8/5

8/4

8/3.5



Assemblies of PE microducts, each with low friction performance. Each assembly (tube bundle) is surrounded by a water blocking tape that reacts to block water movement. Over the bundle is one sheath of flexible black PE, and one sheath of tough orange direct burial-grade PE. These strong products are designed for direct burial into suitably prepared ground.

( m m )
6
8
10
1.5
12
13
-



### FIBREFLOW WEBFLEX

Fibre**Flow** WEBFLEX

FibreFlow WEBFLEX is a product that is unique to Emtelle that has 12 microducts joined together in a 'branch' formation ideal for microtrenching. This design makes it easy to locate and branch any of the 12 microducts easily, with minimal disruption to the remaining microducts





Design Details		
Product dimensions	46.88mm x 27.01mm	
Product weight	491g/m	
Colour	Nat	
Metal free	No	
Minimum bend radius	35D	
Maximum tensile load	4000N	

Outer Diameter/Inner Diameter (mm)





FibreFlow Vertex is a range of tube bundles designed for installation into microtrench and slot cut installations. They are narrow to enable the trench width to be smaller, which increases trenching speed and therefore reduces costs.

Da	tasheet	Description	Supply Length	Bundle OD (n
		3 DBmf (Flat)	3000	12 x 32
CP1608	CP1608	4 DBmf (Flat)	4000	9 x 30
Scan QR code for datasheet		6 DBmf (Flat 2x3)	4000	15.5 x 22.5
ualasheel		6 DBmf (Flat 1x6)	2000	80 x 14.2
	22.77 3.26	8 DBmf (Flat 2x4)	2000	26.2 x 50.2
		16 DBmf	2000	6 x 16.2
	LE1758/990399			Other Specifications av









**CP4281** 

datasheet















# DIRECT BURY (DB) - WITH FOIL

Fibre**Flow OB** 

8/6

10/8

12/10

14/11.5

14/12

16/13

The assembly is surrounded with a 125µm aluminium layer, bonded inside a sheath of flexible black PE with a heavy duty orange coloured HDPE sheath making the product suitable for direct burial. Rip cords are pre-installed along the entire length, under the sheath, to rip through the aluminium and sheath using correct procedure.

3/2.1

4/2.5

4/2.7

4/2.8

5/3.5

6/4.5

7/5.5

Outer Diameter/Inner Diameter (mm)

#### DIRECT INSTALL METAL FREE (DIMF) FibreFlow OD

The DIMF range of products are metal free for use in areas where aluminium foil is not an option. The products can be pulled into existing underground ducts. The products have great flexibility for ease of installation. Refer to specification MHT1772.

Da	atasheet	Outer Diameter/I	nner Diameter (mm)
		3/2.1	8/6
MHT2801	- 国家教授新	4/2.5	10/8
Scan QR code for		4/2.7	12/10
datasheet		4/2.8	14/11.5
	- 2672 - 2	5/3.5	14/12
		6/4.5	16/13
	El Chick 1999	7/5.5	



### DIRECT INSTALL (DI) - WITH FOIL



The assembly is surrounded with a 125µm aluminium layer, bonded inside a sheath of flexible black PE for direct-in-duct installation. A rip cord is pre-installed along the entire length, under the sheath, to rip through the aluminium and sheath using correct procedure.



#### Datasheet

Datasheet

**MHT2802** 

datasheet

Scan QR code for

**MHT2800** Scan QR code for

datasheet



Outer Diameter/In	ner Diameter (mm)
3/2.1	8/6
4/2.5	10/8
4/2.7	12/10
4/2.8	14/11.5
5/3.5	14/12
6/4.5	16/13
7/5.5	



⊙ Fibre**Flow**<sup>™</sup>



Figure-8 construction with steel and glass reinforced strength member. All compatible fittings are available. In particular, it is essential that the customer verifies that existing or proposed cable supports (towers or poles) are sufficiently robust and suitable to carry the required clamps and cable.

Datasheet		Outer Diameter/	Inner Diameter (mm)
		3/2.1	8/6
MHT2681		4/2.5	10/8
Scan QR code for datasheet	- 19 <b>-39</b> 46-54	4/2.7	12/10
ualasheel	- <b>201-21</b> -2	4/2.8	14/11.5
	F-53, 04, 56, 64	5/3.5	14/12
	<b>音感 能率</b>	6/4.5	16/13
	IEI SOISYTMU	7/5.5	







#### FibreFlow DUP





# LOW FIRE HAZARD (LFH)

Datasheet

**MHT2805** 

datasheet

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Fibre**Flow** 

8/6

8/5

8/4

10/6 12/8

14/10

16/12

Outer Diameter/Inner Diameter (mm)

Assembly of LFH microducts, each with low friction performance and suitable for fibre blowing. Each assembly is surrounded with a sheath of LFH material suitable for indoor fire regulation use and giving excellent performance in fire scenario. LFH microducts are manufactured to meet IEC 60332-3 and IEC 60332-1 standards.

