

The One-Stop Shop for Digital Infrastructure Products

#### Underground and Overhead Telecom Infrastructure and PIA Products



# All you need for Broadband Speed!

Everything for your GIGABIT BRITAIN network build – digital infrastructure products, tools & equipment.

# All you need for Broadband Speed!

Mills provides the full range of fibre infrastructure products, tools and equipment needed to build end-to-end Gigabit-capable networks. Operating as both distributor and, in many cases, manufacturer, Mills makes the supply chain simple and efficient, supplying the Communication Provider (CP) with everything needed to build robust and resilient Gigabit-capable digital connectivity throughout the UK, in order to GET GIGABIT BRITAIN LIVE by 2025!

With its clear understanding of the product needs for building GIGABIT BRITAIN, including the specialist knowledge required to utilise Openreach's Duct and Pole infrastructure in a compliant manner, make sure Mills is your partner of choice for FTTx products from the beginning to the end of your network build.

The UK Government's target to deliver nationwide Gigabit capable broadband by 2025, along with recent reforms regarding access to Openreach's Duct and Pole infrastructure, has greatly increased the uptake of Physical Infrastructure Access (PIA) by licensed CPs who are rolling out Gigabit-capable networks in both rural and urban areas in far quicker timescales and at lower cost than if building from scratch.

#### Compliance

All Duct and Pole infrastructure products, associated tools and equipment supplied by Mills comply with Openreach engineering rules regarding PIA.

#### **Recent Mills Milestones**









#### The Next Hundred Years

Following our centenary in 2018 we marked our success with two videos - our extraordinary history and more recent achievements. Just put '*Mills 100 Years*' and '*Mills Next*' into YouTube.

#### **Our New Website**

It's easier than ever to order online. Try our new Add to Cart by SKU and CSV functionality, improved search, new requisition lists functionality, new re-order functionality and improved site navigation!

# The Man with the Fibre Installation Gun

Mills has produced a homage to James Bond introducing its new fibre installation gun. Just enter '**Mills the FIG**' into YouTube. See the Fibre Installation Gun itself on page 33.

#### Meet the Mills Team

This new video explains what makes Mills different and introduces many of the people who help us achieve the level of service that is so important to us. Just put '**Meet Mills Team**' into YouTube.



#### Sales/Technical Support tel: 020 8833 2626

#### **Masters of Innovation**

Innovation plays an important role in Mills' success. The taking of a traditional product, talking to customers and producing a modification that does the job faster and better is a significant part of what we do. This is particularly true of the upgrade from old copper telephone networks to fibre-based systems, dictating a need for equipment to be revisited and updated. Many traditional products have been subjected to rigorous R & D, taking into account ergonomics and aesthetics, to arrive at a lighter, more functional, streamlined solution.





#### More Stock Than Ever

In 2019, our move to new premises on the banks of the Grand Union Canal in Uxbridge gave us ample room for growth with 50,000 square feet of warehousing. Or so we thought. Such has been the demand for our digital infrastructure products and equipment that we have now taken over the unit next door to our headquarters on the Zodiac Business Park and also added a further 10,000 square feet of warehouse space at Brackley in Northamptonshire. In total, this gives us approaching 100,000 square feet of racking and storage from which to meet our promise of next day delivery whenever possible.

#### Index

How to order	P8	
Cable, Ducting and FTTx Products	P9	
External Overhead	P39	
External Underground	P67	
Product Index	P96	
Terms and Conditions	P98	



# Underground and Overhead Telecom Infrastructure and PIA Products

Physical Infrastructure Access (PIA) enables licenced Communication Providers (CPs) to install sub duct or cable into Openreach's existing access duct infrastructure and to attach cables on Openreach's existing poles.

PIA enables CPs to build and expand their fibre networks in far quicker timescales and at lower costs than if building from scratch. All work must be done in compliance with Openreach's specified engineering rules and health and safety standards.

- Pole Furniture
- Chambers
- Overhead Fibre Cable
- Underground Fibre Cable
- Sub Duct
- Spine Duct
- Lead In Duct
- Blown Fibre Tubing
- Identification Labels

# All you need for **Broadband Speed!**









Sales/Technical Support tel: 020 8833 2626



A) C00-3851 Microduct Pressure and Integrity Tester



В

B) S83-5094 - Mills Mobra Arm Mounting Kit for CommScope C12 Series OFDC Closures

C) C05-0061 Mills Fibre Optic Cleaning Kit

С



D) E00-3819 Mills Stripmate ULW Drop Fibre Cable Stripper

0



E) S83-9327 Mills Polemate Kit



F) E00-6912 Mills Fibre Stripper IA



G) ME00-2530 Mills MasterClass Single Hole Fibre Stripper



H) S00-9770 Mills Drum-Mate



I) S83-6621 Mills Groundsheet



J) S13-0464 Cable Drum Cones



K) S00-2544 Clip Board



L) E00-1150 Mills Loose Tube Stripper 1.1mm to 6.0mm



P) S13-0966 - Mills Hydraulic Manhole Cover Lifter 4C Complete Kit



M) S83-1612 Mills Submersible Pump



N) 101-220106001 Fremco Duct Rod Rapid Pusher



O) S83-9324 Mills Swivel WUD Carrot



#### How to order

Simply quote our part number, quantity required, your order number or reference and delivery address - it couldn't be easier.

#### Telephone: 020 8833 2626

#### Website: millsltd.com

#### Email: sales@millsltd.com

#### Hours of business:

Monday to Thursday 8.00am - 6.00pm Friday 8.00am - 5.00pm

#### Delivery

#### Free UK Mainland Delivery\*

England, Scotland (excludes Scottish Highlands), Wales: **FREE** delivery on all in-stock orders over £100 (excl VAT). All orders under £100 to mainland UK addresses will incur a small order charge of £9.95 (excl VAT).

\*Consignments over 30kg, cabinets and palletised deliveries will attract a competitive delivery price.

Next Day Pre 10.30am	
Next Day Pre Ipm	£14.95
Saturday Pre Tpm	£36.50
Northern Ireland	£29.95†

<sup>†</sup>minimum, dependent on weight and dimensions.

Northern Ireland, Channel Islands and Scottish Highlands 'next day' deliveries usually operate on a 3 working day service and will attract a competitive delivery price.

Contact Sales on 020 8833 2626 for details.

#### How to pay

We are happy to accept payment by the following methods:

#### Credit Card

Please quote your card number, start and expiry dates and security digits together with your name, address and delivery address.



#### Account

Accounts may be opened within 4 hours, subject to status, following receipt of a completed account application form.

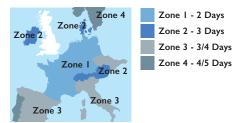
Please contact our Accounts Department direct on **020 8833 2622** for further details.

#### Mills M25 'Same Day' delivery

From a single parcel to a container-load delivered anywhere within the M25, just call **0208 833 2626** for an instant response to your last minute delivery requirements. (Subject to location - prices may vary).

#### Europe\*\*

Mills delivers into Europe on a daily basis.



\*\* Subject to zone - prices may vary.

#### Repairs and return of product

Any product being returned to Mills Ltd. for repair, calibration or exchange must be accompanied by documentation carrying a valid Mills Return Note Number. Please contact Customer Services on **020 8833 2626** for this information.

Prices given are in Pounds Sterling and may be subject to change All prices are subject to VAT - Mills Standard Terms and Conditions apply (see page 98)



Cable, Ducting & FTTx Products

# Cable, Ducting & FITx Products

# **Cable, Ducting & FTTx Products**





email: sales@millsltd.com purchase online: www.millsltd.com

#### **EMTELLE BLOWN FIBRE**

Fibre Unit (FU) is an Emtelle developed and patented blown fibre micro cable, containing a state-of-the art, 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. Supplied in pans (reles on request for longer lengths).

- Ease of handling and durability
- Compatible with industry-standard blowing equipment
- Low friction coating for best blowing results
- Supplied in a fibre pan to ease fibre handling
- · Fibre beads supplied in pan to enable blowing through connectors
- Up to 2000m blowing distance
- Supplied in 2KM lengths (lengths up to 12KM available on request)

@ FIDreFION

- Dry filler enabling fast stripping & handling
- · Light-weight and dielectric design



S Fibre

Description	2 Fibre	4 Fibre	12 Fibre	24 Fibre	
Colour coding					
Diameter	I.Imm	I.Imm	I.6mm	2.05mm	
Weight (mass)	1.0 g/m	1.0 g/m	2.2 g/m	2.8 g/m	
Breakout		Typically 2	mins for 3m		
Blowing distance		Up to 2000m depend	ent on microduct size		
Minimum bore size	2.1mm	2.1mm	3.5mm	3.5mm	

SINGLEMO	DE BLOWN FIBRE (G657 AI)	SINGLEMO	DE BLOWN FIBRE (G657 A2)
PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
9506/2KM	2FU G657A1 SM BLOWN FIBRE 2KM	90139/2KM	2FU G657A2 SM BLOWN FIBRE 2KM
9507/2KM	4FU G657A1 SM BLOWN FIBRE 2KM	91033/2KM	4FU G657A2 SM BLOWN FIBRE 2KM
9510/2KM	12FU G657A1 SM BLOWN FIBRE 2KM	90765/2KM	12FU G657A2 SM BLOWN FIBRE 2KM
91077/2KM	24FU G657A1 SM BLOWN FIBRE 2KM	91099/2KM	24FU G657A2 SM BLOWN FIBRE 2KM



#### Cable, Ducting & FTTx Products

#### **EMTELLE MINICABLES (12F TO 144F)**

Minicables are for blowing into the duct network. They can be installed in single microducts or tube bundles. The cables are lightweight and smaller in diameter than traditional cables, enabling a higher fibre count within a small microduct. Cablep and gel filled loose tubes with optical fibres. Stranded core is fixed by water swellable yarns. Outer sheath is made of polyamide PA12. Colour of outer sheath is black Available colour codes are ANSI / TIA S98, DIN VDE 0888,

Available colour codes are ANSI / TIA 598, DIN VDE 0888 S12, FIN2012. Supplied in reels request for longer lengths.

- · Ease of handling and durability
- · Compatible with industry-standard blowing equipment
- · Low friction coating for best blowing results
- · Supplied on reels to ease fibre handling
- Fibre beads supplied in pan to enable blowing through connectors
- Up to 2000m blowing distance
- Supplied in lengths of 2KM and 4KM (lengths up to 12KM available on request)
- Gel filled loose tubes and water blocking yarns
- Light-weight and dielectric design



#### 

12 Fibre	24 Fibre	48 Fibre	72 Fibre	96 Fibre	144 Fibre	144 G652D
5.8mm	5.8mm	5.8mm	5.8mm	6.5mm	8.5mm	5.4
18.6 g/m	24.5 g/m	25.2 g/m	25.9 g/m	36.8 g/m	58 g/m	18.7 g/m
		T	ypically 2 mins for 3			
Up to 2000m dependent on microduct size						
I	2	4	6	8	12	6
	5.8mm	S.8mm         S.8mm           18.6 g/m         24.5 g/m	Image: Samm         Samm         Samm         Samm           5.8mm         5.8mm         5.8mm         24.5 g/m         25.2 g/m           18.6 g/m         24.5 g/m         25.2 g/m         Ty           Up to 2000	Image: Samm         S.8mm         S.8mm         S.8mm         S.8mm           18.6 g/m         24.5 g/m         25.2 g/m         25.9 g/m	Image: Samm         Samm	Image: Samm         Samm

#### MINICABLES (G657AI)

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	
90692/2KM	12F MINI CABLE G657A1 BLACK (5.8MM) 2KM	90408/4KM	72F MINI CABLE G657A1 BLACK (5.8MM) 4KM	
90692/4KM	12F MINI CABLE G657A1 BLACK (5.8MM) 4KM	90980/2KM	96F MINI CABLE G657A1 BLACK (6.2MM) 2KM	
90693/2KM	24F MINI CABLE G657A1 BLACK (5.8MM) 2KM	90980/4KM	96F MINI CABLE G657A1 BLACK (6.2MM) 4KM	
90693/4KM	24F MINI CABLE G657A1 BLACK (5.8MM) 4KM	91143/2KM	144F MINI CABLE G657A1 BLACK (8.5MM) 2KM	
90409/2KM	48F MINI CABLE G657A1 BLACK (5.8MM) 2KM	91143/4KM	144F MINI CABLE G657A1 BLACK (8.5MM) 4KM	
90409/4KM	48F MINI CABLE G657A1 BLACK (5.8MM) 4KM	75427/2KM	144F MINI CABLE G652D 200U BLACK (5.4MM) 2KM	
90408/2KM	72F MINI CABLE G657A1 BLACK (5.8MM) 2KM	75427/4KM	144F MINI CABLE G652D 200U BLACK (5.4MM) 4KM	



### PRYSMIAN 36F, 48F AND 96F ULTRA LIGHT-WEIGHT ULW OVERHEAD AND UNDERGROUND CABLE

These multi-unit optical drop cables are designed for aerial and/or duct applications and are suitable for use under 11kV power cables.

The fibre is supplied in a 2km length on plywood reels, longer lengths are available on request.

#### A) PRYSMIAN 36F ULTRA-LIGHT WEIGHT (ULW) CABLE (2KM REEL)

Layout:  $3 \times 12$  singlemode fibres. Cable Diameter: 7.0mm

#### B) PRYSMIAN 48F ULTRA-LIGHT WEIGHT (ULW) CABLE (2KM REEL)

Layout: 4 x 12 singlemode fibres. Cable Diameter: 7.1mm C) PRYSMIAN 96F ULTRA-LIGHT

#### WEIGHT (ULW) (2KM REEL)

Layout: 4 units x 12 fibres. Cable diameter: 7.1mm



- Optical fibre: Singlemode G.657.A1.
- Strength member: 3 x 0.32mm brass plated steel wires.
  Longitudinal Water Tightness:
- Water swellable elements (core only). Inner Sheath: HDPE.
- Stripes: Indicate planes for easy sheath removal.
- 36F Drum Height: 44cm.
- 36F Drum Diameter: 80cm.
- Max Installation Tension: 1200N.
- Maximum Breaking Load: 2000N.

#### MILLS 36F AND 48F ULTRA LIGHT-WEIGHT (ULW) OVERHEAD AND UNDERGROUND CABLE

This PIA approved multi-unit ultra light weight optical drop cable is designed for aerial and/or duct applications and is suitable for use alongside 1 IkV power cables. 36F is available on 2Km drums and 48F is available on 2Km and 4Km drums.

- Optical fibre: Singlemode G.657.A1
- Layout: 3 or 4 units x 12 fibres
- Embedding strength member:  $3 \times 0.32$ mm brass coated steel wires
- Moisture Barrier: Water blocking yarn and water swellable tape
- Outer sheath thickness: I.6mm (nominal) HDPE UV Black
- Strip marking width: I.25mm (nominal) HDPE Yellow
- Cable diameter: 7.0mm (± 0.3 mm)
- Cable Weight: 40.0Kg / km (nominal)
- · Supplied on a wooden reel

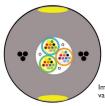


Image shown is of the 36F variant, not to scale'

#### PART NO. DESCRIPTION

 S83-2590
 36F OPTICAL AERIAL DROP CABLE (ULW) 2KM

 S83-2591
 48F OPTICAL AERIAL DROP CABLE (ULW) 2KM

 S83-2592
 48F OPTICAL AERIAL DROP CABLE (ULW) 4KM



#### PART NO. DESCRIPTION

PW0039697

 60082615
 A) 36F ULTRA-LIGHT WEIGHT (ULW) (2KM REEL)

 60050990
 B) 48F ULTRA-LIGHT WEIGHT (ULW) (2KM REEL)

 60098854
 C) 96F ULTRA-LIGHT WEIGHT (ULW) (2KM REEL)

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#### Cable, Ducting & FTTx Products

#### **MICRODUCTS DIRECT BURIAL (DB)**

Available in popular sizes and manufactured from high quality HDPE enabling easy placement of fibre optic cables of suitable OD. The 65026 is a more heavy duty microduct manufactured from MDFE and benefitting from increased wall thickness and two reinforced 1.57mm GRP strength members and black stripes. The 62751 is HDPE ribbed duct designed as a cable pathway for use in telecom networks.

Other sizes and length of microduct are available on request.





Part Number	ID mm	OD mm	Colour	Stripe	GRP Member	Ribbed
DUR-001	7mm	3.5mm	Orange	N	N	Ν
65026	7mm	3.7mm	Orange	Y	Y	Ν
60014	12mm	8mm	Orange	N	N	Ν
DUR-002	I4mm	10mm	Orange	N	N	N
DUR-003	l6mm	I2mm	Orange	N	N	N
62751	18mm	I4mm	Orange	N	N	Y
DUR-004	25mm	21mm	Orange	N	N	N

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
DUR-001	7/3.5MM PRIMARY TUBE ORANGE 600M REEL	DUR-002	14/10MM PRIMARY TUBE ORANGE 2KM REEL
65026	7/3.7MM UNIVERSAL DROP TUBE	DUR-003	16/12MM PRIMARY TUBE ORANGE 2KM REEL
	ORANGE 2X BLACK STRIPE 1000M	62751	18/14MM PRIMARY RIBBED TUBE ORANGE 2000M
60014	12/8MM PRIMARY TUBE ORANGE 2000M	DUR-004	25/21MM PRIMARY TUBE ORANGE 3KM REEL

#### **MICRODUCT TUBE BUNDLES**

The Microduct Tube Bundles	-	1		1			
are supplied in standard orange colour with black stripes for easy	Part Number	OD mm	No of Tubes	Colour	Stripes	Design	
identification and a rip cord for ease of stripping.	64951	18.4mm	7 x 5/3.5mm	Orange	Y		
They are lightweight and flexible products intended for direct installation into waiting ducts, but							
not for direct burial or aerial use. Other sizes and length of microduct tube bundles are available on request.	64986	23.8mm	12 x 5/3.5mm	Orange	Y		
	DUR-005	25.0mm	3 x 10/8mm, 3 x 5/3.5mm	Orange	Y		
PART NO. DESCRIPTION							
				400014			
64951 7-WAY DIRECT INSTAL							
64986 12-WAY DIRECT INSTA	LL 5/3.5MM	ORANGE 2	2X BLACK STRIPE	S 4000M			
DUR-005 DI 6-WAY COMBO (3 >	< 10/8MM, 3	X 5/3.5MM	) ORANGE 2KM I	REEL			

**Mills** 

#### MICRODUCT STRAIGHT CONNECTORS

Direct bury straight connectors developed for use in direct buried fibre optic applications.

The tube stop design reduces tube ovality and allows full tube insertion. This feature also reduces snagging and helps insertion of poorly cut tube. For rigidity the connectors have 30 || mpact Resistance @-5°C and feature a transparent body which allows for visual inspection of tube and fibre.

5,7,8mm connectors are supplied in pkt 50 with larger sizes supplied in pkt 10.

#### PART NO. DESCRIPTION

 Q69-2586
 MICRODUCT STRAIGHT CONNECTORS 5MM PKT OF 50

 Q69-2584
 MICRODUCT STRAIGHT CONNECTORS 7MM PKT OF 50

 Q69-2582
 MICRODUCT STRAIGHT CONNECTORS 8MM PKT OF 50

 Q69-2588
 MICRODUCT STRAIGHT CONNECTORS 8MM PKT OF 50

 Q69-4307
 MICRODUCT STRAIGHT CONNECTOR 10MM PACK OF 50

 Q69-4308
 MICRODUCT STRAIGHT CONNECTORS 12MM PKT OF 10

 Q69-4309
 MICRODUCT STRAIGHT CONNECTORS 14MM PKT OF 10

 Q69-4310
 MICRODUCT STRAIGHT CONNECTORS 16MM PKT OF 10

 Q69-4310
 MICRODUCT STRAIGHT CONNECTORS 16MM PKT OF 10

 Q69-4311
 MICRODUCT STRAIGHT CONNECTORS 25MM EACH

#### MICRODUCT REDUCING CONNECTORS

Direct bury straight connectors developed for use in direct buried fibre optic applications. Available for reducing and increasing microducts in a range of popular microduct sizes. Supplied in pkt 10.