4/2.5

5/3.5

5/2.1

6/3.8

7/5.5 7/4

7/3.5

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ⓒ Fibre**Flow**<sup>™</sup>





#### ⊛ EMTELLE













# FIBRE OPTIC CABLES

 $\bigotimes$ 

Emtell supplies fibre optic cables covering all applications, including telecommunication & power utilities. Our cable range includes high fibre count cables, armoured cables for harsh environment, fire rated cables, OPGW and more.













#### 

- MICRO, MINICABLE, OVERHEAD, DIRECT INSTALL AND DIRECT BURY OPTIONS AVAILABLE
- SMALL DIAMETER & LIGHTWEIGHT
- FIBRE COUNT 2-864F AVAILABLE
- ALL DIELECTRIC CONSTRUCTION
- CORNING® SMF-28® ULTRA IS IN THE HEART OF OUR CABLES
- FIBRE TYPE: G.652D + G.657.A1 (200 µm) OR FIBRE G.652D + G.657.A1 (250 µm)
- SIGNIFICANTLY IMPROVED RELIABILITY AND RESISTANCE TO INSTALLATION DAMAGES
- TEN TIMES HIGHER BEND-RESISTANCE COMPARED TO STANDARD SINGLE-MODE FIBRES
- ULW (ULTRA LIGHT WEIGHT): VERSIONS FOR OVERHEAD INSTALLATION AVAILABLE
- INCREASED EQUIPMENT EFFICIENCY, 10% LESS FIBRE ATTENUATION
- TESTED & APPROVED WITH EMTELLE MICRODUCTS



PE (POLYETHYLENE) OR PA (POLYAMIDE)

**OPTICAL FIBRE** 

Fibre types: G.652D + G.657.A1 (200 µm) or Fibre - G.652D + G.657.A1 (250 µm)





# **BLOWING MT24**

Blowing MT24 cables are characterised by their multi-tube (MT) design with 24 fibres per tube. The fibres are bundled within gel-filled loose tubes and protected by water-swellable yarns. Thanks to the design and the central strength member, the cables undertake an installation tension up to 3kN. Blowing MT24 are perfectly suited to be installed into Emtelle microducts by blowing and tested on our Nx100 test track.



#### **CABLE DESIGN**

- 1. Central strength member (FRP rod)
- 2. Optical Fibre
- 3. Gel-filled loose tube
- 4. Water-wellable yarns
- 5. Jacket



PARAMETERS			
• Up to 288 fibres	Fibre Count	Cable Diameter (mm) (Option PA 200)	Number of Loose Tubes
<ul><li> 24 fibres per tube</li><li> Cable Diameters from 5.3mm</li></ul>	144	5.3	6
Operation tension up to 1kN	192	6.2	8
Installation tension up to 3kN	288	8.0	12

### **BLOWING MT12**

Blowing MT12 cables are characterised by their multi-tube (MT) design with 12 fibres per tube. The fibres are bundled within gel-filled loos tubes and protected by water-swellable yarns. Thanks to the design and the central strength member, the cables undertake an installation tension up to 3kN. Blowing MT12 are perfectly suited to be installed into Emtelle microducts by blowing and tested on our Nx100 test track.



#### PARAMETERS

- Up to 432 fibres
- 12 fibres per tube
- Cable diameter from 3.6mm
- Operation tension up to 1kN
- Installation tension up to 3kN

Fibre Count	Available cable diameters (mm) depending on fibre size and jacket material			Number of Loose Tubes
12		3.6		1
24		3.6		2
36		3.6		3
48		3.6		4
72	4.5	5.1	5.6	6
96	5.1	5.9	6.3	8
144	6.6	7.9	8.4	12
192	6.7	7.9	8.4	16
288	7.9	9.0	9.5	24
432	9.3	10.7	11.2	36









#### **CABLE DESIGN**

- 1. Central strength member (FRP rod)
- 2. Optical Fibre
- 3. Gel-filled loose tube
- 4. Water-wellable yarns
- 5. Jacket





### **DUCTING - CT CST LIGHT**

**EMTELLE** 

## **ADSS - FLAT TYPE MICRO**





design





()



# **INDOOR - RISER TB**



SUBMARINE - CT GSW2

**DIRECT BURIED - CT CST LIGHT** 



Rodent

resistant

resistant

Max rated Reduced weight & size design tesnion up to 2.7kN



()





# **OPGW/GROUND WIRE**





Installation down to 2500m, suitable for application in harsh environments

Up to 24 fibres







#### ⊗ EMTELLE



Applied as 'the last mile' in towns & villages



Max rated design tesnion up to 2.7kN



Up to 24 fibres



Perfect solution for multi-dwelling fibre at any place 48 fibres units



Easy access to of the cable



Up to





Aluminium allow wires shield the high-voltage conductors from lighting strikes



Corrosion resistant



Up to 96 fibres



## ULTRA LIGHTWEIGHT CABLE (ULW)

ULW cables are designed to be compact (7mm diameter), lightweight <38Kg/km and easy to install. The ULW is designed to be installed on distributions line up to 11kV and comes in two designs a dry acrylate tube or soft easy strip tube with water-blocking gel.