#### PART NO. DESCRIPTION

 Q69-2580
 CONNECTOR REDUCER 6MM TO 5MM PK10

 Q69-6729
 CONNECTOR REDUCER 7MM TO 5MM PKT OF 10

 Q69-6731
 CONNECTOR REDUCER 8MM TO 5MM PKT OF 10

 Q69-6791
 CONNECTOR REDUCER 8MM TO 7MM PKT OF 10

 Q69-6732
 CONNECTOR REDUCER 10MM TO 8MM PKT OF 10

 Q69-6735
 CONNECTOR REDUCER 12MM TO 10MM PKT OF 10

 Q69-6737
 CONNECTOR REDUCER 14MM TO 12MM PKT OF 10

 Q69-6738
 CONNECTOR REDUCER 14MM TO 12MM PKT OF 10

 Q69-6738
 CONNECTOR REDUCER 14MM TO 12MM PKT OF 10

#### COLLET LOCKING TOOL



E00-0451 COLLET LOCKING TOOL

#### **MICRODUCT END CAPS**

Direct bury straight connectors developed for use in direct buried fibre optic applications.

Used for permanent end sealing of ducting systems to prevent water and dirt ingress. The cap is self-contained. Available to suit 5,6,7,8,10,12,14,16,18 and 25mm microducts. Supplied in pkt 10.



#### PART NO. DESCRIPTION

 Q69-6741
 A) CONNECTOR END CAP 5MM PKT OF 10

 Q69-6743
 A) CONNECTOR END CAP 7MM PKT OF 10

 Q69-6744
 A) CONNECTOR END CAP 8MM PKT OF 10

 Q69-6745
 A) CONNECTOR END CAP 10MM PKT OF 10

 Q69-6746
 A) CONNECTOR END CAP 10MM PKT OF 10

 Q69-6747
 A) CONNECTOR END CAP 10MM PKT OF 10

 Q69-6748
 A) CONNECTOR END CAP 14MM PKT OF 10

 Q69-6748
 A) CONNECTOR END CAP 16MM PKT OF 10

 Q69-4326
 B) CONNECTOR END CAP 16MM PKT OF 10

 Q69-4327
 C) CONNECTOR END CAP 16MM EACH

 Q69-4327
 C) CONNECTOR END CAP 25MM EACH

#### GAS BLOCK CONNECTORS

The Gas Block connector provides a tube-to-tube joint and seal as well as providing a low-pressure gas seal between the inner microduct and the fibre bundle.

The gas block connector is designed to be fitted at the point where the external network 7mm microducts connects to the internal network 7mm microduct and provides a seal between the installed fibre unit and the inner area of the microduct. Supplied in pkt 10.



#### PART NO. DESCRIPTION

74665	A) 7-5MM GAS BLOCK CONNECTOR PK10
71110	B) 7MM GAS BLOCK STRAIGHT CONNECTOR
	1.0MM TO 1.6MM PK10
71533	B) 7MM GAS BLOCK STRAIGHT CONNECTOR
	1.8MM TO 2.4MM PK10

#### MILLS TUBE MEASURING GAUGE

A handy tool for measuring the inside and outside diameter of blown fibre tubes.

> Ideal for foolproof and rapid identification of internal and external measurements of blown fibre delivery ducts and tubes that have an internal diameter of 2-12mm and external diameter of 5-12mm. It has an overall length of just 143mm and can be used for many other applications where quick identification of internal and external round diameter items are required.





#### MINIDUCT SEALS

The Divisible Fibre Restraints are an easy-to-install Gas and Watertight seal suitable for sealing microducts.

The miniduct seal is easy to install on new installations and existing installations (retrofit). Available for 5,6,7 and 8mm microducts and supplied in pkt 100.



#### PART NO. DESCRIPTION

71720	MINIDUCT SEAL 5MM/1.25MM (X100)
72318	MINIDUCT SEAL 5MM/2.1MM (X100)
73572	MINIDUCT SEAL 6MM/0.9MM (X100)
73573	MINIDUCT SEAL 6MM/1.6MM (X100)
72319	MINIDUCT SEAL 7MM/1.6MM (X100)
71724	MINIDUCT SEAL 7MM/2.5MM (X100)
73234	MINIDUCT SEAL 8MM/0.9MM (X100)

#### **SPLIT CABLE SEALS**

Divisible mini-duct sealing plug sets developed to provide an effective and simple solution for gas and watertight duct sealing requirements. The modular system enables installation in new and existing situations. Supplied as 2 half-shells and a split rubber seal.

Available for 14,16,18 and 25mm ducts and supplied in pkt 25.

#### PART NO. DESCRIPTION

71833	SPLIT CABLE SEAL 14/5.0-6.5MM (X25)
71170	SPLIT CABLE SEAL 14/8.0-10.0MM (X25)
71171	SPLIT CABLE SEAL 16/8.0-6.5MM (X25)
71978	SPLIT CABLE SEAL 16/5.0-6.5MM (X25)
71172	SPLIT CABLE SEAL 16/10.0-8.0MM (X25)
71173	SPLIT CABLE SEAL 18/9.4-12.0MM (X25)
75727	SPLIT CABLE SEAL 25 (4.7-6.5MM) (X25)
75728	SPLIT CABLE SEAL 25 (6.5-8.5MM) (X25)

#### **TUBE DISTRIBUTION CLOSURE**

The Tube Distribution Closure (TDC) is IP 40 rated and can be Direct Buried into a waiting trench or placed inside a manhole or handhole.

Dimensions: Length: 316mm (12.4") Width: 220mm (8.7") Height: 70mm (2.8"). Supplied in a pack of 10.



#### PART NO. DESCRIPTION 7514 TUBE DISTRIBUTION CLOSURE (PK10)

#### PRYSMIAN OVERBLOW SEAL KIT 25 - 14MM PK10



#### PART NO. DESCRIPTION XBFSC02085A PRYSMIAN OVERBLOW SEAL KIT

25 - 14MM (PK10)

#### **EM WRAP** MICRODUCT CLOSURE

The single layer EM-Wrap closure when wrapped around tube bundles, gives mechanical protection when buried in the ground, installed in access chambers, or used in overhead networks.

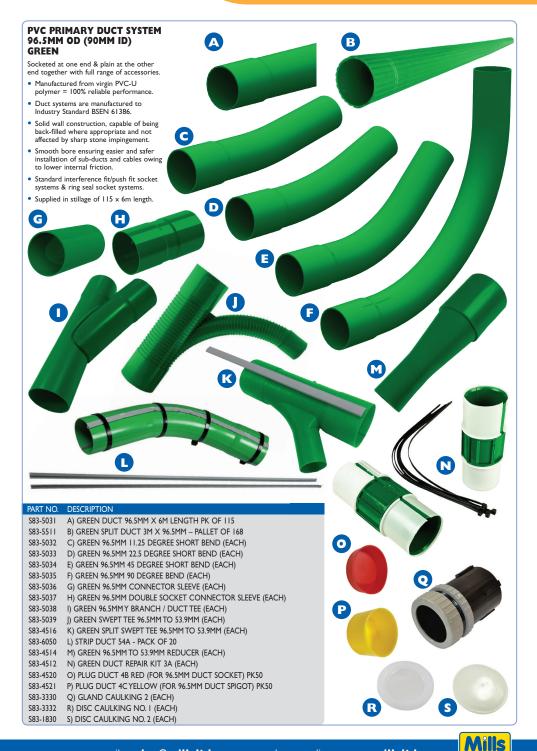
The Emwrap closure has been designed to fit over tube bundles, when a joint or branch is required. It is ideal for FTTH applications, whether the microducts are overhead, ducted or buried. The installation is easy by simply wrapping the rubber sheath around the tube bundles and inserting the tabs through their corresponding openings to form a sealed wrap. Cable ties are then applied to secure the closure in place The double wrap version provided IP67 rating when used with amalgamating tape.









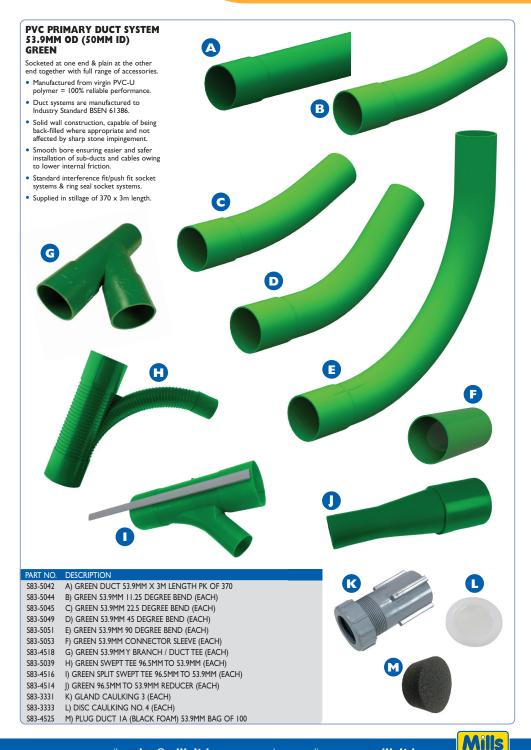


email: sales@millsltd.com purchase online: www.millsltd.com





Sales/Technical Support tel: 020 8833 2626



email: sales@millsltd.com purchase online: www.millsltd.com



To repair duct 11 & 12.

#### PART NO. DESCRIPTION

 S83-5071
 GREY SPLIT DUCT 59A (PALLET OF 216)

 S83-6020
 GREY SPLIT DUCT 57 (PALLET OF 126)

 S83-0791
 DUCT REPAIR KIT 2A FOR REPAIRING DUCT 11 (3" SAD)

 S83-0790
 DUCT REPAIR KIT 4A FOR REPAIRING DUCT 12 (4" SAD)

#### FILOSEAL+ HD FIRE DUCT SEALING KIT 75 - 110MM

FiloSeal+HD FIRE provides a strong support system using the fire resistant hexagonal blocks made of specially formulated material called 'Formite' which builds up like a honeycomb structure ideal for sealing empty or any cable configuration or pipes contained in one duct. It also allows easy reentry of the seal to add or remove cables or pipes as required.

Fire resistant - tested to BS EN1366-3 2009

Supplied in a 310ml Cartridge.



PART NO. DESCRIPTION S83-0759 FILOSEAL+ HD FIRE DUCT SEALING 75 - 110MM

#### FILOSEAL+ HD DUCT SEALING KIT 75-110MM

FiloSeal+HD is an engineered solution that provides a strong support system using hexagonal tubes which build up like a honeycomb structure. FiloSeal+HD is suitable for sealing any cable configuration or pipes contained in one duct and also allows easy re-entry of the seal to add or remove cables or pipes as it is ideal for sealing larger heavy cables and pipes in ducts, boreholes or transit frames providing up to 2 bar Pressure Resistance 100Kg Pulling Force on the cables when sealed 10xd at 45°, with 1 bar pressure bending test.

Supplied in a 310ml Cartridge.



PART NO. DESCRIPTION S83-0758 FILOSEAL+ HD DUCT SEALING KIT 75-110MM



#### Cable, Ducting & FTTx Products

#### FILOSEAL+ DUCT SEALING KIT 75 - 125MM

Duct sealing system FiloSeal+ is a universal solution for sealing cables and pipes in ducts or bore holes. FiloSeal+ is suitable for sealing several cables or pipes contained in one duct up to 125mm diameter and also allows re-entry of the seal to add or remove cables or pipes as required. Supplied in a 310ml Cartridge.



#### PART NO. DESCRIPTION

S83-0756 FILOSEAL+ DUCT SEALING KIT 75 - 125MM

#### FILOSEAL+ DUCT SEALING KIT 150 - 200MM

Duct sealing system FiloSeal+ is a universal solution for sealing cables and pipes in ducts or bore holes. FiloSeal+ is suitable for sealing several cables or pipes contained in one duct up to 200mm dimeter and also allows re-entry of the seal to add or remove cables or pipes as required.

Supplied in a 310ml Cartridge.



#### PART NO. DESCRIPTION

S83-0757 FILOSEAL+ DUCT SEALING KIT 150 - 200MM

#### **NOFIRNO DUCT SEALANT KIT IA**

Approved by Openreach the NOFIRNO silicone-based sealant is used for providing new duct seals or maintaining existing seals when adding or removing cables. It can be used in Exchange Cable Chambers and serving manholes, commercial premises and MDUs with services cupboards or central risers.

- · Fire rated version available certified to BS EN1366-3
- · Quick and easy to install in both horizontal & vertical ducts
- Resistant to submersion in Petrol and Diesel
- Resistant to Methane, Hydrogen Sulphide and Chlorine
- Ensures WIMES, APEA, ATEX & DSEAR compliance
- Ref: 048330

#### PART NO. DESCRIPTION

S83-0117 NOFIRNO DUCT SEALANT KIT IA

#### A) POLYWATER ZIP SEAL DUCT SEALANT KIT

A Closed-Cell Foam Duct Sealing System for conduit sizes up to 50mm (2 inch). ZipSeal™ Duct Sealant is a practical and efficient way to seal small conduits and communication innerducts. The revolutionary Zip-Disc™ insert traps and keeps the foaming liquid in its open-cell centre area.

The unique two-part foam installs quickly and effectively. The innovative design of the Zip-Disc<sup>TM</sup> insert allows for horizontal and vertical installation with minimal drippage. Cured foam blocks can be removed and re-entered relatively quickly if necessary.

ZipSeal  $^{\rm TM}$  Duct Sealant holds up to 10 feet (3.0 m) water-head pressure to keep gases and rodents out of conduits.

#### B) POLYWATER ZIP SEAL DISPENSING TOOL

Polywater TOOL-50-11 Dispensing Tool for use with \$83-7601 Polywater Zip Seal Duct Sealant Kit.





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 S83-7601
 A) POLYWATER ZIP SEAL DUCT SEALANT KIT

 S83-7628
 B) POLYWATER ZIP SEAL DISPENSING TOOL



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#### TDUX KITS

TDUX is a unique inflatable wraparound duct sealing system for permanently sealing telephone cable ducts in order to prevent the leakage of water from the duct into exchange vaults or manholes.

- Suitable for use with plastic, concrete or steel ducting wall-feedthrough systems.
- Can be used with polyethylene or lead-jacketed cables.
- Duct Inflation Tool required.

**Note**: TDUX kit will seal vacant ducts and ducts occupied with 1 or 2 cables. To seal ducts occupied with more than 2 cables, TDUX-CL clips are available as separate items. Call sales for further information.

#### Features

- Fast and easy to install, even in congested enclosures, requiring only three parts for completion.
- Very flexible and reliable wraparound sealing system.
   Independent of duct or cable availty.
- Independent of duct or cable ovality
  - Can be installed while water is flowing out of the duct.
  - Water and airtight up to 50 kPa.
  - Environmentally friendly and non-toxic.
  - Resistant to chemicals and bacteria.
  - · Easy and fast removal.



		DUCT INSIDE D	IAMETER RANGE	CORRESPONDING OUTSIDE	DIA RANGE FOR 1/2 CABLES
PART NO.	PACK QTY	MIN	MAX	IN MIN. DUCT	IN MAX. DUCT
TDUX-45-INT	10	32.5	45	0-14	0-32
TDUX-60-INT	10	45	60	0-18	0-45
TDUX-75-INT	10	55	75	0-28	0-56
TDUX-90-INT	10	60	100	0-22	0-83
TDUX-100-INT	10	45	110	0-45	0-90
TDUX-125-INT	10	110	125	0-83	0-103

#### TDUX CLIP SEALS

One TDUX clip seals up to four cables. If more cables are to be sealed, use one extra clip per three additional cables.

Supplied in a packs of 5.

COMMSCOPE<sup>®</sup>

PART NO.	DESCRIPTION
TDUX-CL-20	DUCT CABLE CLIP SIZE 20 PK5
TDUX-CL-40	DUCT CABLE CLIP SIZE 40 PK5
TDUX-CL-60	DUCT CABLE CLIP SIZE 60 PK5
TDUX-CL-80	DUCT CABLE CLIP SIZE 80 PK5





Used to cover, control and protect fibre optic cable where it emerges inside the premises. Typically used where the customer box is either outside the premises or not directly opposite where the cable comes through the wall from outside. Comprising: I x CLI and I x Internal Cover White. Ref 061825.

#### B) EXTERNAL CUSTOMER LEAD IN & COVER (GREY)

Used to cover, control and protect fibre optic cable where it emerges outside the premises. Typically used where the customer box is either outside the premises or not directly opposite where the cable comes through the wall from outside.

Comprising: I x CLI and I x External Cover Grey.

#### C) EXTERNAL CUSTOMER LEAD IN & COVER (BROWN)

Used to cover, control and protect fibre optic cable where it emerges outside the premises. Typically used where the customer box is either outside the premises or not directly opposite where the cable comes through the wall from outside.

Comprising: I x CLI and I x External Cover Brown.

#### D) CUSTOMER LEAD IN CONDUIT 500MM THICK WALL PK10 Used with Internal and External kits (S83-4330, S83-4329 and S83-5084) in situations

where the wall is thicker than 300mm. Supplied in a pack of 10. Ref 061827.

#### PART NO. DESCRIPTION

\$83-4330A) INTERNAL CUSTOMER LEAD-IN KIT - WHITE\$83-4329B) EXTERNAL CUSTOMER LEAD IN KIT - GREY

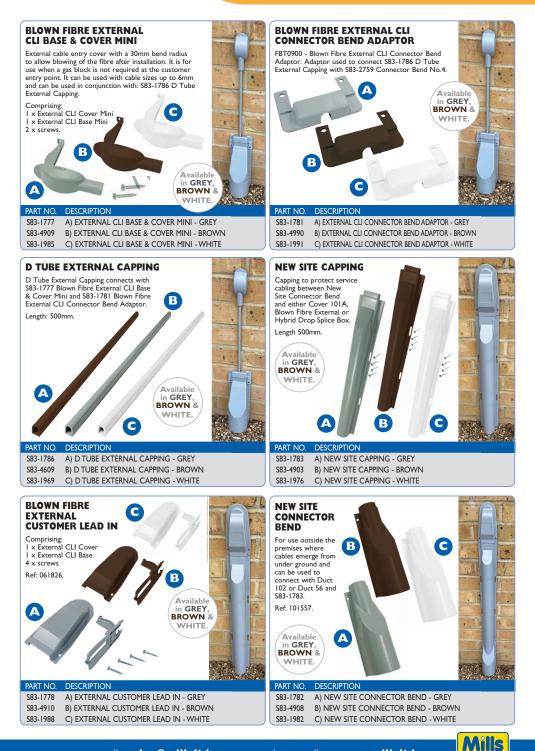


#### PART NO. DESCRIPTION S83-5084 C) EXTERNAL CUSTOMER LEAD IN KIT - BROWN S83-4526 D) CUSTOMER LEAD IN CONDUIT 500MM THICK

 S83-4526
 D) CUSTOMER LEAD IN CONDUIT 500MM THICK WALL PK I0

 S83-4529
 D) CUSTOMER LEAD IN CONDUIT 300MM THICK WALL PK I0





#### PRYSMIAN HDB4 HYBRID DROP SPLICE BOX

The Hybrid Drop Box (HDB4) is a wall mounted product used for the splicing of up to 4 fibres and up to four customer drop cables. The HDB4 can accommodate cables from 3 to 7 mm and is supplied with an extra knock-out port on the back for through wall applications. Dimensions: (h)190mm x (w)110mm x (d)40mm.

Available in 3 options;

- A) XCPSC03029 Prysmian HDB4 Hybrid Drop Box Splice Only
- B) XCPSC03044 Prysmian HDB4 Hybrid Drop Box 2x LC/APC Duplex
- C) XCPSC03043 Prysmian HDB4 Hybrid Drop Box 2x SC/APC Simplex

#### PART NO. DESCRIPTION

 XCPSC03029
 A) HDB4 HYBRID DROP BOX SPLICE ONLY

 XCPSC03044
 B) HDB4 HYBRID DROP BOX 2X LC/APC DUPLEX

 XCPSC03043
 C) HDB4 HYBRID DROP BOX 2X SC/APC SIMPLEX

#### PRYSMIAN RISER BOX (4 AND 8 TRAY)

The Riser Box Multi Tray (RBMT) is designed for use within apartment blocks and mid/high rise office blocks. The unit houses either 8 splice trays, or 4 splice trays and a module storage area. Each splice tray is able to accommodate 8 fibre splices. Dimension: (h) 176mm x (w) 130mm x (d) 60mm.

# PART NO. DESCRIPTION XCPSC01159 A) PRYSMIAN RISER BOX 4 TRAY

#### PRYSMIAN CTB MK3 COMPACT TERMINATION BOX 4 FIBRE

XCPSC03170 B) PRYSMIAN RISER BOX 8 TRAY

Prysmian CTB MK3 equipped with four pigtails 900 microns G.657. A2 and four SC/APC-SC/APC inner-shuttered adaptors. The Compact Termination Box MK3 (CTB MK3) is designed for use in residential and business applications for the termination of up to four optical fibres. The wall box enables the termination of a customer drop cable onto SC/APC type pigtails and adaptors. Dimensions: (I) 80mm x (w) 80mm x (d) 28mm. PART NO. DESCRIPTION

XCPSC02857 PRYSMIAN CTB MK3 COMPACT TERMINATION BOX 4 FIBRE



#### **PRYSMIAN FLEXIBOX TERMINATION BOX 24SCA**

The Flexi-termination box has been designed for internal/external use with up to 8 splice trays, an oval port and up to 48 inputs for up to 48 pre-terminated cables.

Flexibox termination box 24SCA with pigtails, 48 splices, internal with security lock, loop storage, entry system B. Dimensions: (h) 345mm x (w) 272mm x (d) 105mm



PART NO. DESCRIPTION XCPSC04097 PRYSMIAN FLEXIBOX TERMINATION BOX 24SCA

#### PRYSMIAN COMPACT TERMINATION BOX CTB LITE 2F

The Compact Termination Box Lite (CTB Lite) is designed for use in residential and business applications for the termination of up to two optical fibres. The wall box enables the termination of a customer drop cable onto SC/APC type pigtails and adaptors. The unit is supplied with two fixing screws for mounting directly onto a wall.

Dimensions: (I) 80mm x (w) 80mm x (d) 26mm.



PART NO. DESCRIPTION XCPSC03131 PRYSMIAN COMPACT TERMINATION BOX CTB LITE 2F



#### **PRYSMIAN DISTRIBUTION WALL BOXES**

Available in 3 sizes:

#### A) Prysmian SDWB Small Distribution Wall Box 220 x 150 x 50mm

The Small Distribution Wall box is a wall mounted product used for the distribution of fibres to up to six customer drop cables. Each customer has an individual splice tray that can house up to four splices. Customer drop cables of 3 to 6mm can be distributed from the box.

#### B) Prysmian MDWB Medium Distribution Wall Box 307 x 400 x 131mm

The unit has a capacity of up to 168 fibre splices and can accommodate input cables of both butt and inline types.

Up to thirty two customer drop cables of 3-6mm in diameter, and four customer drop cables of 6-12mm in diameter, can be distributed from the box.

C) Prysmian LDWB Large Distribution Wall Box 320 x 410 x 115mm

The unit has a capacity of up to 240 fibre splices and can accommodate input cables of butt, loop and inline types.

Up to 48 customer drop cables of 3-6mm in diameter and 8 customer drop cables of 6-12mm in diameter can be distributed from the box.

#### PART NO. DESCRIPTION

 XCPSC01915
 SDWB SMALL DISTRIBUTION WALL BOX 220 X 150 X 50MM

 XCPSC03104
 MDWB MEDIUM DISTRIBUTION WALL BOX 307 X 400 X 131MM

 XCPSC01917
 LDWB LARGE DISTRIBUTION WALL BOX 320 X 410 X 115MM

#### PRYSMIAN FLEXIBOX SPLICE ONLY BOX WITH SECURITY LOCK 144F

The splice only Flexibox is a wall box designed for internal/external use with up to 12 splice trays and up to 8 individual inputs for up to 24 cables.

Each splice tray is able to accommodate up to 24 fibre splices and the box has an excess storage or loop storage area.

The Flexibox is available with a lock for security and also has a removable cover for extra access whilst splicing and routing fibres. Dimensions: (h) 345mm x (w) 272mm x (d) 105mm.

# bles.

#### PART NO.

XCPSC03955 PRYSMIAN FLEXIBOX SPLICE ONLY BOX WITH SECURITY LOCK 144F

#### PRYSMIAN CASALINK CTB EXTERNAL CUSTOMER TERMINATION BOX MKI

The CTB External Customer Termination Box is a wall mounted IP55 sealed product that can be used for splicing the CBT drop cable to the Internal External cable that enters the house. The kit comprises:

internal External cable that ente	is the nouse. The kit comprises
<ul> <li>4 x SE Splice Trays</li> </ul>	<ul> <li>I x M20 Entry Cable</li> </ul>
<ul> <li>I x Wall Fixing Kit</li> </ul>	Gland 4-9mm
8	Lyc April Cable Lock

DESCRIPTION

- 2 x Drop Sealing Grommet.
- I x Aerial Cable Locking Kit





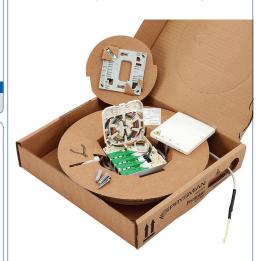
#### PRYSMIAN COMPACT TERMINATION BOX PRE-TERMINATED SC/APC 2

The Pre-terminated Compact Termination Box MK3 (CTB MK3) kit for internal cables is designed for use in residential and business applications. The wall box is supplied on a cardboard reel with a length of cable preinstalled in the factory. This process eliminates the need for splicing or fitting field mount connectors in the customer premises.

The cable is simply pulled out of the box, back to the floor/riser box and the CTB MK3 can be secured to the wall or clipped on a DIN rail, without the need to open the unit.

Dimensions: (I) 80mm x (w) 80mm x (d) 28mm.

Available in 2 and 4 fibre options and in a choice of cable length.



PART NO.	DESCRIPTION
XCPSC02866	CTB PRE-TERMINATED SC/APC 2 FIBRE 30M
XCPSC02946	CTB PRE-TERMINATED SC/APC 2 FIBRE 50M
XCPSC02977	CTB PRE-TERMINATED SC/APC 4 FIBRE 30M
XCPSC02978	CTB PRE-TERMINATED SC/APC 4 FIBRE 50M
XCPSC03273	CTB PRE-TERMINATED SC/APC 2 FIBRE 70M
XCPSC03155	CTB PRE-TERMINATED SC/APC 4 FIBRE 70M

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27

#### PRYSMIAN SMALL EXTERNAL SPLICE BOX ECSB4

The External Customer Splice Box (ECSB4) is a wall mounted product used for the splicing of up to 12 fibres and up to four customer drop cables. The box also has the added feature of a storage area under the hinged splice tray.

The box is supplied with five cable entry seals for the input cable port and four drop ports. The box can accommodate cables from 2 to 7 mm. The box is supplied with an extra knock-out port on the back for through wall applications.

Dimensions: (w) 105mm x (h) 105mm x (d) 33mm. (allow further 20mm height for grommets).



XCPSC02944	PRYSMIAN SMALL EXTERNAL SPLICE BOX ECSB4	
		_

#### PRYSMIAN VERTICASA INTERNAL TRANSITION BOX (ITB) 12/24F

The Verticasa In-line Transition Box (ITB), is mainly used for Multi Dwelling Units (MDU's) or office fibre cabling systems. It is a compact splicing box enabling the splicing of up to 4 drop cables to a main in-line cable. The ITB houses a single splicing tray. It is available in two versions, one for 12 and 24 fibre Verticasa cables and one for 44 fibre Verticasa cables.

#### Features:

· Allows splicing from cables to cables.

PART NO. DESCRIPTION

- I2/24 fibre version is suitable for one inline cable of up to I2.5mm in diameter. The 48 fibre version is suitable for one inline cable of up to I5mm in diameter.
- Up to 4 drop cables can be spliced to the in-line cable.
- The compact dimensions  $100 \times 80 \times 32 \text{mm}$  allow the unit to be installed in the network where access is restricted: riser, duct, etc...
- The cable entries are suitable for 5mm drop tubes or standard cables from 2.5 to 5 mm OD.
- Up to 4 fusion splices or two mechanical splices can be accommodated into the splice tray.
- Cable management within the unit ensures the minimum 20mm bend radius for optical fibre is not exceeded.
- · Easily installed and fitted to the wall or inside a riser.
- · Input/output cables are secured at the cables entry levels.
- · Manufactured from fire resistant UL94-V0 rated material.

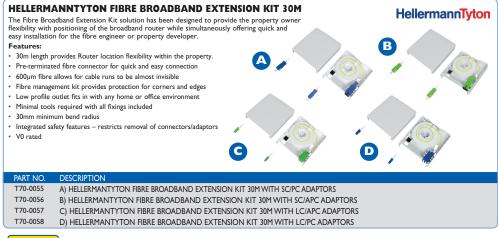
#### Specifications:

#### • Maximum number of splices: 2 mechanical, 4 fusion

- Number of cable ports: I Input Cable 4 Output Cables
- Maximum cable diameter (mm): 12.5 mm (12/24F), 15.0mm (48F)
- Required space envelope (mm): (L) 100 x (W) 80 x (D) 32
- Operating temperature: -20°C to + 50°C (5 to 95% RH)
- Material Internal Unit:-
- Cover: FR ABS White RAL 9016
- Base: FR ABS White RAL 9016

#### PART NO. DESCRIPTION

XCPSC00523 PRYSMIAN VERTICASA INTERNAL TRANSITION BOX (ITB) 12/24F





Sales/Technical Support tel: 020 8833 2626

Prysmian Group

#### PRYSMIAN INTERNAL / EXTERNAL COMPACT TERMINATION WALL BOX

The Internal / External Compact Termination Wall Box is designed for use in residential, small and large businesses premises.

#### Features:

- Termination Box can be mounted internally or externally and is sealed to IP54.
- Removable cover for easy access and fitted with a lock for enhanced security. The unit can be supplied with a keyed lock or a plastic lock which can be turned with a screwdriver.
- Unit manufactured from UV stabilised fire resistant UL94-V0 material allowing external installation.
- Single hinged splice tray enables access for working. The splice tray is supplied with interchangeable inserts and can accommodate up to 8 fusion splice protectors of heat shrink or crimp type, or 8 mechanical splices.
- Customer drop cables (patch cords) exit from the bottom of the unit and are sealed using a split grommet. Drop cables can also be routed through the wall.
- Up to 4 SC type pigtails and adaptors or 8 LC type pigtails and adaptors can be accommodated. A splice only version is also available.
- All fibres are positively bend managed to a 30mm minimum bend radius.
- External input cable enters the unit from the bottom. Cable up to 11mm in diameter can be accommodated.
- For Blown Fibre applications a gas block connector can be housed within the box.
- A knock out is provided in the base of the unit for applications where the customer drop patch cords are required to be routed through the wall into the premises.



#### Available in multiple configurations including keyed lock and splice only options: • SC/APC, SC/UPC up to 4x pigtails and adaptor types • LC/APC, LC/APC up to 8x pigtails and adaptor types

#### PRYSMIAN CTP CUSTOMER TERMINATION POINT

The Customer Termination Point has been designed and developed to accommodate the easy connection of a customer. The CTP can be used for fibre to the premise applications with an integral splicing area as well as positions for up to 2 SC Simplex or LC Duplex adaptors.

It is wall mountable with entry positions for input/output cables on the bottom with two additional through-the-wall holes.

The CTP has provision for excess storage of up to 10m of 3mm cables, as well as up to  $25m^*$  of blown fibre units up to 1.25mm and also allows separation of an incoming and outgoing cable for ease of access.

Grey, black or brown colour
External drop / connectorised through wall
SCA, SCU, LCA, LCU simplex adaptor types

#### Design and Construction

- Compact design.
- · Stores up to 10m of 3mm cable, 25m\* of blown fibre
- · Supports blown fibre/fixed cable access via UG ,
- external or internal duct
- Single person installation
- IP55 rated
- · Moulded and assembled in the UK
- · Available in black, grey and brown







29



#### **A) DESICCANT PACK 2A**

Used on unventilated Cabinets Cross Connection. 140g pack. Ref: 076062.

#### B) COMPOUND 21A

Compound 21A is a single component adhesive cement for bonding PVC ducting. Ref: 071821.

#### C) RESIN PACK 2B

A two component polyurethane compound specifically formulated for use in the construction of vertical air blocks in pressurised telecommunication cables. Ref 074228.

#### **D) RESIN PACK 6C**

Resin Pack 6C is a two component polyurethane compound specifically formulated for use as a sealant against the ingress of moisture into the concrete bases of cabinets crossconnection. Ref: 056487.

Features:

- Complies with latest BT specification.
- Supplied as a 3.8 litre kit comprising of 3.29 litres Base and 0.51 litres Hardener.
- Yellow base and blue hardener result in pale green mixed product (visual guide to mix quality).

#### E) RESIN PACK 7A

Resin Pack 7A is a two-component polyurethane foam specifically formulated for the sealing of telecommunications cable ducting against the ingress of moisture and gas.

#### Features:

- Fully complies with BT Specification M225.
- · Supplied as two half litre cans containing the base and hardener components.
- Kit also contains an injection syringe.

#### F) RESIN PACK 7B

Resin Pack 7B is a two-component polyurethane foam specifically formulated for the sealing of telecommunications cable ducting against the ingress of moisture and gas.

#### Features:

- Fully complies with BT Specification M225.
- · Supplied as a comprehensive duct sealing kit including flexible foam dams.

ALH Systems

Ideal for use on 54A ducting.





PART NO.	DESCRIPTION
S83-3224	A) DESICCANT PACK 2
S83-2750	B) COMPOUND 21A
S83-2836	C) RESIN PACK 2B



2A

B

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SIN PACK

**RESIN PACK** 

**9**B

ALH SYSTEMS LTD.

ESTBURY, WILTS

ALH

ALLI Systems Ltd RESIN PACK 14C (ITEM CODE 08982

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#### A) RESIN PACK 9B

Resin Pack 9B (FR) is a two component non-harmful polyurethane compound specifically formulated for use as a selfcuring closure sealant system for sealing polyethylene sheathed telecommunications cables into the bases of Sleeves 30A. 31A and 32A and Conduits for both construction and maintenance purposes.

#### **B) RESIN PACK 10B**

A very hard/permanent sealant, used for sealing sleeves 30A, 31A and 32B.

#### C) RESIN PACK 14C

Resin Pack 14C is a two component polyurethane compound specifically formulated for use as a sealant against the ingress of moisture and gas into telecommunications cable ducting.

#### D) RESIN 14 **RÉMOVAL TOOLKIT**

The Resin 14 Removal Toolkit is for the removal of Resin 14 duct seals from within cabinet/DSLAM, and comprises a Manual Impact Drill, I x 5.5mm x 210mm, I x 8mm x 210mm SDS drill bits and a pair of Extraction Hooks. The extraction hooks are approx. 600mm in length with a T-handle at one end and a small hook at the other. Ref: 088051.

#### E) COMPOUND 16A

Compound 16A is a single component non-curing mastic specifically formulated for sealing against gas and water in underground conduits carrying telephone cables.

#### F) COMPOUND DX5

C

Black compound for sealing around junction boxes, service cable entries and many other similar applications. Forms around irregular surfaces and configurations, highly resistant to cracking, drying and shrinking. Supplied in 5 x 1 pound blocks.

PART NO.	DESCRIPTION
S83-2840	A) RESIN PACK 9B
S83-2748	B) RESIN PACK 10B
S83-2835	C) RESIN PACK 14C

PART NO DESCRIPTION \$83-1838 D) THE RESIN 14 REMOVAL TOOLKIT S83-2749 E) COMPOUND 16A S83-3226 F) COMPOUND DX5

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Closure Sealant 10B ~ CV049 962 0.4

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#### **MILLS DUCT PREPARATION TOOLS,** AND DUCT INTEGRITY TEST EQUIPMENT

#### It is absolutely essential ducts are installed and tested prior to cable installation.

Mills offers an unrivalled range of duct preparation tools and duct integrity test equipment. For further advice, information and to see the complete range, please visit our website millsltd.com or call our highly trained sales staff on 0208 833 2626





E00-7292 Mills Blown Fibre Microduct Cutter 0-14mm







S83-6198 Mills Tri-Head Duct Cutter



\$83-6910 Mills Subduct Cutter 6-35mm

E00-6670 Mills End Cutting Duct Tool



Mills Tube Reaming & Deburring Tool



C00-4452 **Mills Microduct Rounding** Tool Set of 4



E00-6124 Mills Tube **Measuring Gauge** 





**Multifunction Blown** 



C00-3851 **Mills Microduct Pressure** and Integrity Test Kit



**Blown Fibre** Bead Crimper

E00-6974 **Blown Fibre Duct** Cutter 0-22mm

6

Fibre Preparation Tool



S83-7249 - FTTH Microduct Testing Rig (Pressurise, Calibrate & Catch) 8 Way





#### Features

- Pushing force and speed are both easily adjustable
- Innovative, simple-to-use, microfibre cable loading mechanism prevents the microfibre from being damaged or crushed during cable loading
- Active anti-buckle and 'no-crush' sensing device prevents damage to the microfibre during install
- LCD screen displays speed, distance, pushing force and battery life
- Microduct outside diameters 5,6, 7, and 8 mm can be blown into using interchangeable gaskets
- Quick-change adaptor plates enable operation on different size microducts in seconds
- Quick-release microfibre reel dispenser post
- 2 x Bosch 12v 2.0 Ah Lithium Ion batteries and I x 220/240v battery charger
- · 1.2 mm adaptor plate set (for 1.1mm fibre cable) including gasket sets for 5mm, 6mm,7mm and 8mm microducts
- · Tough, impact-resistant, weatherproof case
- Water separator, replacement drive wheel, o-rings and gaskets
- Threaded anchor point for use with optional tripod mount or optional harness attachment

- Fibre Cable Diameter: Up to 2.0 mm
- Microduct Diameter: 5, 7, 8 mm outside diameter
- Blowing Distance: Up to 2000 metres (\*depending on cable type and duct integrity)
- Blowing Speed: Up to 100 m/min (\*depending on type of cable and duct integrity)
- Pressure & Airflow: For optimum performance a portable compressor producing ≥80 L/min (2.8 CFM) at 10 bar is recommended
- Hand arm vibration values: Aeg = 0.26ms/m2
  - Dimensions: 400 x 350 x 90 mm (with fibre reel holder and battery pack fitted)
- Weight: 1.8 kg (with fibre reel holder and battery



and Mills Fibre Blowing Toolkit for both overhead and underground applications.