Fibre count

### **AERIAL DROP CABLE 3.4MM**

Datasheet

**CP2976** 

Scan QR code for datasheet

A small, lightweight cable which can be used for final FTTX aerial or façade connections. This cable solution can be preconnectorised, reducing splicing costs and installation time as well as simplifying the installation.

1f Pre-Terminate **OH Drop Cable** Generic 35m-85

Datasheet

Scan QR code for datasheet

ted		Fibre count
-		Semi-tight buffer diameter
5m		Outer jacket thickness
:	Сорсаницан Паруан Галан	Cable diameter
İ		Cable weight

ount			

Element type	Acrylate bundle, colour coded		
Cable mass	38kg/km		
Cable outer diameter	7.0mm		
Bending radius static/dynamic	70/140		
Tensile strength	1250		
Break load	>1350 - <2000		

**Design Details** 

## NORDIC LITE - NANO CABLE

The Emtelle Nordic Lite is the new ultra-thin optical fibre microcable with up to twelve fibres set in an encapsulating layer providing excellent dimensional and thermal stability. An outer low friction thermoplastic layer proves a high level of protection and excellent installation properties.

Da	atasheet	Desig	n Detai	ls		
		Fibre Count	2	6	8	12
CP2970		Outer diameter (mm)	1.6	1.8	2.0	2.1
Scan QR code for datasheet	1000-000-000-000-000-000-000-000-000-00	Mass (nominal) (g/m)	2.0	2.4	3.2	3.4
		Min bend radius (mm)	32	36	40	40
		Max installation tension	20 N	24 N	32 N	34 N



**EMTELLE** 

4,8,12,24,36,48

1

0.9mm

0.85mm

3.4mm

12.6kg/km







# **COLOUR IDENTIFICATION**

⊗ EMTELLE

## ANSI / TIA 598



# DIN VDE 0888

12

8 4

16





# FIN2012

24	16	12	8	4		Fibre/Tube count
						Blue
					$\bigcirc$	White
						Yellow
						Green
						Slate
						Orange
						Brown
						Aqua
						Black
						Violet
						Rose
						Red
						Blue with ring marks
					$\bigcirc$	White with ring marks
					/	Yellow with ring marks
						Green with ring marks
						Slate with ring marks
						Orange with ring marks
						Brown with ring marks
						Aqua with ring marks
					/	Natural with ring marks
						Violet with ring marks
						Rose with ring marks
						Red with ring marks



# $\bigotimes$ HDPE DUCT

HDPE ducts offer high protection for telecommunication and power networks and protect cables such as optical fibre, copper or electricity cables against mechanical and chemical damage and for rodent protection. They are Ideally suited for direct burial into suitable prepared ground, or they can be pulled into existing underground ducts.

HDPE ducts act as ideal containment for telecommunication backbone networks where high capacities are needed or the option of subsequent installation with microducts is requested.

HDPE ducts are suitable for different underground installation methods such as open trench, moleploughing or HDD.

The pressure-tight design of HDPE ducts allows both the pulling in of microducts and microduct bundles and the blowing of microducts and cables with compressed air (duct-induct installation).

HDPE ducts can be manufactured according to regional standards and can have a ribbed or smooth low friction bore. Our HDPE ducts guarantee the highest level of operational reliability, long service life, high load capacity and efficient storage.











#### ❀ EMTELLE

- HDPE DUCTS OFFER HIGH PROTECTION FOR TELECOMMUNICATION AND POWER NETWORKS
- HDPE DUCTS ARE SUITABLE FOR DIFFERENT UNDERGROUND INSTALLATION METHODS

Our HDPE products are used to give protection to both cables and microducts.





# HDPE DUCT

EMTELLE

High Density Polyethylene (HDPE) ducts are used for the construction of underground duct system for both fibre optic and microducts in the telecommunication's network. The HDPE ducts are intended for protecting fibre optic cables installed by traditional pulling techniques.

#### Datasheet **MHT582**

Scan QR code for datasheet



Size OD/ID	SDR*	I.D. nom	MASS nom g/m	Max Install Tension kN/kg
18 / 14	9.0	14	96	0.9/90
25 / 20	10.0	20	170	1.7/170
31 / 25	10.3	25	252	2.5/250
35 / 30	14.0	30	247	2.5/250
40 / 35	16.0	35	280	2.7/270
50 / 43	14.3	43	486	4.8/480
60 / 50	12.0	50	824	8.2/820

\*'SDR' is the standard dimension ratio (OD / wall). Lower SDRs indicate heavy-duty sizes. Other configurations available on request

### LOOSE PROTECTED MICRODUCT

The loose protected microduct solution comprises a range of microduct that are composed of standard, strong HDPE tubing as the outer duct, with a super smooth silicone coating inside. This outer duct provides complete protection of cables before, during and after installation.