# FREMCO<sup>®</sup> FIBRE BLOWING MACHINES

Mills Limited are the exclusive distributors for the UK and Ireland and offer product from stock, service turn around within 48 hours, technical support, training and different payment options.

#### REQUEST YOUR TEST DRIVE TODAY!

#### WHY FREMCO?

#### No need for tools

Configuration and installation with our machines can be deployed without any usage of tools. This makes every fibre blowing job more effective as the machine can quickly be changed to blow different sizes of fibre/cable and ducts.

#### **Easy configuration**

With attention to user-friendly design, our machines have a minimum number of loose parts making it possible to configure the machine in only a few minutes. This makes it possible to reach several fibre blowing jobs per day.

#### **Competitive pricing**

The development of our machines are made with the customer in mind.

The machines are great quality, and with no unnecessary, expensive features. Our extended warranty and service agreement up to 60 months creates a great cost-benefit.



#### NANOFLOW MAX

Fibre blowing machine for FTTH fibres (EFBU) and micro cables up to 4.5 mm

Small but powerful fibre blowing machine, which can blow both blown fibre (EPFU) and micro/nano cables. Tested in accordance to IEC standards.

Design for fibre/cable diameter 0.8 - 4.5 mm being blown into 3 - 12.7 mm microducts.



#### MICROFLOW TOUCH

Fibre blowing machine for FTTH fibres (EFBU) and micro cables up to 6.5 mm The Fremco Microflow is the natural choice

for effortless FTTH installations.

Design for fibre/cable diameter 0.8-6.5 mm being blown into 4-16 mm ducts.

#### **MICROFLOW LOG**

Fibre blowing machine for FTTH fibres (EFBU) and micro cables up to 6.5 mm

The Fremco Microflow LOG is a data driven decision fibre blowing machine. Its online diagnostics display how the machine is operating and how to improve its utilisation.

Design for fibre/cable diameter 0.8-6.5 mm being blown into 4-16 mm ducts.



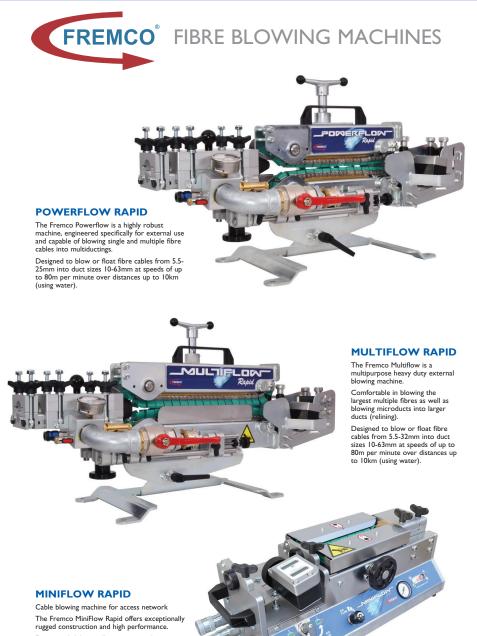
#### **OVERBLOW BLOCK**

Normally used for overblow, the Y-block can assist in adding one cable to an an existing duct, where another cable is already installed.

With Fremco's customized duct holders and adaptors, the Y-block is more flexible as it can be fitted into different sizes of ducts between 14-65 mm. This means you can modify both ends of the Y-block to fit each specific overblow job.



#### Sales/Technical Support tel: 020 8833 2626



Ensures reliability in all extreme weather conditions, it has been designed to blow fibre cables from 3-12mm into tube sizes 7-20mmmm at speeds of up to 100m per minute over distances up to 3.5km.



# FREMCO<sup>®</sup> FIBRE BLOWING MACHINES

#### EASYFLOW SMART

Based on 25 years of experience in the fibre blowing market, EasyFlow SMART (Patent pending) encompasses all the experience of a fibre blowing expert. The automatic mode protects the cable all the way during the fibre blowing job, minimising costly errors and significantly loss of cable.

#### **DUCT ROD RAPID PUSHER**

The new Fremco Duct Rod Pusher, designed in conjunction with Mills Limited and utilising all the reliability of the larger Fremco Fibre Blowing machines, is a quality duct rod pushing machine designed to assist in rodding operations, and capable of effortlessly pushing continuous rod from 9-25mm diameter with typical distances of up to 300 metres.







## The official Fremco Service Centre for the UK and Ireland

As the official distributor for UK and Ireland, Mills has recently opened its Fremco Service Centre. The Service Centre is designed in association with Fremco, and is manned by three Mills Fremco-trained staff. The Fremco Service Centre is able to offer 3 or 5 year service agreements for the full range of Fremco machines, including the new Duct Rod Rapid Pusher.



## **Purchasing Options**

Here at Mills we've extended our purchasing options so that for expensive kit valued at over  $\pounds 2,000$  such as the Fremco range or complete tool kits, we can offer finance and hire facilities through our agreements with Sunbelt Rentals

## **48 Hour turnaround**

A 48 hour turnaround on servicing is the norm with loan machines available as necessary to avoid disruption to the work flow.

All servicing carries a 12 month warranty.

#### **Service Agreement Benefits**

- Save money compared to actual price of a service
- High Quality Servicing at an authorised Fremco Service Centre
- Fixed monthly, annual or one-off payment giving total overview of expenses
- Keep your extended warranty when your machine is serviced at an authorised Fremco Service Centre

and Johnson Reed.

Fremco machines represent a considerable investment for many companies so being able to hire on a short-term or long-term contract makes a lot of sense financially.

## Leasing



Johnson Reed can arrange a flexible lease-to-purchase agreement for any purchases from £2,000. You can spread payments over a 2-to-5 year term with a hassle-free application completed over the phone. Leasing is fast, tax efficient and available to ALL businesses new and well established. Use their handy online calculator to get a quick estimate: www.johnsonreed.co.uk/calculator

## Just contact our sales team on: 020 8833 2626



## Hire Fibre Blowing and Network Test Equipment from Sunbelt Rentals

When you hire from Sunbelt, our specialist knowledge ensures you'll get the most appropriate equipment, delivered on time complete with instructions and accessories. You also have access to first class technical support should there be any problems. www.sunbeltrentals.co.uk



## MILLS CABLE LUBRICANT

The Mills range of cable lubricants has been designed for the telecoms industry and most specifically for blowing or pulling fibre optic cables. These lubricants are available for all sizes of general ducting and microducts and provide maximum friction reduction, reducing the risk of cable damage.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
S27-1960	A) MILLS FIBRE BLOWING SUBDUCT LUBRICANT 0.95 LITRE	S27-1961	D) MILLS FIBRE BLOWING SUBDUCT LUBRICANT 3.8 LITRE
S27-1963	B) MILLS FIBRE BLOWING MICRODUCT LUBRICANT   LITRE	S27-2665	E) CABLE LUBRICANT 2A WITH MICRO BEADS 20 LITRES
S27-1959	C) MILLS OPTIC CABLE PULLING LUBRICANT 20 LITRE		

## **CABLE BLOWING COMPRESSORS**

Compressed air is a vital part of the cable blowing and jetting process and choosing the right compressor is essential to ensuring fibre optic cables can be installed quickly and efficiently without damage. Mills offers a comprehensive range of compressors, after-coolers and air dryers to suit your requirement. Our experienced fibre blowing team are able to advise on this important element of the fibre blowing process.



A) Kaeser M17 Portable Compressor Versatile, reliable and easy to transport. The 15-bar version is the ideal choice

for trenchless laying of fibre cables or for leakage tests. An external compressed air aftercooler can also be optionally connected to ensure a dependable supply

of cool, condensate-free air at all times. Flow Rate: 1.0 m3/min or 35cfm.Operating Pressure: 15 bar or 215 PSI.

#### B) Rotair MDVN82KH Portable Compressor

Compact dimensions for easy handling and optimum dimensions / delivered power ratio. Complete with integral after cooler.

Operating pressure: 7 bar 102 psi : 10 bar 145 psi : 14 bar 203 psi.

Free air delivery: 8000 l/min 282 cfm : 6400 l/min 226 cfm : 5000 l/min 177cfm.

#### C) Lastmile Blown Fibre Air Compressor Petrol Compact and lightweight

compressor has been specifically designed to produce clean oil-free dry air for fibre blowing applications and is the ideal partner for the Fremco Nanoflow, and Microflow. Produces 9.5 CFM (270 I/ min) of clean air at maximum pressure of 10 Bar (145 PSI).

#### D) Last Mile VRK Armadillo Fibre Blowing Compressor

Portable compressor designed for cable blowing. With safety and efficiency in mind, it is designed to meet the requirements for cable blowing installations and has a built in aftercooler. Max operating pressure 15bar / 218ps. Working Pressure J3Bar / 188psi. Free air delivery 1000L/min / 35cfm. Minimum working pressure 5.5bar / 80psi.

E) MDU Cordless Compressor with 2 x 40v 4Ah Batteries, Charger & Hose

Cordless Compressor supplied with 2 x 40v 4Ah Batteries, Charger & Hose. Suitable for short blowing runs under 100 metres. Output: 240w.



## PART NO. DESCRIPTION

 101-30011
 A) KAESER M17 PORTABLE COMPRESSOR

 S00-1802
 B) ROTAIR MDVN82KH PORTABLE COMPRESSOR

 S00-3790
 C) LASTMILE BLOWN FIBRE AIR COMPRESSOR PETROL

 S00-3791
 D) LAST MILEVRK ARMADILLO FIBRE BLOWING COMPRESSOR

 P09-5094
 E) MDU CORDLESS COMPRESSOR WITH 2 X 40V 4AH BATTERIES, CHARGER & HOSE

# External Overhead

## **External Overhead**





email: sales@millsltd.com purchase online: www.millsltd.com



A) 5/8 Inch Square Socket for Coach Screws I/2 Inch Drive 5/8" square socket used to attach and remove coach screws from poles.

B) 1/4 Inch Hex to 1/2 Inch Square Drive Adaptor Fits 1/2-inch square drive sockets and is suitable for drills with standard 3 iaw chucks.

C) SDS Plus to 1/2 Inch Square Drive Socket Adaptor Fits 1/2-inch square drive sockets and is suitable for rotary hammers with SDS plus shank systems.

## PART NO. DESCRIPTION

 G70-1768
 A) 5/8 INCH SQUARE SOCKET FOR COACH SCREWS 1/2 INCH DRIVE

 G70-1769
 B) 1/4 INCH HEX TO 1/2 INCH SQUARE DRIVE ADAPTOR

 G70-1770
 C) SDS PLUS TO 1/2 INCH SQUARE DRIVE SOCKET ADAPTOR



Δ

## WASHERS GALVANISED 16,17,18

#### A) Washer Galvanised 16

Galvanised steel tubular washer 65mm long and 27mm in diameter for use with Bolts Hex Head to secure Universal Pole Brackets or UPBs to poles where the bolt is too long. Box of 50. Ref: 016161.

## B) Washer Galvanised 17

Galvanised steel tubular washer for use with Bolts Hex Head to secure UPBs to poles where the bolt is too long. Dimensions: 20mm long and 27mm diameter. Box of 200. Ref: 016162.

#### C) Washer Galvanised 18

 $G_{a}^{a}$  vanised steel tubular washer 40mm long and 27mm diameter for use with Bolts Hex Head to secure UPB's to poles where the bolt is too long. Box of 200. Ref. 016163.

#### PART NO. DESCRIPTION

 S83-1766
 A) WASHER GALVANISED 16 - BOX OF 50

 S83-2865
 B) WASHER GALVANISED 17 - BOX OF 200

 S83-2866
 C) WASHER GALVANISED 18 - BOX OF 200

#### WASHER GALVANISED 4

50mm diameter x 3mm thick with an 18mm hole and used on Bolt Arm.

Supplied in a box of 100.

Ref: 016152.



## PART NO. DESCRIPTION

S83-2868 WASHER GALVANISED 4 (BOX OF 100)

## NAIL BONDING

Galvanised steel round headed nail 45mm long x 5mm diameter and used in conjunction with Washer Galvanised 19 for securing Aluminium Strip and Cappings to poles.

Supplied in a 5kg box.

Ref: 072034.

#### PART NO. DESCRIPTION \$83-2672 NAIL BONDING

## PIN STEEL NO.2 PK200

Hardened steel pin with captive washer for attaching labels to poles including pre-climb test labels, Caution Overhead Fibre and Pole Plastic Letters & Numbers. Overall length 30mm (1 1/8"). Supplied in box of 200.

Ref: 070864.

PART NO. DESCRIPTION S83-1746 PIN STEEL NO.2 PK200



## WASHER GALVANISED 19

Galvanised steel flat washer 20mm in diameter with a 7mm hole in the centre. 1.6mm in thickness

Used with Nail Bonding and Strip Aluminium to secure cables to wooden poles. Supplied in a 3kg box containing approximately

770 washers. Ref: 073202.

#### PART NO. DESCRIPTION

S83-3163 WASHER GALVANISED 19 (3KG)

## PLUGS CREOSOTED

A packet of 100 creosoted plugs 10mm x 50mm (3/8" x 2"). These products are used to plug old fixing holes or test holes created following testing using a Mattson borer. To prevent decay to the pole the specification LN435 states "All holes from cores taken for testing must be plugged with creosote treated plugs, which are an interference fit into any holes made."

Ref: 016266.



PART NO. DESCRIPTION S83-0944 PLUGS CREOSOTED

### STRIPS ALUMINIUM I6mm wide aluminium strips used to secure

cables running vertically on poles and available in 3 lengths (80mm, 120mm and 160mm) to accommodate most sizes and multiples of cables. Regulations specify cables must be fixed at a minimum of 450mm intervals and must not impede access to the climbing steps.

Supplied in pack of 25.

\$83-0902 Ref: 015708. \$83-0856 Ref: 076077. \$83-0903 Ref: 076078.

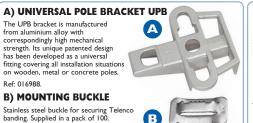
## PART NO. DESCRIPTION

 S83-0903
 80MM STRIP ALUMINIUM (PK25)

 S83-0902
 I20MM STRIP ALUMINIUM (PK25)

 S83-0856
 I60MM STRIP ALUMINIUM (PK25)





Ref: 013603.

#### PART NO. DESCRIPTION

 S83-1540
 A) UNIVERSAL POLE BRACKET UPB

 S83-3246
 B) MOUNTING BUCKLE (PK100)

## **TELENCO BANDING TOOL**

Stainless steel banding tool for the attachment of the Telenco Universal Pole Bracket (UPB) to wooden and hollow poles. Ideal for use on joint user poles where permission cannot be granted to drill a bolt hole through the pole to attach cable fixings. Ref. 013608.

PART NO. DESCRIPTION \$83-3242 TELENCO BANDING TOOL

#### RATCHET POLE BANDING TOOL

Ratchet stainless steel banding tool for the attachment of the Telenco Universal Pole Bracket (UPB) to wooden and hollow poles. Ideal for use on joint user poles where permission cannot be granted to drill a

bolt hole through the pole to attach cable fixings.



## PART NO. DESCRIPTION

\$83-1699 RATCHET POLE BANDING TOOL



Contains: Screw banding tool, aviation tin snips, riveting hammer, cut resistant safety gloves and storage case.

Mile



PART NO. DESCRIPTION \$83-1667 POLE BAND MOUNTING TOOL KIT

## BANDING STAINLESS STEEL 20MM X 50M

Stainless steel strip banding 20mm x 0.7mm x 50m contained in a plastic "Easy carry container". For attaching S83-1540 Universal Pole Bracket or UPB, S00-7197 External Fibre Locking Mechanism or ELM and S00-1601 Malico L Coiling Bracket to BT Hollow & Joint User wood & steel poles.

Ref: 013610.

### PART NO. DESCRIPTION

 S83-1542
 BANDING STAINLESS STEEL 20MM X 50M

 S83-1543
 PROTECTION SLEEVE FOR BANDING SS 20MM X 10M

## **BOLT HEX HEAD**

A galvanised steel hexagonal headed bolt, available in 300mm (S83-I538) and 350mm (S83-I539) lengths supplied fitted with two galvanised steel washers and one nut.

For attaching Universal Pole Bracket or UPB, Hook Aerial Cable I and IA to wooden poles.

S83-1538 Ref: 016977. S83-1539 Ref: 016978.

### PART NO. DESCRIPTION

 S83-1538
 BOLT HEX HEAD 16MM X 300MM

 S83-1539
 BOLT HEX HEAD 16MM X 350MM

## HOOK AERIAL CABLE

Hook Aerial Cable I or J Hook is a "D" section steel bar coated with nylon and formed into a "J" shape. Used to support an Aerial Cable on Joint User Poles. Ref: 016240.



PART NO. DESCRIPTION \$83-3245 HOOK AERIAL CABLE

## OMEGA POLE BRACKET 180MM

Pole bracket used for securing pole hardware on wooden poles used for low voltage networks. Installation with S83-1542 20mm pole band or with a coach / lag screw. Material: Galvanized steel. Width: 180mm.





#### MALICOIL L FIBRE LOV300E CABLE COILING BRACKET Manages the coiling and bend radius of aerial optical fibre. Available in 3 sizes. A) Malicoil S- Coiling Diameter: TOT Min 270mm / Max 400mm B) Malicoil M- Coiling Diameter: with ADSS structure Min 400mm / Max 600mm C) Malicoil L- Coiling Diameter: height or at ground level. Min 550mm / Max 960mm PART NO. DESCRIPTION impact of the cable coiling. S00-1601 A) MALICOIL S - COILING DIA: MIN 270MM / MAX 400MM PART NO. DESCRIPTION S00-1970 B) MALICOIL M - COILING DIA: MIN 400MM / MAX 600MM S00- 1969 C) MALICOIL L - COILING DIA: MIN 550MM / MAX 960MM

## **BRACKET 22**

A dropwire fixing consisting of a galvanised steel triangular bracket with three fixing holes and a welded loop. Designed to attach a dropwire clamp at end users premises or on a multi pole route where no pole ring exists



Suitable for use with 36f ULWC, BIRLA, CDC, HFCL and Dropwire 10A.

Ref: 011114.

#### DESCRIPTION PART NO. S83-2723 BRACKET 22

## HOOK AERIAL CABLE IA

Used on wooden poles to support suspension and aerial cable relief clamps. Ref: 016990.



#### PART NO. DESCRIPTION S83-1681 HOOK AERIAL CABLE IA

## BRACKET 44

A dropwire fixing consisting of a galvanised steel "L" shaped Bracket with a welded loop at one end and a plate with two holes at the other end.

Designed to attach a dropwire clamp to brickwork at end users premises where further additional height clearances are required

On brickwork (without rendering or cladding) this Bracket is designed to be secured with 2 x Bolt Expanding 2A

Maximum span length is 68 metres.

Dimensions: 420 x 210mm (Wall Plate: 150 x 100mm) Ref: 009561.