Subducts/ Microducts	5 m m	7 m m	1 0 m m	1 2 m m	1 4 m m	Supply length on drum
25/20.4	10	5	2	1	1	1000m
32/26	14	7	3	1	1	1000m
32/27	18	7	4	3	1	1000m
40/32.6	18	12	6	4	1	1000m
40/34	24	14	7	5	2	1000m
50/40.8	24	18	7	7	4	1000m
50/42	26	22	10	7	5	1000m
50/44	26	24	12	7	5	1000m
63/51.4	26	26	14	10	7	700m

#### Datasheet

**MHT2639** Scan QR code for datasheet



### **PRE-CABLED SUB DUCTS**

Both traditional fibre optic and fibre mini-cables are available as a pre-installed product. Lengths of up to 10km are available dependent on the cable type and materials. Emtelle can produce various combinations of a single fibre cable in HDPE duct. This cable can be removed at a later date and upgraded as required.



Brochure

Scan QR code for brochure



		Mini Trenching	Mole Ploughing	Overhead
Cable Type	Cable Diameter (mm)	HDPE Duct (OD)/(ID) (mm)	HDPE Duct (OD) (mm)	HDPE Duct (OD) (+ web) (mm)
Fibre Bundle	1.1-1.6	8/3.5	16/10	6/2.7
Micro Cable	2.8	10/6	25/17	8/5
Mini Cable	6 - 10.5	20/16	25/17	20/16
Conventional Fibre Bundle	10 - 16	31/25	31/25	25/20

Other configurations available on request







Other configurations available on request



# $\bigotimes$ ACCESSORIES

12

It takes more than fibre and ducts to build an extensive network and ensure its efficiency and effectiveness. Emtelle doesn't just offer a product - but a complete, quality solution. Our range of accessories complements and completes the full solution. We offer everything from closures & cabinets to marker pens to labels. All accessories are tested on compatibility – a network is only as strong as its smallest components.

































### **OVERHEAD FITTINGS UNIVERSAL POLE BRACKET (UPB)**

High mechanical strength aluminium alloy bracket for anchoring various aerial hardware onto all types of infrastructure poles.

#### Datasheet

UK\_DS\_9246 Scan QR code for datasheet



## **MINI DROP CLAMP**

Drop cable clamp featuring an all-plastic UV resistant body and toolless design. Used for securing a round aerial drop cables 3-4mm up to 70m spans.

Datasheet

UK\_DS\_75467 Scan QR code for datasheet



### **GALVANISED HELICAL DROP CLAMP**

Galvanised steel helical warped -dead end- cable clamp design to warp around aerial cables to tie-off cables onto pole brackets and drop anchoring points.

Datasheet

UK\_DS **Helical Dead End Clamp** 









### **OVERHEAD FITTINGS** TRIANGULAR FITTING CLAMP

3-hole anchoring bracket that can be fix onto exterior surfaces by selecting appropriate screws. Used as a termination bracket for customer drop cable clamp.

#### Datasheet

**UK DS 75362** Scan QR code for

datasheet



# **EXPANDING BOLT 1A**

I-bolt anchoring point that can be secured into a brick/concrete wall. Used as a termination bracket for customer drop cable clamp.

Datasheet

**UK DS 75117** Scan QR code for datasheet



### **CABLE CLAMP**

Wedge style cable clamp suitable for anchoring circular dropwires. Has tapered grip action using jaws that grip the insulation over the dropwire. Use predominantly on figure -8 aerial cables.

Datasheet

#### **MHT2108**

Scan QR code for datasheet























#### **OVERHEAD FITTINGS EXTENDED DROP CABLE BRACKET**

4-hole anchoring bracket with extended anchor point for additional clearance of obstructions that can be fix onto exterior surfaces by selecting appropriate screws. Used as a termination bracket for customer drop cable clamp limited to 40m spans.

#### Datasheet

UK\_DS\_74644 Scan QR code for datasheet



### **BOLT 16 X 300MM**

Standard bolt set for securing aerial hardware onto poles with through holes greater then 16mm. Suitable for short span aerial hardware.

#### Datasheet

**MHT2108** Scan QR code for

datasheet



### **OVERHEAD RING WITH TOP BOLT**

Pole mounted halo style top ring for securing multiple customer drop cable clamps in multiple directions.

#### Datasheet

**MHT2108** Scan QR code for datasheet





### **OVERHEAD FITTINGS FIBRE LOCKING MECHANISM**

Secure and isolate ULW style cable elements between cable span and splice closure. Evenly spread cable tension over all cable elements

Datasheet

UK\_DS\_74523 Scan QR code for datasheet



## **STEEL BANDING**

Steel banding for securing aerial hardware and splice closures onto poles.