PART NO. DESCRIPTION BRACKET 44 \$83-1060



Designed for cable storage and protection, this pole hardware accessory enables the management of fibre optic cable overlengths on poles, in manholes or on walls/facades. The LOV300e storage bracket enables the avoidance of the piston effect on aerial cables

The bracket allows convenient splicing at

Compact and discreet, the LOV300e storage bracket can be attached at the rear of a splice closure in order to curtail the visual

S83-0103 LOV300E CABLE STORAGE BRACKET

## BRACKET 32

A dropwire fixing consisting of a galvanised steel "J" shaped Bracket with a welded loop and a plate with four holes at the other end. Designed to attach a dropwire clamp to timber or brickwork at end users' premises where additional height clearance is required e.g. a Bungalow.

Ref: 016264.



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#### PART NO. DESCRIPTION \$83-2724 BRACKET 32

#### WALL PLATE 5A WITH THIMBLE

Galvanised steel wall plate for attachment of lightweight cables and wires

Dimensions: 150mm x 100mm Ref: 018388.

PART NO. DESCRIPTION S83-9215 WALL PLATE 5A WITH THIMBLE 150MM X 100MM

## BRACKET 51

On brickwork (without rendering or cladding) this Bracket is designed to be secured with 2 x Bolt Expanding 2A

The Bracket 51 is attached to the wall by the same drilling method as the Bracket 44 but, as it stands out further from the wall, is considerably taller.

Dimensions: 600 x 350mm (Wall Plate: 150 x 100mm).

Maximum span length is 68 metres. Ref: 060795.

PART NO. DESCRIPTION BRACKET 51 S83-1064



## A) CLAMP AERIAL CABLE 2

Used to support Cable Aerial Self Supporting Combined 10/0.5, 20/0.5, 5/0.6 and 10/0.6 at through pole positions on hollow poles. Ref: 073194.

## **B) CLAMP AERIAL CABLE 4**

Used to support Cable Aerial Self Supporting Combined 50/0.5, 10/0.63, 28/0.63 and 14/0.9 at through pole positions on hollow poles. Ref: 073196.

#### PART NO. DESCRIPTION

A) CLAMP AERIAL CABLE 2 \$83-2744 S83-2745 B) CLAMP AERIAL CABLE 4

## **GRIP STAY ANCHOR**

For terminating Wire Steel 7/2.00 to Anchor Screw Stay or to Insulator Stay 2 when these are inserted in a stay. For terminating lashes aerial cable using wire steel 7/2.00 on the span side of Insulator Stay 2.

Ref: 016229.

#### PART NO. DESCRIPTION

S83-2783 **GRIP STAY ANCHOR** 

## **GRIP WIRE SUSPENSION**

#### A) Grip Wire Suspension No. I

Used to terminate Cable PET or PETAL Aerial incorporating single strand suspension wire, except at power crossing. Ref: 016444.

#### B) Grip Wire Suspension No.2

For terminating all sizes of Cable PET and Aerial Cable except those that incorporate Single Strand Suspension Wire, Ref: 016227

#### C) Grip Wire Suspension No.3

For terminating Cable PET and Aerial Cable that incorporate single strand suspension wire on the span side of Insulator Stay 2 at power crossing. Ref: 016231.

#### D) Grip Wire Suspension No.4

For terminating all sizes of Cable PET and Aerial Cable except those with Single Suspension Wire, on the span side of Insulator Stay 2 at power crossings. Ref: 016232.

## PART NO. DESCRIPTION

S83-2785	A) GRIP WIRE SUSPENSION NO.I (SINGLE)
S83-2786	B) GRIP WIRE SUSPENSION NO.2 (SINGLE)
S83-2787	C) GRIP WIRE SUSPENSION NO.3 (SINGLE)
S83-2788	D) GRIP WIRE SUSPENSION NO.4 (SINGLE)

## Clamp used when installing Cable Dropwire Ref: 073194 B) CLAMP DROPWIRE 6 Dropwire clamp with extended relieved end and nylon protective coating, used to anchor cable dropwire in hollow poles. Ref: 016309.

#### PART NO. DESCRIPTION

\$83-2746 A) CLAMP DROPWIRE 10A S83-2747 B) CLAMP DROPWIRE 6

A) CLAMP DROPWIRE 10A

## **A) GRIP INSULATOR POLE**

Multi stranded "U" shaped clamp formed by laying 6 galvanised high tensile steel wires, each 2.00mm diameter in a spiral wrap formation, with an internal coating of aluminium oxide. Supplied with 2 "O" clips 9-1 Imm diameter and used for attaching an Insulator Stay 2 to the suspension wire of the cable. Approximate length 430mm. Ref: 016234.

B

## **B) GRIP STAY POLE**

For terminating Wire Steel 7/2.00 at the pole heads end. For terminating lashed Aerial Cable where wire steel 7/2.00 is used. Ref: 016228.

#### PART NO.

S83-2782 S83-2784 **B) GRIP STAY POLE** 

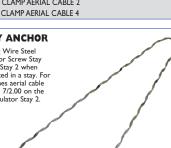
## CABLE ABRASION PROTECTOR

Reduces abrasion of aerial cables when in contact with poles and hardware fittings, anchor clamp bail wire and tree branches. S83-1670 Ref: 048987. S83-1672 Ref: 048988. S83-1673 Ref: 048989.

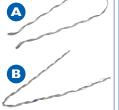
## PART NO. DESCRIPTION

S83-1670	CABLE ABRASION PROTECTOR NO.1 - 6MM X IM (PK 20)
S83-1671	CABLE ABRASION PROTECTOR NO.2 - 16MM X IM (PK 10)
S83-1672	CABLE ABRASION PROTECTOR NO.3 - 25MM X IM (PK 10)
S83-1673	CABLE ABRASION PROTECTOR NO.4 - 33MM X IM (PK 10)
S83-1674	CABLE ABRASION PROTECTOR NO.5 - 40MM X IM (PK 10)









#### HYPOCLAMP **SLIPPERY FISH AERIAL CABLE** CLAMP / GRIP

The new Hypoclamp F is approved for PIA installations and has been designed for quick tool-less installation of Slippery Fish SST COF250 Self Rodding Dropwire Cable for spans up to 70 metres. Ref: 095296.



#### PART NO. DESCRIPTION

S83-0672 HYPOCLAMP SLIPPERY FISH AERIAL CABLE CLAMP / GRIP

#### HYPOCUT F DROP CLAMP FOR EZ AXS & ROC FLAT CABLES PKIO

The PIA approved Hypocut F drop clamp has been specifically developed to meet the requirements of FTTP network roll-outs in the UK. This cable clamp enables the anchoring of flat aerial drop cables up to 70 metres. Supplied in a pack of 10.



#### PART NO. DESCRIPTION

HYPOCUT F DROP CLAMP FOR EZ AXS S83-4436 & ROC FLAT CABLES PK10

## **EXTERNAL FIBRE LOCKING MECHANISM FOR** ULTRA-LIGHTWEIGHT OVERHEAD CABLES

The Fibre Locking Mechanism also known as an ELM, is a locking mechanism essential for 'loose' jacketed element or elements in an overhead cable

The ELM provides an effective solution that isolates the termination of the fibres, either spliced or connectorised, in the fibre enclosure from the 'in span' environmental loading (ice and winding).

Ref: 066611.



#### A) ADSS FIBRE DROPWIRE CLAMP PKI0

Galvanised spiral aerial clamps or Helical Dead Ends approved for PIA applications and designed for quick and tool-less installation of ADSS Cables with a micromodule structure. Supplied in packs of 10.

## B) FIBRE CABLE CLAMP / **GRIP 36 ULW AND 48 ULW** PURPLE FLASH PK10

A galvanised spiral aerial grip or Helical Dead End (6.80-7.20mm) approved for PIA application and designed for quick tool-less installation of 36f Ultra-LightWeight (ULW) and BIRLA 7mm Overhead Dropwire Cable. Overall length of 560mm (Purple Colour Tag). Supplied in packs of 10. Ref: 85656

#### C) FIBRE CABLE CLAMP / **GRIP 36 ULW AND 48 ULW** YELLOW FLASH PKIO

A galvanised spiral aerial grip or Helical Dead End (6.80-7.20mm) approved for PIA application and designed for quick tool-less installation of overhead hybrid dropwire cable. Overall length of 560mm (Yellow Colour Tag).

Supplied in packs of 10. Ref: 104340.

#### D) FIBRE CABLE CLAMP / **GRIP OH FIBRE DROPWIRE** PK I O

A galvanised spiral aerial grip or Helical Dead End (5.80-6.20mm) approved for PIA application and designed for quick tool-less installation of fibre dropwire cable. For spans up to 70 metres.

Supplied in packs of 10. Ref: 090060.

#### E) FIBRE OPTIC DEAD END CLAMP 6MM (3 WIRE) PKI0

Pack of 10 Fibre Optic Dead End Clamps 6mm (3 wire). Ref: 106778.

#### PART NO. DESCRIPTION

S83-0250	A) ADSS FIBRE DROPWIRE CLAMP ORANGE 3.0MM – 3.9MM (PK10)
S83-3250	A) ADSS FIBRE DROPWIRE CLAMP BLUE 4.3MM – 5MM (PK10)
S83-3251	A) ADSS FIBRE DROPWIRE CLAMP WHITE 5.4MM - 6.2MM (PK10)
S83-0673	B) FIBRE CABLE CLAMP / GRIP 36 ULW & 48 ULW PURPLE FLASH (PK10)
S83-1804	C) FIBRE CABLE CLAMP / GRIP OVERHEAD HYBRID DROPWIRE YELLOW FLASH (PK10)
S83-1807 S83-4001	D) FIBRE CABLE CLAMP / GRIP OH FIBRE DROPWIRE (PK10) E) FIBRE OPTIC DEAD END CLAMP 6MM (3 WIRE) PK10

## ABOVE GROUND TELECOMS CLOSURE 2/4A

The 2/4A Above Ground Closure is widely used on buildings where communication wires and drop wires have to be joined externally. Ref: 026014.



PART NO DESCRIPTION ABOVE GROUND TELECOMS CLOSURE 2/4A S83-1683

Check

below for

colour

options

Check

below for

colour

options

BCDB



## External Overhead



#### PART NO. DESCRIPTION

 S83-3244
 CABLE LIGHTWEIGHT 3-6MM AC 7-200

 S83-3243
 CABLE HEAVYWEIGHT 5-8MM AC 10-320

#### FTTP BFD/CU HYBRID COME-ALONG CLAMP FOR COPPER AND FIBRE DROP CABLE

Overhead Cable Installation Tool (Come Along Clamp) but now with grip inserts for legacy 6 to 8mm cables as well as for the new flat ROC cable from Corning and EzAxS from CommScope for FTTP deployment.

Supplied with heavy duty 2 metre chain and sturdy carabiners for securing and holding tension during installation. Ref 069586.

PART NO. DESCRIPTION S83-3583 COME-ALONG CLAMP FOR DROP CABLE

#### PART NO. DESCRIPTION

 S83-0940
 A) GRIP PULLING AERIAL CABLE 2A (4-12MM)

 S83-0993
 B) GRIP PULLING AERIAL CABLE 3A (3-9MM)

## ANCHORING CLAMP AC68 140

A cost-effective solution for the dead-ending on poles of FTTH figure-8 cables with steel or dielectric messenger Ø 3 to 9mm deployed on distribution networks (spans up to 90m).

The AC68 140 clamp offers a tensile strength of 200daN.

Designed with a short opening and conical body, a jaw with two plastic wedges and a flexible bail.

- Simple and fast installation, requiring no tools
- Cable clamping on 60mm length
- Efficient cable grip due to the conical wedges design
- Installation with zero bend radius constraint
- Mounting on all pole line hardware with closed eye and min. Ø 15mm

For figure-8 drops Ø 6-9mm.

Bail: 140mm.

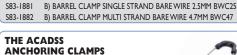
Sales/Technical Support tel: 020 8833 2626

PART NO. DESCRIPTION S83-0100 ANCHORING CLAMP AC68 140



46

#### **BARREL CLAMPS** A) Automatic stay wire wedge clamp for operating stay wire installations. For diameters: 6.1 - 6.6mm. between 2.5 and 5mm. B) For the simple and fast dead-ending of figure-8 cables with steel messengers, comprising a conical opening bail. body, a pair of wedges, a lanyard and a stainless steel bail. Features: Cost-effective, single-piece design S83-1880 Ref: 016980. Simple and fast installation requiring no tools \$83-1881 Ref: 016973 Efficient cable grip by conical wedging S83-1882 Ref: 016974. Manual adjustment of the lowest point of the cable by blocking the wedge on remote position Mounting on all pole line hardware with open or closed eye and min. Ø 10mm PART NO. DESCRIPTION \$83-4038 DESCRIPTION closed or opened hardware (min Ø 10mm holes).



A) BARREL CLAMP TERMINATING STAY WIRE SWC63

The ACADSS anchoring clamps present an open conical body, a jaw with two plastic wedges and a flexible bail. These cable clamps are used for the termination of fibre optic round ADSS cables deployed on distribution networks where spans do not exceed 90m.

ACADSS clamps are tool-less and considerably reduce the installation time.

Cable clamp: 165mm

. Span : < 90m

PART NO.

S83-1880

Available in 5 sizes for cables with diameters from 8-19mm.

## PART NO. DESCRIPTION

S83-3254	ACADSS8C FOR ROUND FIBRE OPTIC CABLE 8-10MM
S83-3255	ACADSS12 FOR ROUND FIBRE OPTIC CABLE 11-14MM
S83-3256	ACADSS14 FOR ROUND FIBRE OPTIC CABLE 13-16MM
S83-3257	ACADSS16 FOR ROUND FIBRE OPTIC CABLE 15-17MM
S83-3258	ACADSS18 FOR ROUND FIBRE OPTIC CABLE 17-19MM

## **DROP CABLE ANCHORING CLAMP 2.5-5MM**

The drop clamp 5/35 FTTH R enables simple or double anchoring of drop cables. Recommended for round cables with diameters

Thermoplastic single-piece construction with a closed conical body, a round integral wedge secured to the body through a link and an

DROP CABLE ANCHORING CLAMP 2 5-5MM

#### **DROP MANDREL CLAMP 3-4MM**

The FTTH drop clamp Mini is used for the dead-ending of 3 to 4mm aerial round drop cables with flexible insulation sheath where spans do not exceed 70m. The Mini is made up of a mandrel shaped body around which the cable is wound and self-tightened. The clamp can be secured to many different types of



PART NO. DESCRIPTION S83-4108 DROP MANDREL CLAMP 3-4MM

#### **DROP MANDREL CLAMP 4-6MM**

The drop wire clamp is used for the dead-ending of 4mm to 6mm aerial round drop cables distribution networks where spans should not exceed 70m.

The clamp can be secured to many different types of closed or opened hardware (min Ø 10mm holes).

PART NO. DESCRIPTION **DROP MANDREL CLAMP 4-6MM** S83-4109



## External Overhead



Δ

Enables the suspension of optical or coax figure-8 cables with steel or dielectric (FRP) messengers.

#### B) SC711C 7 TO 11MM SUSPENSION CLAMP

Enables the suspension of optical or coax figure-8 cables with steel or dielectric (FRP) messengers.



### C) ARC 6 TO 9MM AERIAL CABLE RELIEF CLAMP

Enables the suspension of figure-8 cables in Hook Aerial Cable I and IA to prevent the wearing of the cable sheath on the galvanised steel hook.

#### D) TELENCO SUSPENSION CLAMPS FOR ROUND ADSS CABLE

Suspension Clamps for aerial round ADSS cables on drop networks where spans do not exceed 70m. The suspension clamps consist of a nylon body with a nylon bail and a neoprene sleeve. The bodies are secured around the cable with 2 clips and one tie. All parts are UV protected.

### PART NO. DESCRIPTION

TANTNO.	
S83-1706	A) SC37C 3 TO 7MM SUSPENSION CLAMP
S83-1675	B) SC711C 7 TO 11MM SUSPENSION CLAMP
S83-1677	C) ARC 6 TO 9MM AERIAL CABLE RELIEF CLAMP
S83-1685	D) TELENCO DS4 SUSPENSION CLAMP
	FOR 4-6MM ROUND ADSS CABLE - BOX OF 100
S83-1686	D) TELENCO DS6 SUSPENSION CLAMP
	FOR 6-8MM ROUND ADSS CABLE - BOX OF 100
S83-1687	D) \$83-1687 TELENCO DS8 SUSPENSION CLAMP
	FOR 8-12MM ROUND ADSS CABLE - BOX OF 30
S83-1688	D) \$83-1688 TELENCO D\$12 SUSPENSION CLAMP
	FOR 12-15MM ROUND ADSS CABLE - BOX OF 30
S83-1689	D) S83-1689 TELENCO DS15 SUSPENSION CLAMP
	FOR 15-17MM ROUND ADSS CABLE - BOX OF 30

D

## **RIGID CABLE PROTECTING GUARDS**

- Available in 4 different sizes
- · Pre-punched to aid installation
- Manufactured from high-impact PVC, for extra protection
- Supplied in 2.4m lengths
  Supplied in black.
- Supplied III black.

V01-4058: (also known as capping 26) Black PVC channel section 2440mm long x 51mm wide.

Used on walls and wooden poles for protected cable space up to 40 mm in diameter.

Ref 072903.

V01-4056: (also known as capping 22) Black PVC channel section 2440mm long x 51mm wide.

Used on walls and wooden poles for protected cable space up to 19mm in diameter.

Ref: 070316.

## PART NO. DESCRIPTION

V01-4056	19MM RIGID CABLE PROTECTOR 3M (CAPPING 22)
V01-4057	25MM RIGID CABLE PROTECTOR 3M
V01-4058	40MM RIGID CABLE PROTECTOR 3M (CAPPING 26)
V01-4059	55MM RIGID CABLE PROTECTOR 3M



 PART NO.
 DESCRIPTION

 \$83-5090
 A) BROWN RISER GUARD 2.4M PK10

 \$83-5091
 B) BROWN DOLLY CABLE ENTRY





PART NO. DESCRIPTION

S83-1753 CAPPING STEEL NO. 8



## ROUND PVC CONDUIT BLACK 20MM 3M



DESCRIPTION GALVANISED STAPLES 65MM 5KG TUB

## POLE DEPTH TUBE CAP 20MM PK100

LDPE 20mm push fit cap for sealing pole depth tubes (dip sticks) to prevent water ingress. Supplied in a pack of 100.





PART NO. DESCRIPTION POLE DEPTH TUBE CAP 20MM PK100 S83-3550



B) EYEBOLT

EXPANDING 2A

with an MIO thread. This

is the preferred method of

attaching a dropwire to the

end users premises, where

size: 14mm. Required Hole

021689 / 023041

the walls are rendered. Ring

size: 16mm diameter x 95mm

depth. Box 20. Ref: 016442 /

A dropwire fixing consisting

of a Zinc plated steel eyebolt

## A) EYEBOLT EXPANDING IA

A dropwire fixing consisting of a Zinc plated steel eyebolt with an M6 thread. This is the preferred method of attaching a dropwire to brickwork at end users' premises. Overhead single point fixing bolt. Ring size 12mm. Required hole size 12mm x 50mm. Box 20. Ref: 016445

## C) M8 EYEBOLT

Eyebolt M8 x 95mm for use with Catenary Wire Kits (R02-7028) and associated accessories

Provides temporary or permanent anchorage in stone, concrete or brickwork. Supplied with shield, washer and hex nut.

## D) EYEBOLT EXPANDING 2B

A dropwire fixing consisting of a Zinc plated steel eyebolt with an MIO thread and a length of 205mm. This is the preferred method of attaching a dropwire to the end users premises, where the walls are clad. Ring size 23mm ID with 40mm OD.