Datasheet

**MHT2108** 

Scan QR code for datasheet



# **BUCKLES FOR BANDING (BIB20)**

Steel banding buckles for securing aerial hardware and splice closures onto poles.

#### Datasheet

**MHT2108** Scan QR code for datasheet



Page 68



















Page 69

#### OVERHEAD FITTINGS/MICRODUCT CONNECTORS & SEALING **EMTELLE TENSIONING TOOL BTS**

Steel banding tool for securing aerial hardware and splice closures onto poles.

#### Datasheet

**MHT2108** 

Scan QR code for datasheet





# **ELFS**

Fibre lock system to eliminate lateral movement of terminated fibre bundles due to vibration or thermal expansion / contraction of the duct system. Design specifically for Emtelle FibreFlow products.

Datasheet

UK\_DS\_ELF Scan QR code for

datasheet



### **CONNECTORS, END, REDUCERS**

Clear push-fit tube connectors, end caps and reducer connectors suitable for use with FibreFlow microduct to ensure a seamless and airtight connection while blowing fibre cable or fibre bundle.

#### Datasheet

UK\_DS **JGPushfitconn** Scan QR code for





### MICRODUCT CONNECTORS & SEALING **GAS BLOCK**

Gas Block connectors provides an in-line seal between the connector, tube and fibre cable preventing gas and water from entering the cable system and leaking into unwanted areas.

#### Datasheet

UK\_DS **JGGasBlock** Scan QR code for datasheet



## **FIBRE AND MICROCABLE SEAL**

Split gas / water block tube end seal for installation on new and existing infrastructure to prevent gas and water for entering the cable system. Smal form factor tubes and cables seals.

#### Datasheet

UK\_DS\_71175 Scan QR code for datasheet



### **DUCT SEALING**

Split gas / water block tube end seal for installation on new and existing infrastructure to prevent gas and water for entering the cable system.

#### Datasheet

UK\_DS\_71161 Scan QR code for datasheet





datasheet














## **MICRODUCT CONNECTORS & SEALING PUSH-FIT CONNECTOR**

Clear push-fit tube connectors suitable for use with FibreFlow microduct to ensure a seamless and airtight connection while blowing fibre cable or fibre bundle.

#### Datasheet

UK\_DS **TCONNECTOR** Scan QR code for datasheet





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## **CONNECTORS & BLOWING EQUIPMENT COMPRESSION CONNECTORS**

Compression connectors are designed to provide a suitable joint and seal between lengths of HDPE duct, for blowing purposes.

#### Datasheet

UK\_DS\_7891 Scan QR code for datasheet



# FIBRE INSTALLATION GUN (F.I.G.)

Designed with the drop fibre installer in mind, the patented F.I.G. is a lightweight, battery-powered compact blowing gun.

#### Datasheet

UK\_DS\_74909 Scan QR code for datasheet



# **ACCELAIR 2**

AccelAir2 cable blowing machine. Electrical motor with maximum installation speed of 100meters per minute while operating at 15bar pressure.

#### Datasheet

UK\_DS\_74773 Scan QR code for datasheet



# CONNECTORS, END, REDUCERS

Clear push-fit tube connectors, end caps and reducer connectors suitable for use with FibreFlow microduct to ensure a seamless and airtight connection while blowing fibre cable or fibre bundle.

Datasheet

UK\_DS\_9916 Scan QR code for datasheet





# **PROTECTED CONNECTORS, END CAPS**

Clear push-fit tube connectors and end caps with rugged protected cover / tube lock suitable for use with FibreFlow microduct to ensure a seamless and airtight connection while blowing fibre cable or fibre bundle.

#### Datasheet

UK\_DS\_70169 Scan QR code for datasheet



💮 Fibre**Flow**"

















## **BLOWING EQUIPMENT** MINIJET

Minijet P400 cable blowing machine. Pneumatic drive motor suitable for installing larger and heavier cable into duct systems via air or water jetting / blown.

#### Datasheet

UK\_DS\_70521 Scan QR code for datasheet







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## AIRSTREAM

Airstream cable blowing machine. Electrical drive motor suitable for installing medium sized cable into duct systems. Supports diameters of 5mm to 18mm duct with 2.5mm to 11mm cable.

Datasheet

UK\_DS\_70899 Scan QR code for datasheet



## **AIR-FLOW METER KIT**

Air-Flow meter kit with all accessories required to measure the air flow in a microduct system. Adequate air flow is required to ensure a cable can be blown into a duct system.

Datasheet

**UK\_DS\_7778** Scan QR code for datasheet





## **BLOWING EQUIPMENT** PAN GUIDE

Mechanical guide that can be easily attached to a FibreFlow blowing pan. The guide ensures a steady feed of fibre bundle during cable blowing and eliminates snags that can cause damage to the fibre bundle.

#### Datasheet

UK\_DS\_7851 Scan QR code for datasheet



## **INVERSION RING**

The inversion ring is a FibreFlow tool specifically made for FibreFlow blowing pans. This tool ensures a seamless connection between 2 pans during a fibre inversion procedure.

#### Datasheet

UK\_DS\_7012 Scan QR code for datasheet



## **INVERSION RING CLAMP**

The inversion ring clamp is a FibreFlow tool specifically made for FibreFlow blowing pans. This tool secures 2 pans together during a fibre inversion procedure.

#### Datasheet

UK\_DS\_7788 Scan QR code for datasheet



















## COMMSCOPE SPLICE ENCLOSURES **FIST-EDSA™**

CommScope FIST-EDSA fibre optical splice and patch closure. The closure is a bespoke solution for termination and patch customer connection onto pre-installed internal patch panel. The panel support up to 48 customer connections.

#### Datasheet

## UK\_DS\_FIST-**EDSA**

Scan QR code for datasheet





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**COMMSCOPE**<sup>®</sup>

# TENIO

CommScope TENIO fibre optical splice closure with fast toolless mechanical cable sealing. Modular design to suite a wide range of cable and splicing application.

Datasheet

**UK\_DS\_TENIO** Scan QR code for datasheet



## OFDC

CommScope OFDC fibre optical splice closure range is designed to support a wide range of distribution and drop cable. Modular and suitable for splicing or connectorised drop cable. Compact design suitable for aerial or underground deployment.

Datasheet

UK\_DS\_OFDC Scan QR code for datasheet





## COMMSCOPE SPLICE ENCLOSURES **FLAT-FIST**<sup>™</sup>

The FIST GC02-F is a generic environmentally sealed enclosure for the fibre management system that provides the functions of splice and passive component integration in the external network.

#### Datasheet

UK\_DS\_GC02F Scan QR code for datasheet



## FIST-MSC™

This innovative closure is specially designed to give customers the freedom to respond to future changes while delivering unparalleled reliability.

#### Datasheet

UK\_DS\_FIST-MSC

Scan QR code for datasheet



• Fibre Flow



















## MICRODUCT CLOSURES AND MANAGEMENT **EMTELLE TOBY BOX**

The Emtelle Toby Box is a compact access point from where a technician can easily maintain and install customer connection infrastructure. The underground box can be used to store excess cable slack or fit a compact splice closure.

### Datasheet

UK\_DS\_71735 Scan QR code for datasheet



# **EM-WRAP SINGLE LAYER** IP67 RATED

EM-Wrap product is designed to be quick and easy to install. It offers protection to exposed microducts and tube connectors when performing a tube breakout. It also offers ingress protection to the exposed system.

Datasheet

UK\_DS\_75128 Scan QR code for datasheet



# EM-WRAP DOUBLE LAYER 1P67 RATED

EM-Wrap product is designed to be quick and easy to install. It offers protection to exposed microducts and tube connectors when performing a tube breakout. It also offers ingress protection to the exposed system.

### Datasheet

UK\_DS\_75129 Scan QR code for datasheet





## MICRODUCT CLOSURES AND MANAGEMENT **EM-BEND MANAGER**

EM-Bend product is designed to be quick and easy to install only using cable ties. It offers a smooth 90 degree bend while protecting the tube connector for optimal cable blowing performance. Can also be used as an L-branch or a T-branch (put 2 L-parts together).

#### Datasheet

UK\_DS\_75444 Scan QR code for datasheet



## H-BRANCH

FibreFlow H-Branch closure is a protective closure to manage and distribute microducts. The closure offers superior ingress protection with 4 large diameter port.

Datasheet

UK\_DS\_72279

Scan QR code for datasheet



# **CLO1 CLOSURE**

Fibreflow CLO1 closure is a protective closure to manage and distribute microducts. The closure offers superior ingress protection with 4 large diameter port. Slightly more compact then the H-Branch this solution mostly used to connect customer drop ducts.

#### Datasheet

UK\_DS\_9501 Scan QR code for datasheet























## MICRODUCT CLOSURES AND MANAGEMENT EMU BOX

Emtelle have designed and constructed the EMU box to suit many requirements for FTTH and FTTP projects.



UK\_DS\_72792 Scan QR code for datasheet





ALCONG L



**EMTELLE** 

## MICRODUCT CLOSURES AND MANAGEMENT **TUBE DISTRIBUTION CLOSURE (TDC)**

Fibreflow tube distribution closure is a protective closure to manage and distribute microducts. The closure allows for easy routing in almost any direction through its 7 ports. High impact resistance allows for direct buried application.

#### Datasheet

UK\_DS\_7514





# **EXTERNAL CUSTOMER LEAD IN (SMALL)**

External trucking and through wall protection of fibre optical customer drop cable. The solution offers an aesthetically pleasing installation while functionally protecting infrastructure.