## E) EYEBOLT EXPANDING 2C

A dropwire fixing consisting of a Zinc plated steel eyebolt with an MIO thread and a length of 255mm. This is the preferred method of attaching a dropwire to the end users premises, where the walls are heavily clad. Ring size 23mm ID with 40mm OD.

R

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#### PART NO

S83-1853 A) EYEBOLT EXPANDING 1A PKT 20 \$83-0901 B) EYEBOLT EXPANDING 2A PKT 20 R02-7024 C) M8 EYEBOLT PKT 20

#### S83-2626 D) EYEBOLT EXPANDING 2B PKT 5

\$83-2628 E) EYEBOLT EXPANDING 2C PKT 5

**CRANKED COMBINATION SPANNERS** 

Expanding Ia and other 10mm hexagon headed fixings.

Expanding 2a and other 17mm hexagon headed fixings.

rubbing on brickwork and general masonry.

Ref: 127468

Ref: 129393/141751.

Combination Spanners - cranked at 20 degrees to prevent knuckles from

A) 10mm combination spanner for installing Bolt Expanding 1a, Eyebolt

B) 17mm combination spanner for installing Bolt Expanding 2a, Eyebolt

## A) BOLT EXPANDING IA

Zinc plated steel stud with an MI0 thread. Used in joint boxes and manholes to fix Cable Bearers (S83-3203-S83-3208) and Steps Manhole No.2 (S83-3217). Size MIÓ x overall Length 85mm. Designed for use in an 12mm diameter hole Supplied in a pack of 20 Ref: 071906.

## B) BOLT EXPANDING 2A

M10 x 90mm (Overall Length 105mm) expansion bolt with a 30mm diameter washer requiring a 16mm hole to be drilled into concrete or brickwork - supplied in boxes of 25. Ref: 021689.

## C) STUD EXPANDING IA

Zinc plated steel stud with an M6 thread (similar to Eyebolt Expanding IA).

Used when securing \$83-2724 Bracket 32 and S83-9215 Wall Plate 5A to brickwork. Designed for use in an 8mm diameter hole. Ref: 016303.

#### PART NO DESCRIPTION

S83-2869 A) BOLT EXPANDING 1A PKT 20 B) BOLT EXPANDING 2A BOX OF 25 \$83-1773 S83-1854 C) STUD EXPANDING 1A PKT 20

## **STAPLES GALVANISED**

A) Galvanised steel staple, "U" shaped approximately 40mm wide and used to retain single strand suspension wire to poles when making a termination.

Ref:16270.

B) Galvanised steel staple, "U" shaped approximately 50mm wide. Used to retain multi strand suspension wire and CAC's to poles when making a termination

Ref: 016271.

#### PART NO. DESCRIPTION

S83-2857 \$83-2858 B) 50MM STAPLE PK 1KG





screw with twin thread profile for fast installation. Supplied in boxes of 200.

## **B) PANHEAD** PÓLE FIXING SCREW

Pozidrive zinc plated panhead wood screw with twin thread profile for fast installation. Supplied in boxes of 200.

### PART NO. DESCRIPTION

S83-0859	A) NO.12 X 1" COUNTERSUNK POZI WOOD SCREW PK 200
S83-2927	A) NO.12 X 1.1/2" COUNTERSUNK POZIWOOD SCREW PK 200
S83-2928	A) NO.12 X 2" COUNTERSUNK POZIWOOD SCREW PK 200
R02-1662	A) NO.12 X 2.1/2" COUNTERSUNK POZIWOOD SCREW PK 200
S83-1823	A) NO 12 X 3" COUNTERSUNK POZI WOOD SCREW PK 200
R07-1747	B) NO.12 X 1" PANHEAD POZI WOOD SCREW PK 200
R07-1748	B) NO.12 X 1.1/2" PANHEAD POZI WOOD SCREW PK 200
R07-1749	B) NO.12 X 2" PANHEAD POZI WOOD SCREW PK 200





PART NO. DESCRIPTION R02-2587 FIBRE DROP CABLE CLEATS PK100

#### A) CABLE TIE TENSIONER 5A (PLASTIC) 2.4 - 4.6

C) CABLE TIE GUNS Cable tie gun with automatic cutoff in one simple pull of a trigger.

Lightweight and durable cable tie gun, squeeze trigger to tension, twist to cut. For nylon cable ties 2.5 - 4.8 mm. Ref. 126820.

#### B) CABLE TIE TENSIONER 7A (PLASTIC) 4.6 - 7.6

Lightweight and durable cable tie gun, squeeze trigger to tension, twist to cut. For nylon cable ties from 4.8 - 7.6 mm. Designed for use on nylon cable ties with widths from 2.2 to 4.8mm and a thickness up to 1.6mm. D) MILLS CABLE TIE

## REMOVAL TOOL

A simple tool for quick, easy and safe removal of most sizes of cable ties.



S83-0945	A) TENSIONER 5A (PLASTIC) 2.4 - 4.6
S83-0853	B) TENSIONER 7A (PLASTIC) 4.6 - 7.6
S57-3005	C) PROFESSIONAL CABLE TIE GUN
S57-4005	D) S57-4005 MILLS CABLE TIE REMOVAL TOOL

## FUSION CABLE TIE HANDY PACK

A handy pack of 200 different sized, multicoloured cable ties. Suitable for a variety of applications such as cable binding or harnessing.

## Comprising:

- 25 x 2.5 x 100mm Red 25 x 2.5 x 100mm Green 25 x 2.5 x 100mm Blue 25 x 2.5 x 100mm Yellow 25 x 2.5 x 150mm Natural 25 x 3.6 x 200mm Black 25 x 3.6 x 200mm Black
- Manufactured from UL approved virgin nylon 6/6
  General operating
  - General operating temperature: -40°C to 85°C

USIO

- Flammability rating: UL94V-2 (self-extinguishing within 30 seconds)
- RoHS compliant



## PART NO. DESCRIPTION T70-0623 FUSION CABLE TIE HANDY PACK



STRAPS CABLE FIXING

Suitable for a variety of applications, such as cable binding or harnessing. Supplied in a pack of 100 with the exception of 583-0896 which is supplied in 50.

- Manufactured from UL approved virgin nylon 6/6
- General operating temperature: -40°C to 85°C
- Flammability rating: UL94V-2 (self-extinguishing within 30 seconds)
- UV resistant for outdoor use (black ties only)
- Black ties are halogen free
- RoHS compliant

## PART NO. DESCRIPTION \$83-2703 IC BLACK 100MM X 2.5MM (T18R) - PKT 100 \$83-0904 IA BLACK 270MM X 4.8MM(LK2A) - PKT 100

- S83-0904
   IA BLACK 270MM X 4.8MM(LK2A) PKT 100

   S83-0896
   I0A BLACK 540MM X 13.0MM (LK5B) PKT 50
- S00-3121 BLACK 540MM X 8MM PKT 100
- S83-2704
   IC NATURAL 100MM X 2.5MM (T18R) PKT 100
   S83-2929
   IA NATURAL 270MM X 4.8MM (LK2A) PKT 100
- STRAP CABLE FIXING 12A (REL180) Black, releasable cable tie for use in overhead cabling. Ideal for temporary fastening. Size: 180mm x 7.5mm.

Supplied in packs of 50.

PART NO. DESCRIPTION S83-0886 STRAP CABLE FIXING 12A (REL180)



## TIPTAGS AND PRINTER

The Tiptag HF cable markers have been designed to identify microduct and cable bundles.

Tiptag HF is halogen free and its material properties show low smoke propagation, density and toxicity. Tiptags are presented in a special perforated format which includes fastening slots for easy fitting with cable ties.

They are also suitable for retrofit purposes.

Print from the reel with HellermannTyton's premium range of thermal transfer printers and ribbons for optimum print quality and longevity.

#### Features and benefits:

- Ideal for marking larger wire and cable bundles
- Halogen free
- Low smoke propagation and toxicity
- Perforated format that includes fastening slots for cable ties
- Colour: Yellow
- Available in 3 Sizes.

## PART NO. DESCRIPTION

 C71-0425
 A) TIPTAG I IMM X 65MM HT REF TIPTAG I X65YE PKT 190

 C71-0423
 A) TIPTAG I IMM X 100MM HT REF TIPTAG I X100YE PKT 120

 C71-0424
 A) TIPTAG I SMM X 100MM HT REF TIPTAG I 5X100YE PKT 120

 C71-0420
 B) HELLERMANNTYTON TT431 THERMAL TRANSFER PRINTER

Δ

## BROTHER P-TOUCH E300VP HANDHELD PRINTER LABEL KIT

The P-Touch E300VP is the only portable approved and specified by Openreach and can be set up by the user to produce 18mm wide PIANOI flag labels

It's a durably engineered machine with a rechargeable battery and AC adaptor that makes printing labels from 3.5 to 18mm wide simple. And it's also compatible with high-grade and selflaminating tapes, as well as heat-shrink tubes.

#### Features

- Prints hard-wearing labels up to 18mm wide
- Up to 20mm per second print speed + 5 lines of print
- QWERTY style keyboard + 15 character, 2-line, backlit LCD screen
- Time and date printing function, 168 electrical and audio/visual specific symbols
- Convenient manual cutter with pause function
  Comes with carry case, wrist strap and
- rechargeable Li-ion battery pack

Supplied with Li-ion battery, 240v ac adaptor, user guide, 18mm black on yellow cassette, wrist strap in robust carry case

A 12v car charger (C92-5102) is available as an accessory and other size labels for different application as shown on our website millsltd.com.

Dimensions: 133 (W) x 220 (H) x 74 (D). Weight: 0.740 kg.

 C92-5102
 A) BROTHER P-TOUCH E300VP HANDHELD PRINTER LABEL KIT

 C92-4957
 B) BROTHER STANDARD TZE-641 LAMINATED TAPE 18MM YELLOW

 C92-5107
 C) 12V - 24V CHARGER SUITABLE FOR BROTHER P-TOUCH HANDHELD PRINTERS



Please see website for further details



brother

P-touch E300

GENERAL

7232557686

QWERTYUIOP

A 48 AAA-

A

PART NO. DESCRIPTION

100

LGO AAA



The TT431 thermal transfer printer is perfect for printing on HellermannTyton materials such as self-adhesive labels, shrinkable tubing and TipTag identification tags.

Thanks to its low weight and compact construction, the TT431 integrates seamlessly into any workstation.

It is easy to use due to its intuitive colour LCD touch display and clear status messages which can be shown in multiple languages.

The optional cutter and perforator make this printer ideal for a wide range of applications. 300 dpi resolution ensures that barcodes, warning symbols, logos and text are as sharp as they can be.

COMPANY:BT OPENREACH

PLANOI: 1234567891234 DATE: 18/10/2021

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VELLOW

From: 10/21 To: 04/21 Contractor: Mills Itd



### BRADY BMP61 LABEL PRINTERS AND ACCESSORIES

#### A) Brady BMP61 Label Printer QWERTY UK B) Brady BMP61 Label Printer QWERTY UK WiFi

The rugged, thermal transfer BMP61 Label Printer is compatible with 800 labels and ribbons. Each combination represents a durable identification solution designed to endure extreme contexts and to keep cables and components identified in the most demanding industries.

BMP61 can print sleeves, self-laminating labels, raised profile labels, tags and other identification solutions in a vast range of materials, sizes and colours up to 50.8 mm wide. Wifi-version is compatible with mobile apps: create or load label templates

#### C) Brady PTLFT-01-425 Polypropylene Flag Label 30 x 20mm White - Roll 250

Easy-to-apply non-tear flag label perfect for fibre optic cable tags. Allows the user to print a substantial amount of characters. Suitable for harsh environments. Permanent Adhesive.

## D) Brady PTL-8-439 Vinyl General Identification Label 12.7 x 15.24mm White - Roll

Flexible vinyl labels for general industrial identification that conform well to various smooth or rough surfaces. The labels are designed to have excellent resistance to oils, detergents, dirt grime and other solvents.

## E) Brady PTL-21-427 Self Lam Vinyl Wrap Around Label 25.4 x 63mm White - Roll of 100

Vinyl self-laminating white labels allow you to mark wires and cables after cabling. Markings are protected by a covering ideal for wet and oily environments.

#### F) Brady Ribbon Cartridge M61-R4310 for BMP61 & M611 Label Printers

Black printer ribbon cartridge suitable for use with the BMP61 label printer. Chemical, environmental and smear resistant.

#### G) Brady Ribbon Cartridge M61-R6610 for BMP61 & M611 Label Printers

Black printer ribbon cartridge suitable for use with the BMP61 label printer.

#### H) Brady Ribbon Cartridge M61-R6010 for BMP61

& M611 Label Printers

High heat and scratch and solvent resistant.

#### I) Brady BM7I-25x75-7643-YL Polyurethane Tie-on Cable Tag 25x75mm Yellow - Pk250

For data and telecommunications wire and cable. These B-7643 cable tags contain no added halogens and offer excellent fire safety characteristics combined with minimal smoke emission.

#### J) Brady BM71-15x75-7598-YL Polyester Tie-on Cable Tag 15x75mm Yellow - Pk250

For data and telecommunications wire and cable. Gloss finish.

#### K) Brady BM71-15x75-7643-YL Polyurethane Tie-on Cable Tag 15x75mm Yellow - Pk250

For data and telecommunications wire and cable. These B-7643 cable tags contain no added halogens and offer excellent fire safety characteristics combined with minimal smoke emission.

#### L) Brady BMP61-B7597-35X102-YL-BLNK Polyethylene Tie-on PIANOI Cable Tags 35x102mm Yellow- Roll of 250

Print professional quality, long lasting PIANOI labels using the Brady BMP61 portable label printer. Label content can be configured to specific user requirements. Create durable, long-lasting labels. Supplied in a preperforated strip. For use with the M61-6610 Ribbon Cartridge. Brady recommends the use of their WorkStation software or the Express Label app to configure these labels. The row of square boxes shown in the images can only be created using these, they cannot be created directly on the BMP61 printer.



Please see website for further details

Mills

PART NO.	DESCRIPTION
C28-0460	A) BRADY BMP61 LABEL PRINTER QWERTY UK
C28-0461	B) BRADY BMP61 LABEL PRINTER QWERTY UK WIFI
C28-0462	C) BRADY PTLFT-01-425 POLYPROPYLENE FLAG LABEL 30 X 20MM WHITE - ROLL 250
C28-0464	D) BRADY PTL-8-439 VINYL GENERAL IDENTIFICATION LABEL 12.7 X 15.24MM WHITE - ROLL
C28-0465	E) BRADY PTL-21-427 SELF LAM VINYL WRAP AROUND LABEL 25.4 X 63MM WHITE - ROLL OF 100
C28-0466	F) BRADY RIBBON CARTRIDGE M61-R4310 FOR BMP61 & M611 LABEL PRINTERS
C28-0469	G) BRADY RIBBON CARTRIDGE M61-R6610 FOR BMP61 & M611 LABEL PRINTERS
C28-0471	H) BRADY RIBBON CARTRIDGE M61-R6010 FOR BMP61 & M611 LABEL PRINTERS
C28-0467	I) BRADY BM71-25X75-7643-YL POLYURETHANE TIE-ON CABLE TAG 25X75MM YELLOW - PK250
C28-0468	j) BRADY BM71-15X75-7598-YL POLYESTER TIE-ON CABLE TAG 15X75MM YELLOW - PK250
C28-0470	K) BRADY BM71-15X75-7643-YL POLYURETHANE TIE-ON CABLE TAG 15X75MMYELLOW - PK250
C28-0481	L) BRADY BMP61-B7597-35X102-YL-BLNK POLYETHYLENE TIE-ON PIANOI CABLE TAGS 35X102MM YELLOW- ROLL OF 250



with fine nib thickness providing smudge proof and waterproof qualities on almost all surfaces. Formerly \$83-0960

C) WHITE PAINT MARKER 2.5MM TIP

Premium quality oil-based white paint marker pen can be used on almost any surface. Oil-Based pigment premium ink, non-toxic conforms to ASTM D4236 EN71-3, lightfast and water resistant.

#### PART NO. DESCRIPTION

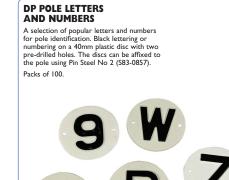
 S83-0948
 A) PEN MARKER NO.I

 C71-9824
 B) PEN MARKER GOLD NO.2

 S83-0381
 C) WHITE PAINT MARKER 2.5MM TIP







DESCRIPTION PART NO. RFF S83-2810 000463 LETTER POLE PLASTIC A (PKT 50) S83-2811 000464 LETTER POLE PLASTIC B (PKT 50) S83-2812 000465 LETTER POLE PLASTIC C (PKT 50) \$83-2813 000466 LETTER POLE PLASTIC D (PKT 50) \$83-2814 000467 LETTER POLE PLASTIC E (PKT 50) S83-2815 000468 LETTER POLE PLASTIC J (PKT 50) S83-2816 000469 LETTER POLE PLASTIC L (PKT 50) \$83-2817 000470 LETTER POLE PLASTIC M (PKT 50) \$83-1810 025777 LETTER POLE PLASTIC N (PKT 50) \$83-1809 000479 LETTER POLE PLASTIC P (PKT 50) S83-2818 000460 LETTER POLE PLASTIC S (PKT 50) 000462 S83-2819 LETTER POLE PLASTIC T (PKT 50) S83-1811 025778 LETTER POLE PLASTIC W (PKT 50) S83-2999 000470 NUMBER POLE PLASTIC 0 (PKT 50) S83-2824 000471 NUMBER POLE PLASTIC I (PKT 50) S83-2825 000472 NUMBER POLE PLASTIC 2 (PKT 50) S83-2826 000473 NUMBER POLE PLASTIC 3 (PKT 50) \$83-2827 000474 NUMBER POLE PLASTIC 4 (PKT 50) \$83-2828 000475 NUMBER POLE PLASTIC 5 (PKT 50)

 S83-2829
 000476
 NUMBER POLE PLASTIC 6 (PKT 50)

 S83-2830
 000477
 NUMBER POLE PLASTIC 7 (PKT 50)

 S83-2831
 000478
 NUMBER POLE PLASTIC 8 (PKT 50)

 S83-2832
 000479
 NUMBER POLE PLASTIC 9 (PKT 50)

## H (HAZARD PLATE) ORANGE LABEL PKT 10

The pole is within I metre of a defined hazard (spiked railings etc)-MEWP access only, but full range of engineering activities are permitted.



PART NO. DESCRIPTION S83-0379 H (HAZARD PLATE) ORANGE LABEL PKT 10





PART NO. DESCRIPTION

\$83-0376 D (DEFECTIVE) RED PLATE LABEL PKT 10

#### SD (SHALLOW DEPTH) RED PLATE LABEL PKT 10

The pole is planted at a shallow depth, these are not currently prioritised for renewal. They must not be climbed, but can be worked on from a MEWP. Work permitted includes renewal of existing drop wires and attachment of new drop wires, but not aerial cables.



#### PART NO. DESCRIPTION

S83-0377 SD (SHALLOW DEPTH) RED PLATE LABEL PKT 10

## C (SHALLOW CLIMBABLE) GREEN PLATE LABEL PKT 10

The pole is marginally shallow, but is OK to climb as long as additional rules are followed.



PART NO. DESCRIPTION S83-0378 C (SHALLOW CLIMBABLE) GREEN PLATE LABEL PKT 10

## Z (SAFE CLIMB ZONE POLE) GREEN PLATE LABEL PKT 10

The pole is within I metre of a defined hazard, but has been assessed as having a safe climb zone, which allows those who have obtained accreditations to access.