Datasheet

UK\_DS\_71501





# **EXTERNAL CUSTOMER LEAD IN (LARGE)**

External trucking and through wall protection of fibre optical customer drop cable. The solution offers an aesthetically pleasing installation while functionally protecting infrastructure.

### Datasheet

UK\_DS\_71503 Scan QR code for datasheet



# **EM-MARKER**

The EM-Marker is a compliant telecommunication underground marker that is placed underground to easily trace key points of infrastructures. Other uses include being used as an end cap or with the EM-Bend

Datasheet

**UK DS 75178** Scan QR code for datasheet



# MIC

An in-line enclosure used for the blown fibre joint applications. Can be used in aerial and wall mounted scenarios.

### Datasheet

UK\_DS\_MJC Scan QR code for datasheet





















## MICRODUCT CLOSURES AND MANAGEMENT CTU 1.0 (SPLICE)

The CTU closure is a compact access point from where a technician easily maintain and install customer connection infrastructure. The wall mounted closure can be used to store excess cable slack and support a splice connection.

Datasheet

UK\_DS\_CTU Scan QR code for datasheet





# CTU 1.5 (PATCH)

The CTU closure is a compact access point from where a technician easily maintain and install customer connection infrastructure. The wall mounted closure can be used to store excess cable.

Datasheet

UK\_DS\_CTU Scan QR code for

datasheet



# **BUDI BOX**

The BUDI Box is a fibre optic wall mount enclosure, with single element FIST splice trays for SMOUV splices.

Datasheet

UK\_DS\_BUDI-FIST

Scan QR code for datasheet





UK\_DS\_9018 Scan QR code for datasheet



⊗ EMTELLE

## **MICRODUCT CLOSURES AND MANAGEMENT 3 PORT FIBREFLOW ITFP**

Internal breakout closure for easy routing of internal microducts inside a building riser or cable tray while offering bend protection and connector protection.

### Datasheet

UK\_DS\_7258 Scan QR code for datasheet



# **4 PORT FIBRE FLOW ITFP**

Internal breakout or distribution closure for easy routing of internal microducts inside a building riser or cable tray while offering bend protection and connector protection.

### Datasheet

UK\_DS\_7217 Scan QR code for datasheet



# **Y-BRANCH (INTERNAL)**

Internal Y-shaped closure for deviation microtube in separate directions inside a building riser or cable tray while offering bend protection and connector protection.

#### Datasheet





















## MICRODUCT CLOSURES AND MANAGEMENT **INTERNAL TDC**

FibreFlow tube distribution closure is a protective closure to manage and distribute microducts. The closure allows for easy routing in almost any direction through its 7 ports. Flame retardant material allows for use inside a building riser or cable trays.

Datasheet

UK\_DS\_70283 Scan QR code for datasheet





⊗ EMTELLE

X

# ССР

Customer Connection Point (CCP) providing a fibre termination point inside a residential property. The CCP comes complete with a preinstalled pigtail, connector and adaptor.

Datasheet

UK\_DS\_74428 Scan QR code for

datasheet



## CCP+DROP

Complete internal home connect solution - pre-installed internal drop cable with customer connection point (CCP). Fully assemble for increased quality assurance and a fast reliable deployment.

Datasheet







## **CABINET & LOCKING MANAGEMENT** CABINET

CommScope FTTH cabinet designed for dense distribution of customer connection and large distribution cable. The Internal frame uses an initiative FIST closure routing and splice trays. Customer connections can be directly spliced or distributed though the LGX splitter modules.

Datasheet

## UK\_DS\_FTTH\_ Cabinets

Scan QR code for datasheet



# SMARTLOCK INTELLIGENT LOCK & KEY

Smartlock is a lock and key system that provides an extra line of security to operators and their networks. It allows a cabinet and closure to be protected and only accessed through a dedicated key. Includes GPS tracking and is IP67 rated.

Datasheet

## Datasheet Smartlock

Scan QR code for datasheet



• Fibre Flow















# 13

# **TOOLS & CONSUMABLES**

 $\bigotimes$ 

Building up an FTTH network does not end with the products. The key is a proper and professional installation on-site. To support our customers during installation, Emtelle offers installation training and the tools and consumables to assist in a smooth installation. Our blowing equipment is thoroughly tested and suited for use with our ducts and cables. Our tooling equipment allows the preparation of fibre optic splices or the branching of microduct bundles efficiently and correctly.





































# **SHEATH STRIPPER 4.5-40MM**

Suitable for making circumference cuts on cable and microducts. The tool has a plastic body with a changeable spring loaded "V" anvil to attach it to the cable. The cutting blade is adjustable for depth with a capacity of 4.5 – 40mm.



UK\_DS\_9728

Scan QR code for datasheet



# **METAL FREE CUTTER 1DB**

Strips round tube bundles in the range of 8-13mm.