PART NO. DESCRIPTION S83-0380 Z (SAFE CLIMB ZONE POLE) GREEN PLATE LABEL PKT 10

MI

## **PRYSMIAN CASALINK CBTs**

The Casalink Block Terminal (CBT) is a pre-connectorised closure designed for use in the external environment with an IP rating of IP68. The closure comes in three sizes, 4, 8 and 12 Drop and can be supplied with splitters installed including unbalanced splitters to allow connecting multiple boxes to one another.

The closure is supplied sealed so the internal workings cannot be tampered with. Additionally a separate mounted bracket is supplied

to ease the installation when working at height. CBTs with splitters pre-installed are supplied without feeder cable.



## Features and Benefits:

- Compact design.
- Minimal visual impact.
- Quick and easy access.
- Easy to install

#### Testing:

- Dry Heat: IEC60068-2-2Change of Temperature:
- IEC60068-2-14
- Damp Heat: IEC60068-2-78Head Of Water:
- IEC60068-2-17 (Test QF)
- Vibration: IEC60068-2-6
- Shock: IEC60068-2-27

## Technical Data:

- Required space envelope (mm): 4f (h) 176 x (w) 134 x (d) 92 8f (h) 176 x (w) 134 x (d) 129 12f (h) 176 x (w) 178 x (d) 129
- Operating temperature: -20 degrees C to + 60 degrees C (5 to 95% RH)
- Material: 10% Glass Filled Polypropylene
- Colour: Black



## Prysmian Group



PART NO.	DESCRIPTION	PORTS
XCPSC03917	A) Prysmian Casalink CBT with 4 SC/APC Outputs 1:4 Balanced Splitter & 1x SC/APC Input	4
XCPSC03741	A) Prysmian Casalink CBT with 4 SC/APC Outputs & 100m Pre-installed Cable	4
XCPSC03740	B) Prysmian Casalink CBT with 8 SC/APC Outputs & 100m Pre-installed Cable	8
XCPSC03888	B) Prysmian Casalink CBT with 8 SC/APC Outputs 1:8 Balanced Splitter & 1x SC/APC Input	8
XCPSC03926	C) Prysmian Casalink CBT with 12 SC/APC Outputs & 100m Pre-installed Cable	12
XJTSC03350	D) Prysmian CBT Half Size MOBRA Kit	
XJTSC02405	E) Prysmian UMJ CMJ MMJ Casalink Mobra Mounting Bracket	



#### PRYSMIAN CASALINK DROP CABLES

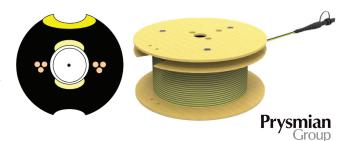
Prysmian CasaLink Block Terminal (CBT) Drop Cables are of a single fibre design terminated at one end with an SC/APC connector.

This connector is housed in a shroud and has a pulling eye to support installation.

The terminated end is secured into the Casalink BlockTerminal (CBT), and the unterminated end is spliced at the customer premises.

In addition to pre-terminated CBT drop cables, a termination kit is also available that provides all the components for local termination.

#### Visit millsitd.com for more info



PART NO.	DESCRIPTION
XPCSC01138	PRYSMIAN CASALINK BLOCK TERMINAL IF DROP CABLE 20M PIA APPROVED
XPCSC01141	PRYSMIAN CASALINK BLOCK TERMINAL IF DROP CABLE 35M PIA APPROVED
XPCSC01214	PRYSMIAN CASALINK BLOCK TERMINAL IF DROP CABLE 65M PIA APPROVED
XPCSC01215	PRYSMIAN CASALINK BLOCK TERMINAL IF DROP CABLE 105M PIA APPROVED
XPCSC01159	PRYSMIAN CASALINK BLOCK TERMINAL IF DROP CABLE 160M PIA APPROVED
XPCSC01680	PRYSMIAN CASALINK BLOCK TERMINAL IF DROP CABLE 350M PIA APPROVED

## PRYSMIAN CASALINK CUSTOMER TERMINATION PRODUCTS

#### A) PRYSMIAN CASALINK CBT CUSTOMER DROP CABLE TERMINATION KIT 3MM

For the termination of alternative customer drop cable enabling the fibre termination to interface with Prysmian Casalink CBTs.

#### B) PRYSMIAN CBT POLE STRAP KIT

The Prysmian CBT Pole Strap kit is used to fix a CBT to a pole. The Clamps are made from stainless steel for durability and strength.



#### D) PRYSMIAN CASALINK CTB EXTERNAL CUSTOMER TERMINATION BOX MKI

The CTB External Customer Termination Box is a wall mounted product that can be used for splicing the CBT drop cable to the Internal External cable that enters the house.

#### C) PRYSMIAN CASALINK CBT CONNECTOR TOOL PK5 The Prysmian CBT Connector tool is used to

The Prysmian CBT Connector tool is used to loosen and tighten the shroud used on customer drops or the input of splitter versions of the CBT. Supplied in a pack of 5.

## PART NO. DESCRIPTION

XKTSC01443 A) PRYSMIAN CASALINK CBT CUSTOMER DROP CABLE TERMINATION KIT 3MM

- XKTSC01442 A) PRYSMIAN CASALINK CBT CUSTOMER DROP CABLE TERMINATION KIT 6MM
- XCPSC03749 B) PRYSMIAN CBT POLE STRAP KIT
- XKTSC01437 C) PRYSMIAN CASALINK CBT CONNECTOR TOOL PK5

XCPSC03744 D) PRYSMIAN CASALINK CBT EXTERNAL CUSTOMER TERMINATION BOX MKI

## PRYSMIAN 36F, 48F AND 96F ULTRA LIGHT-WEIGHT ULW OVERHEAD AND UNDERGROUND CABLE

These multi-unit optical drop cables are designed for aerial and/or duct applications and are suitable for use under 11kV power cables.

#### A) PRYSMIAN 36F ULTRA-LIGHT WEIGHT (ULW) CABLE (2KM REEL)

Layout: 3 x 12 singlemode fibres. Cable Diameter: 7.0mm

#### B) PRYSMIAN 48F ULTRA-LIGHT WEIGHT (ULW) CABLE (2KM REEL)

Layout:  $4 \times 12$  singlemode fibres. Cable Diameter: 7.1mm

The fibre is supplied in a 2km length on plywood reels, longer lengths are available on request.

#### C) PRYSMIAN 96F OPTICAL AERIAL DROP CABLE (ULW) - 2KM DRUM

Layout: 4 units x 12 fibres. Cable diameter: 7.1mm

#### PART NO. DESCRIPTION

60082615 A) 36F ULTRA-LIGHT WEIGHT (ULW) (2KM REEL)

60050990 B) 48F ULTRA-LIGHT WEIGHT (ULW) (2KM REEL)

60098854 C) PRYSMIAN 96F OPTICAL AERIAL DROP CABLE (ULW) - 2KM DRUM



/smian

## External Overhead



Configurable, Scalable, Simple

Whatever the application, wherever you need to mount them, NOVUX hardened terminals are ready. The built-in mounting tabs and mounting strap feature easy, direct mounting onto a strand, flat surface, pole, pedestal, or within a hand hole. Alternatively, to ease installation and maintenance, CommScope's universal mounting bracket can be used in all mounting applications. With one common platform, installation across the series is easy and efficient and is backed by consistent documentation and training.

### NOVUX hardened terminals

Up to 40% smaller \*Compared to existing MST terminals with universal mounting brackets

#### Widest variety of technologies available from a single platform

 Single- and multi-fibre, splitters, optical tap, fibre indexing, and on-demand hybrid configurations

## **NOVUX** single-fibre terminals

- · Ideal for single-family unit communities
- Up to 12 ports
- Point-to-point (P2P) or splitter configurations

## NOVUX multi-fibre terminals

- · Ideal for multi-fibre applications
- Up to 12 ports
- 2 to 12 fibres per port

## NOVUX optical tap terminals

- Reduce deployment costs in rural or low-density applications
- Plug-and-play 2, 4, 8 drops

## NOVUX fibre indexing terminals

- Leverage innovative fibre indexing for new builds
- 12 and 24 fibres

#### Application flexibility for new builds and upgrades

- Extended choice of cable types and sizes; stubless configurations
- Minimised footprint for optimal port count and terminal size
- Black and gray colors for ease of concealment

#### Ready for the field workforce of the future

- Unique network identification with ID plate and QR code
- Uniform installation practices and documentation speeds cross-training
- Digital access to all product information powered by CommScope cTrak® app

#### Agile global supply chain backed by common platform design and processes

- Multiple global locations with local manufacturing advantage
- Industry-renowned local field expertise and support





COMMSCOPE"

Distributor





Each terminal in these applications is from the NOVUX HT Series. They're designed to adapt to your application—sharing connection capabilities, a unique product information system, a mounting platform, and customer configurability. While NOVUX hardened terminals are helping build your network, they're building your long-term profitability, because one terminal works for all your applications in all your deployments.





## External Overhead

NOVUX hardened terminals					
NOVUX HT	TECHNOLOGIES AVAILABLE	SMALL	MEDIUM	LARGE	
	Single-fiber: P2P/no splitters	2 ports	6 ports	12 ports	
		4 ports	8 ports		
	Single-fiber: P2P w/splitters	2 ports, 1x1:2	8 ports, 2x1:4	12 ports, 3x1:4	
HST Series	Single-fiber. FZF W/spirtters	4 ports, 1x1:4	8 ports, 1x1:8	12 ports, 5x1.4	
			7 ports, 1x1:4 splitter, 3 P2P	12 ports, 1x1:8 splitter, 4 P2P	
Hybrid	Hybrid for multi-use	4 ports, 1x1:2 splitter, 2 P2P	8 ports, 1x1:4 splitter, 4 P2P	11 ports, 2x1:4 splitter, 2 P2P, 1 HMFOC 4f	
	Multi-fiber	Up to 24f	Up to 24f	Up to 24f	
HMT Series		2 ports, each 2, 4, 6, 8 or 12f	6 ports, each 2, 3 or 4f		
HIVIT Series		3 ports, each 2, 4, 6, or 8f	8 ports 2 or 3f	12 ports, each 2f	
		4 ports, each 2, 4, or 6f			
HTT Series	Optical taps	2 drops	4 drops	8 drops	
		12 fiber index only, 1f	12 fiber 1:4	12 fiber 1:8	
	Fiber indexing	12 fiber index only, 2f	12f multi-use 2f + 1:4	12 fiber multi-use, 3f +1:4	
		12 fiber index only, 3f	24f multi-use 2f	12 fiber multi-use, 4f +1:4	
HXT Series		12 fiber index only, 4f	24f multi-use 3f	12 fiber multi-use, 2f +1:8	
		12 fiber multi-use, 2f	24f multi-use 4f		
		12 fiber branching, 2 to 6f per port			

## For further information and to configure your Novux hardened terminal solution, please contact our sales department.

Key information to assist with configuration

COMMSCOPE"

Distributor

- Indexing Requirement
- Number of Ports
- Housing Colour -Black, Grey
- Cable Type

Tap Configuration

- Splitter Configuration
- Underground or Overhead Mounting Accessory
- Drop Fibre Assembly and Length





## Ring sales for ordering guide or visit: millsltd.com



### MILLS UNIVERSAL CBT BACK TO BACK POLE BRACKET

A galvanised pole bracket to suit most brands of CBTs (Connector Block Terminals) including Prysmian Casalink, Corning Optisheath, Commscope Novux HT, Hexatronic ASN and Hellerman Tyton AFN,

This two-sided bracket is manufactured from 1.2mm galvanised steel, the bracket is approved for PIA application and fixes to the top of the pole using the panhead screws provided.

The bracket has 4 x 3mm, 8 x 4mm and

4 x 6mm nutserts to accept different manufacturers' CBT's

The 'back to back bracket is supplied with 4 x M3 x 25 Pozi Panhead Screws, 4 x M4 x 30 Pozi Panhead Screws and

4 x M6 x 30 Pozi Panhead Screws Each face measures 380 x 140 mm and

the bracket 'stands off' 165mm, from the pole. The bracket also features a protective strip along the top edge.

Formerly S00-0978. Ref: 095656



PART NO. DESCRIPTION S00-1751 MILLS UNIVERSAL CBT BACK TO BACK POLE BRACKET



on to the double or triple CBT brackets, for provision of legacy copper components and relieving congestion at the top of poles.

The block is predrilled, supplied with  $2 \times M6 \times 30$ mm panhead screws and benefits from a 25 year warranty. (Bracket not included).





S83-1852 MILLS UNIVERSAL FACEPLATE FOR CBT BACK-TO-BACK BRACKETS

### MILLS UNIVERSAL CBT 3 WAY BACK-TO-BACK HINGED STAND OFF POLE BRACKET

A galvanised pole bracket to suit most brands of CBTs (Connector Block Terminals) including Prysmian Casalink, Corning Optisheath, Commscope Novux HT, Hexatronic ASN and Hellerman Tyton AFN, This 3 sided bracket is manufactured from 1.2mm galvanised steel, the bracket is approved for PIA application and fixes to the top of the pole using the panhead screws provided. The bracket has  $4 \times 3$  mm,  $8 \times 4$  mm and  $4 \times 6$  mm nutserts to accept different manufacturers' CBT's

The triple back to back bracket is supplied with 4 x M3 x 25 Pozi Panhead Screws, 4 x M4 x 30 Pozi Panhead Screws and 4 x M6 x 30 Pozi Panhead Screws

Each face measures  $380 \times 140$  mm and the bracket 'stands off' 165mm.





#### PART NO. DESCRIPTION

S00-1741 MILLS UNIVERSAL CBT 3 WAY BACK-TO-BACK HINGED STAND OFF POLE BRACKET

## MILLS UNIVERSAL FACEPLATE FOR CBT BACK-TO-BACK BRACKETS

An adaptor plate which allows all Prysmian Casalink CBT's to be fitted to the Mills CBT Back-to-Back, double and triple brackets. Manufactured from galvanised 1.5mm plate and supplied with  $4 \times M4 \times 25mm$  Panhead Screws and washers.



S00-5092 MILLS BACK-TO-BACK CBT BRACKET CASALINK ADAPTOR PLATE

## THE MILLS POLEMATE SYSTEM

The Polemate range of products and accessories has been specifically designed in conjunction with telecom engineers to assist field operational staff with the installation of telecommunication equipment. The Polemate system comprises a pole-mounting base unit to which splicing trays and cable reel stands can quickly and easily be attached providing a stable platform whilst on site. In addition many of the components are interchangeable with the Mills Pitmate System, shown on our website: www.millsltd.com. The Mills Polemate system can be supplied as modular components or as a complete Polemate kit.

MILLS POLEMATE KIT Kit comprises; S83-7622 Base Unit S83-7623 Rubber Wedge Spacers Pk3 S83-7629 Splicer's Work Tray S83-7624 CBT Arm











Polemate Base Unit

...with General Tray

...with Splicer's Tray

...with CBT Reel Arm



## **MILLS POLEMATE BASE UNIT**

The foundation of the Polemate system is this Polemate Base Unit which comprises a 50mm wide x 1200mm long webbing ratchet strap and a pole back plate, which can be simply ratcheted to the desired height on the pole.



## MILLS POLEMATE BASE UNIT WITH SPLICER'S WORKTRAY

This kit contains a 50mm wide x 1500mm long webbing strap with back plate and splice table with slicer tripod fixing 508mm x 408mm. Strap Dimensions 50mm width x 1500mm in length. Splice Tray 508mm width x 408mm depth x 2mm thickness. Total weight 5.2Kg.



## **SPLICER'S WORK TRAY**

A purpose-made splicer's tray that simply slots into the \$83-7622 Polemate Base Unit providing a firm work support for both joint, splicer, cleaver and associated tools. Dimensions: Width 508mm x Depth 408mm x Thickness 2mm.



## **CBT ARM**

A specialist 500mm long bracket for use in the installation and controlled de-reeling of CBT Cable Reel Assemblies up to a diameter of 830mm. The CBT Arm System allows the reel to be unreeled in a controlled manor due to the interference fit of the spindle flanges.



## **GENERAL WORKING TRAY**

Easily slipped into the S83-7622 Mills Polemate Base Unit Bracket providing a firm work support for general service and maintenance applications. Dimensions: 508mm x 258mm.



## RUBBER WEDGE SPACER PK3

Pack of 3 wedge-shaped rubber spacers which can be used to prevent compression marks and avoid damage to vertically routed copper cables. Dimensions: Length 100mm x Width 50mm wide x Thickness 15/30mm.

PART NO.	DESCRIPTION
S83-9327	A) MILLS POLEMATE KIT
S83-7622	B) MILLS POLEMATE BASE UNIT
S83-6958	C) MILLS POLEMATE BASE UNIT WITH SPLICER'S WORKTRAY
S83-7629	D) MILLS POLEMATE / PITMATE SPLICER'S WORK TRAY
S83-7624	E) MILLS POLEMATE / PITMATE CBT ARM
S83-7431	F) MILLS POLEMATE / PITMATE GENERAL WORKING TRAY
S83-7623	G) MILLS POLEMATE RUBBER WEDGE SPACER PK3



D

## A) ANCHOR SCREW STAY NO I

Used as a ground anchorage when staying poles. Installed by a pole erection unit. Supercedes Rod Stay 2.

#### B) ANCHOR STAY NO.2

Anchor system for securing a variety of communication equipment including telecom poles, mobile satellites, antennas and masts. Its simplicity and speed of installation make it perfect in a temporary or permanent capacity.

## C) INSULATOR STAY 2

Made of Vitreous Porcelain and used for insulating pole stays in the proximity of power lines. Colour: Brown. Size: 114mm long x 75mm wide. Ref: 012501.

## D) ANCHOR STAY NO.2 STRESSING JACK

Manual loadlock stressing jack used in the installation of Anchor Stay No.2. The SJI stressing Jack is used to position, tension and stress the anchor stay, once installed using the Installation Drive Rod Set.

## E) ANCHOR STAY NO.2 INSTALLATION DRIVE ROD SET

Rod set for the installation of Anchor Stay No.2.

- Comprising:
- · Drive End Fits into the Anchor head
- Extension rod
- Coupler

• 32 x 160 shank - To fit into a heavy breaker Maximum installed depth: 2000mm. Shank Size: 32 x 160mm Hexagonal.

## F) ANCHOR DRIVE ROD REMOVERS

Rod Removers are used to assist with the removal of the \$83-1897 Drive Rods after installation of an anchor. The unique shape of the set allows for easy removal in difficult ground conditions where removal by hand may be impossible. These tools can be used by 1 person or 2 people depending on the force required and are a lightweight removal solution. Supplied in pairs.

#### G) FLEXIBLE STAY WIRE 6.3MM X 100M

Flexible stay wire made of hot dip galvanised steel engineered with 7 strands with a diameter of 2.1mm each.

## **H) TENSIONER WIRE STAY**

A lever-operated tensioning tool used for tensioning stay wires.

## I) VERTICAL STAY BRACKET

The Vertical Stay Bracket allows poles to be stayed with a much reduced B:H ratio which in many cases will enable jobs to be completed without the need to employ either stout Poles, or non standard solutions.

Site circumstances sometimes prevent the anchor being installed at the min 1:2 position, but using a vertical stay bracket, an anchor can be provided as little as 600mm from the pole.

## J) STAY GUARD WITHOUT PIGTAIL 1.82M

Designed to identify stay wires and cable installations where anchoring devices are exposed to pedestrian and/or vehicular traffic.

Length 1.82m.