Datasheet

UK\_DS\_7794 Scan QR code for datasheet



## **SNIPS**

Diagonal cutters provide clean cutting of metal products, direct bury sheaths and fillers as used in conjunction with FibreFlow products.

Datasheet

UK\_DS\_9344 Scan QR code for datasheet









Small combination pliers with cutter.

Datasheet

UK\_DS\_7301

Scan QR code for datasheet



# **RETRACTABLE KNIFE**

Retractable blade for safe operation.

Datasheet

UK\_DS\_7069 Scan QR code for datasheet





Tool used to strip off the outer sheath of a thin walled DB tube bundle.

Datasheet

UK\_DS\_70935 Scan QR code for datasheet



⊖ FibreFlow

















# LONGITUDINAL SHEATH STRIPPER

The longitudinal sheath stripper has been designed to remove the outer sheath from DB tube bundle. There are four blade depth settings on the tool and it is supplied with two guards giving 12 possible blade depths.

Datasheet

Datasheet

UK\_DS\_7001

kevlar strength strands

UK\_DS\_7039 Scan QR code for

datasheet

Scan QR code for datasheet



**HEAVY DUTY KEVLAR SCISSORS** 

These heavy duty scissors can be used to cut many products including

**EMTELLE** 

# MICRODUCT ROTATIONAL CUTTER

Handheld tool suitable for stripping cable jackets, cable sub assemblies and microduct both longitudinally and circumferentially.

#### Datasheet

UK\_DS\_7299 Scan QR code for datasheet



# SMALL MICRODUCT ROUNDING TOOL PK4

When using the FibreFlow system it is essential that when the microduct is connectorised, the microduct itself has been prepared correctly.

Datasheet

UK\_DS\_7949 Scan QR code for



# LARGE MICRODUCT ROUNDING TOOL

This simple tool allows you to round any microducts ranging from 14 - 18mm OD after cutting and before adding a connector.

Datasheet

UK\_DS\_71437 Scan QR code for datasheet



datasheet



The rotational sheath stripper is designed to strip the outer sheaths from jacketed cables. The depth of the cut is fully adjustable reducing the risk of damaging any sub units within an assembly.

**ROTATIONAL SHEATH STRIPPER** 

Datasheet

UK\_DS\_7071 Scan QR code for datasheet





FibreFlow























# **PRIMARY TUBE CUTTER**

This tool gives a clean, straight cut to the FibreFlow microduct before inserting into a connector. Suitable for up to 12mm.

#### Datasheet

UK\_DS\_7014

Scan QR code for datasheet



# **42MM HEAVY DUTY CUTTERS**

This cutter has been designed to cut ducts and tube bundles up to an OD of approximately 42mm.

Datasheet

UK\_DS\_7068 Scan QR code for datasheet





**EMTELLE** 

**63MM HEAVY DUTY CUTTERS** 

These cutters have been designed to cut ducts and tube bundles up to 63mm.

Datasheet

UK\_DS\_9346 Scan QR code for datasheet





# THICK WALL MICRODUCT CUTTER

Tool used to cut thick micro walled microduct.

Datasheet

UK\_DS\_70768 Scan QR code for datasheet



# **FIBRE STRIPPER**

Suitable for stripping the outer jacket of Emtelle's 2/4 Fibre Unit and aides in the removal of the underlying resin.

Datasheet

UK\_DS\_9342 Scan QR code for datasheet



# **STRIPPER FIBRE 10A**

The stripper 10A is designed to strip 250 micron buffer from primary coated fibres

Datasheet

UK\_DS\_7335 Scan QR code for datasheet



















# MINICABLE SHEATH STRIPPER

The minicable sheath stripper longitudinally slits the minicable sheath in diametrically opposite locations to expose the individual loose tube elements. The sheath stripper can have either single or double cassettes to cater for different minicable diameters

Datasheet

UK\_DS\_73655 Scan QR code for datasheet



# **MINICABLE SHEATH STRIPPER**

The millar jacket stripping tool is designed to strip the outer sheath from tight jacket Cables/Fibre Units.

Datasheet

UK\_DS\_7562 Scan QR code for datasheet



## WEB SLITTING TOOL

Suitable for slitting the web on Emtelle's figure 8 aerial tube assemblies.

Datasheet

UK\_DS\_9418 Scan QR code for datasheet







# **COMPLETE FIBREFLOW TOOL BOX**

The FibreFlow toolbox contains all the basic FibreFlow tools.

Datasheet

UK\_DS\_7833 Scan QR code for datasheet



# **MSAT FIBRE STRIPPING TOOL**

MSAT is a fibre stripping tool that eliminates the struggle of stripping fibre by hand and allows easy access to the fibre beneath the outer jacket.

Datasheet

UK\_DS\_75345 Scan QR code for datasheet



ⓒ FibreFlow<sup>™</sup>













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# NOTES...

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