## PART NO. DESCRIPTION

	S83-2718	A) ANCHOR SCREW STAY NO I
	S83-1896	B) ANCHOR STAY NO.2
	S83-2997	C) INSULATOR STAY 2
	S83-1899	D) ANCHOR STAY NO.2 STRESSING JACK SJ
	S83-1897	E) ANCHOR STAY NO.2
		INSTALLATION DRIVE ROD SET
	S83-3814	F) ANCHOR DRIVE ROD REMOVERS
	R02-1735	G) FLEXIBLE STAY WIRE 6.3MM X 100M
	S83-0805	H) TENSIONER WIRE STAY
	S83-1860	I) VERTICAL STAY BRACKET
l	S83-1875	J) STAY GUARD WITHOUT PIGTAIL 1.82M





### LYTE 5B LE5BEQ 3 SECTION ALUMINIUM **TELECOMS EXTENSION LADDER 5.96 METRES**

BT 5B aluminium 2.5m triple extension ladder featuring comfortable 1.6m wall D rung profie, pole rung support to allow ladder to swivel on its own fixing, double safety catch, fitted with nylon rollers for easy operation and minimum effort. Supplied with lashing rope and ferrule fittings. Closed height 2.5m - extended height 5.96m.

- Certified to BS2037 Class I
- Unique aluminium 'butterfly' rung
- Double safety catch and a lashing rope to ensure safety when in use
- Nylon rollers fitted to the bases and middle sections
- Weight: 18.5kg



#### PART NO. DESCRIPTION

LYTE 5B LESBEQ 3 SECTION ALUMINIUM S00-1481 TELECOMS EXTENSION LADDER 5.96 METRES

#### LYTE 7A L7EQ 3 SECTION **GLASSFIBRE TELECOMS EXTENSION LADDER 6.0 METRES**

BT 7A / 7B Extreme heavy duty use GRP triple extension ladder favoured by major utilities companies due to its durability, functionality and reputation. Ideal for telecoms users and any work needed around electrical hazards, power lines, lamp posts and telegraph poles.

- Open Height: 6.00 metres
- Closed: 2.50 metres
- Number of sections: 3
- Rungs per section: 8
- Weight: 23.0 kg









PART NO. DESCRIPTION LYTE 7A L7EQ 3 SECTION GLASSFIBRE TELECOMS EXTENSION LADDER 6.0 METRES S00-9028



## **MILLS OVERHEAD TOOLS**

## Mills has developed a comprehensive range of specialist overhead tooling currently in extensive use across the Openreach Network.

All products have been specially designed and approved for such usage. Only a small selection is presented here. To see our full range please visit our website millsltd.com or call our highly trained sales staff on 0208 833 2626

#### A) S83-3949 - Mills Belt Pole IB

Used with Dispenser Dropwire I to tie off sash line at the base of a pole.

A Im x 50mm webbing strap with adjustable securing buckle, the strap adjoins a plate, a sashline cleat, toggle and arrow showing direction of use. Each strap has an individual identity number.

#### B) S83-2653 - Mills Pole Horse

The Mills Pole Horse is an essential aid for all pole installers, allowing poles of all dimensions to be supported while pole furniture is added or removed prior or post installation. The pole support benefits from flat feet plates and safety support chains and can quickly be folded flat for ease of storage. Ref: 126681.

В

#### C) S83-0768 - Mills Twister Pole

Plate type pole twister, used to align poles after installation. Comprising a curved plate 300mm x 175mm with 2 barbs which presses into the wood, This plate is attached via a 6mm wire rope to a levering eye which is wrapped around the pole. A crow bar (Mills S83:3679 or S00-1226 not supplied), is then passed though the levering eye to allow the pole to be twisted into the desired position.

E



#### D) S83-0885 - Pole Sock

Safety sock used when transporting poles. Manufacturered from heavy duty reinforced PVC canvas material with alternating red and white 85mm wide warning stripes.

The bag is 110cm long x 60cm wide and will accept poles up to a diameter of 35cm with a webbed seamed top and 5mm draw strip and button toggle to secure it around the pole during transportation.

#### E) S83-2677 - Pole Jack

F

A hand operated jack with a rack & panel mechanism. Closed height 3ft operating range 22". For shifting, straightening or recovering poles. Capacity 5000kg

#### F) S83-8426 - Dispenser Dropwire 2B A specialist cable stand and dropwire dispenser, manufactured from tubular steel construction with an adjustable tensioning device to prevent overrun of the drum. The drum is held by means of a spring loaded spindle. The unit further benefits from telescopic handle giving a collapsed height 600mm. Ref. 127548 / 126468.

G

G) S83-2024 - Mills Prop Raising Telescopic 6.2m The Prop Raising Telescopic is an insulated telescopic od which can extend to 6.2 metres and is used as a temporary support for aerial drop cables that require maintenance and have drooped below 5.2 metres. Formery K93-3546.

## PART NO. DESCRIPTION S83-3949 A) MILLS BELT POLE IB

S83-2653	B) MILLS POLE HORSE
S83-0768	C) MILLS TWISTER POLE
S83-0885	D) POLE SOCK
S83-2677	E) POLE JACK
S00-8426	F) DISPENSER DROPWIRE 2B
S83-3546	G) MILLS PROP RAISING TELESCOPIC 6.2M





PART NO.	DESCRIPTION
S83-0782	H) DISPENSER SASH LINE
S83-2686	I) PULLEY DROPWIRE 6
S83-0925	J) TENSIONER 2B
S83-0936	K) RIGGING WEIGHT 1A
S83-0781	L) RIGGING HEAD IA
S83-0879	M) SLING WIRE ROPE 1A
S83-0723	N) ROD TELESCOPIC 7M

#### N) S83-0723 - Rod Telescopic 7m

A 7 metre telescopic fibre glass rod to enable installers and other personnel involved with overhead work to gauge the clearance height of dropwire at road crossings.

BT regulations state the minimum installation height of a dropwire must be at least 5.5 metres and further, that poles must not be accessed by ladder should a connecting dropwire be found to be below a height of 5.2 metres.

Storage Length: 116cm. Weight: 700g. Ref: 008874







## HARNESSES

Falls from height are one of the biggest causes of workplace fatalities and major injuries. Common causes are falls from ladders and through fragile roofs. The purpose of the Working at Heights Regulations is to prevent death and injury from such a fall. Mills offers an extensive range of

#### A) Complete Belt Safety Kit

The Ridgegear specialist harness kit is designed for the telephone utilities, and comprises:

- Fall Arrest Lanyard (shown as **B**)
- Safety Harness (shown as **C**)
- Work Positioning Belt (shown as D)

## Kit components are also available separately:

#### B) Fall Arrest Lanyard

Fall arrest lanyard comprising 50mm web shock absorber and 1.7m of 12m integral kernmantel rope lanyard. Fully tested to BSEN 355.

#### C) Safety Harness

Multi Purpose Harness for most purposes. Fully tested to BSEN 358 and 361.

#### **D) Work Positioning Belt**

Restrain Belt for fixing work position at height. Fully tested to BSEN 3358.

#### E) Tetra Leaning Ladder & Pole Kit

Complete Leaning Ladder & Pole Kit as used by Openreach Engineers.



harnesses, lanyards, tripods and associated equipment for working at height and also in confined spaces.

For further information and to see the complete range please visit our website millsltd.com or call our highly trained sales staff on 0208 833 2626

Items **B,C** and **D** are available individually or as complete kit **A** 

RidgeGear

## SPECIALIST TRAINING COURSES, INCLUDING:

- Harness Training & Work at Height Awareness (Max 15 delegates)
- MEWP Harness Use & Inspection (Max 15 delegates)
- Working at Height Practical (Max 6 delegates)
- Working at height Fall Arrest (Max 6 delegates)
- PPE Inspector (Max 15 delegates)

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
S83-0887	A) BELT SAFETY I I A COMPLETE KIT (SMALL)	S83-3185	C) SAFETY HARNESS (SMALL)
S83-0888	A) BELT SAFETY I I A COMPLETE KIT (MEDIUM)	S83-4034	C) SAFETY HARNESS (MEDIUM)
S83-0889	A) BELT SAFETY I A COMPLETE KIT (LARGE)	S83-4035	C) SAFETY HARNESS (LARGE)
S83-0890	A) BELT SAFETY I A COMPLETE KIT (EXTRA LARGE)	S83-4036	C) SAFETY HARNESS (EXTRA LARGE)
S50-0657	B) FALL ARREST LANYARD	S50-0656	D) WORK POSITIONING BELT
	1	S00-0984	E) TETRA LEANING LADDER & POLE KIT



# External Underground

## **External Underground**





email: sales@millsltd.com purchase online: www.millsltd.com

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#### A) MOBRA JUF/2 FOR SMALL BOXES WITH WIDTHS FROM 220MM TO 300MM

No-Drill MOBRA chamber mounting bracket for use with \$83-0528 MOBRA Chamber Bracket Pivot Arm Medium.

S83-0529 Ref: 088199.

## B) MOBRA JUF/4-6 FOR MEDIUM BOXES WITH WIDTHS FROM 410MM TO 600MM

No-Drill MOBRA chamber mounting bracket for use with S83-0526 MOBRA Chamber Bracket Pivot Arm Long.

S83-0525 Ref: 066823.

## C) MOBRA JUF/10 FOR LARGE BOXES WITH WIDTHS FROM 660MM TO 850MM

No-Drill MOBRA chamber mounting bracket for use with \$83-0526 MOBRA Chamber Bracket Pivot Arm Long.

S83-0524 Ref: 066822.



#### PART NO. DESCRIPTION

 S83-0529
 A) MOBRA JUF/2 FOR SMALL BOXES

 S83-0525
 B) MOBRA JUF/4-6 FOR MEDIUM BOXES

 S83-0524
 C) MOBRA JUF/10 FOR LARGE BOXES

## **MOBRA ARMS AND ACCESSORIES**

### A) MOBRA Arm Short

Standing Height 450mm, Closed Length 630mm. MOBRA Chamber Bracket Pivot Arm Medium for use with S83-0529 MOBRA Small Chamber Bracket JUF/2. Ref: 066827.

## B) MOBRA Arm Long

Standing Height 650mm, Closed Length 820mm. MOBRA Chamber Bracket Pivot Arm Long for use with 83-0525 MOBRA JUF/46 For Medium Boxes with widths from 410mm to 600mm and 583-0524 MOBRA JUF/10 For Large Boxes with widths from 660mm to 850mm, Ref. 066826.

#### C) Replacement Square End Cap

For S83-0526 and S83-0528 standard MOBRA arms. Supplied individually.

#### Size: 41 x 41mm.

#### D) MOBRA Pair of Mounting Brackets for Plastic Chambers

MOBRA no drill chamber mounting brackets for use with joints and termination boxes within cable chambers. Ref: 668256.

#### E) No Step Label for Mobra Arms Pk10

A highly visible self-adhesive PSP label designed to be affixed to short and long mobra arms S83-0526 and S83-0528 and to identify the ISP's equipment as well as alerting engineers that the arm is a "no step" area. Label size 250 x 30mm.

Supplied in packs of 10.

A minimum order is required, please contact our sales department for further information.





## A) CABLE MANAGEMENT CABLE SUPPORT 838MM

Cable management bar designed to assist with the management and tidying of cable running through pits and chambers. Length 838mm.

#### B) CABLE MANAGEMENT CABLE SUPPORT 1100MM

Cable management bar designed to assist with the management and tidying of cable running through pits and chambers. Length 1100mm.

## C) CABLE MANAGEMENT CABLE SUPPORT 1980MM

Cable management bar designed to assist with the management and tidying of cable running through pits and chambers. Length 1980mm.

## **IOINT SUPPORT KIT IA**

2 x 2.42m lengths of 33.55mm subduct to be used in access chambers to suspend closures and other equipment within the chamber. Ref: 017807.

- Product Diameter: 33.55mm
- Product Weight: I.4g/m
- Minimum Bend Radius: LLD
- Maximum Tensile Load: 2250N
- Metal Free: Yes

- Product Specification: LN166



PART NO. DESCRIPTION OINT SUPPORT KIT IA PKT 2 S00-3512



## PART NO. DESCRIPTION

S83-1488	A) CABLE MANAGEMENT BAR. LENGTH 838MM
S83-1489	B) CABLE MANAGEMENT BAR. LENGTH 1000MM
S83-1490	C) CABLE MANAGEMENT BAR. LENGTH 1980MM

#### **MILLS CBT** BACK-TO-BACK **MOBRA BRACKET**

Mills CBT back-to-back Mobra Bracket is similar to the existing CBT Pole Bracket, but designed to be bolted to a Mobra arm (S83-0526 or S83-0528).

Suitable for 4, 8 and 12 Way Corning and Commscope CBTs (Connector Block Terminals).

Manufactured from 1.2mm galvanised steel, the bracket is approved for PIA application and fixes to a Mobra Arm.

The bracket has 4 x 3mm, 8 x 4mm and 4 x 6mm nutserts to accept different manufacturers' ĊBT's.

The back-to-back bracket is supplied with 4 x M3 x 25 Pozi Panhead Screws, 8 x M4 x 30 Pozi Panhead Screws and 4 x M6 x 30 Pozi Panhead Screws

Each face measures 380 x 140 mm and the bracket 'stands off' 165mm.



DESCRIPTION PART NO MILLS CBT BACK-TO-BACK MOBRA BRACKET S00-3511

Mills



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С

A CRH COMPANY

## STAKKABOX™ MODULA

STAKKAbox<sup>™</sup> Modula are recycled polypropylene modular and structural preformed access chambers suitable for use in carriageway and footway environments rated to D400 under EN124. A thin wall design with vertical and horizontal ribs, results in a product that is strong vertically and on the side wall. Complete installations typically take up to one hour.

#### Available in two sizes:

• 300  $\times$  300  $\times$  600mm internal dimensions.

600 x 450 x 600mm internal dimensions (FW2 / EN2 Footway 2).
 Frame & Concrete Covers B125 Loading Class are available including options for locking.

## PART NO. DESCRIPTION

S83-4484	A) STAKKABOX MODULA CHAMBER 300 X 300MM CLEAR OPENING 600MM DEEP
S83-4485	B) FRAME & CONCRETE COVER 300 X 300MM TO SUIT (S83-4484)
S83-4502	C) STAKKABOX MODULA CHAMBER 600 X 450MM CLEAR OPENING 600MM DEEP
S83-4503	D) FRAME & CONCRETE COVER 300 X 300MM TO SUIT (S83-4502)

## A-B) FTTH FOOTPATH DEMARCATION / TOBY BOXES

Located at the boundary to the customer during FTTx installations, the Toby Box is used as a demarcation point for FTTx 'Homes Passed' where the customer does not require an immediate FTTx connection or can be used as a future 'Maintenance point' similar to an access chamber. For housing Microducts and Splice enclosures.

## C) STAKKABOX TOBY JOINT BOX

The STAKKAbox  $^{\rm TM}$  Toby provides an access chamber with a clear opening of 150mm x 150mm. The single ring section is 300mm deep. A 600mm option can also be supplied on request.

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Features: Twinwall and internal ribbing for improved loading performance Material: Talc-filled recycled Polypropylene





## A-C) STAKKABOX JMF CHÁMBER SECTION

STAKKAbox<sup>™</sup> JMF is a range of modular and structural preformed access chambers that provide a modern alternative to traditionally brick built chambers.

This system provides contractors with a means of constructing access chambers safely, quickly and inexpensively, whilst offering superior build quality, reduced defects and enhanced site safety performance over traditional methods.

STAKKAbox<sup>™</sup> JMF is designed for use within the telecommunications market and is available in 102, 104 and 106 sizes.

Due to its twin wall design, individual sections are lightweight meaning they can be manually lifted and stacked on top of each other to reach the specified depth required.

The STAKKAbox  $^{\rm TM}$  JMF chamber system also comes with a wide range of X-TRAS  $^{\rm TM}$  chamber accessories and AX-S<sup>™</sup> access covers to provide a complete network access system.

Using the JMF system, complete chambers can be constructed from excavation to reinstatement in less than one hour.

#### Available in 3 sizes, all 150mm deep:

- 102 Chamber Section 725 x 255mm Clear Opening
- 104 Chamber Section 915 x 445mm Clear Opening
- 106 Chamber Section 1310 x 610mm Clear Opening

#### D) Frame & Concrete Covers, B125 Loading Class

AX-S<sup>™</sup> Concrete Infill access covers offer flexibility in size and design with options for locking. Please see call sales and see datasheet for further details

For volume sales company logos can be added. Due to the weight of this product additional carriage charges may apply. Available in 3 sizes:

- 725 x 255 mm
- 915 x 445 mm
- I3I0 x 6I0 mm

#### E) Cable Management Kits

Cable management furniture kit for STAKKAbox JMF102 , STAKKAbox JMF104, Quad and Fortress chambers comprising:

- 2x Drop in Wall Bearers
- 2 x Cable Bearers
- 2 x Locking Pins

#### F) STAKKAbox Galvanised Drop in Step for JMF Chambers

Mounts to chamber wall to provide stepped access. Manufactured in galvanised steel with no bolts or back plate required. For use with the following STAKKAbox chambers:

- S83-4531 STAKKAbox IMF 104 Chamber Section 915 x 445mm Clear Opening - 150mm Deep • S83-4532 STAKKAbox IMF 106 Chamber Section
- 1310 x 610mm Clear Opening 150mm Deep
- Legacy STAKKAbox chambers.



G) MOBRA Mounting Brackets for STAKKAbox JMF Chambers (Pair)

PART NO.	DESCRIPTION	
S83-4530	A) STAKKABOX JMF 102 CHAMBER SECTION 725 X 255MM CLEAR OPENING - 150MM DEEP	
S83-4531	B) STAKKABOX JMF 104 CHAMBER SECTION 915 X 445MM CLEAR OPENING - 150MM DEEP	
S83-4532	C) STAKKABOX JMF 106 CHAMBER SECTION 1310 X 610MM CLEAR OPENING - 150MM DEEP	
S83-4533	D) FRAME & CONCRETE COVER, 725 X 255 MM B125 LOADING CLASS	
S83-0681	D) FRAME & CONCRETE COVER, 915 X 445 MM B125 LOADING CLASS	
S83-0682	D) FRAME & CONCRETE COVER, 1310 X 610 MM B125 LOADING CLASS	
S83-4534	E) CABLE MANAGEMENT KIT FOR STAKKABOX JMF102 CHAMBERS	
S83-0683	E) CABLE MANAGEMENT KIT FOR STAKKABOX JMF 104 & FORTRESS CHAMBERS	
S83-4535	E) CABLE MANAGEMENT KIT FOR STAKKABOX JMF106 CHAMBERS	
S83-0684	F) STAKKABOX GALVANISED DROP IN STEP FOR JMF CHAMBERS	

S83-0527 G) MOBRA MOUNTING BRACKETS FOR STAKKABOX JMF CHAMBERS (PAIR)



#### A) STAKKABOX FORTRESS CHAMBER SECTION 915 X 445MM CLEAR OPENING 150MM DEEP

STAKKAbox<sup>™</sup> Fortress is a range of modular and structural preformed access chambers, suitable for use in carriageway and footway environments.

The Fortress system is moulded in HDPE and possesses excellent strength to weight properties.

#### Features

STAKKAbox™ chambers are significantly faster to install than conventional alternatives, with complete installations typically taking up to one hour. This results in reduced costs for the installer. No specialist equipment or plant is required in order to install the chamber and there is no need for specialist box builders.

Chambers are built to required depth by adding 150mm sections. Due to the twinwall design, individual sections are light meaning they can be manually lifted. Each access chamber possesses vertical and horizontal ribs, resulting in a product that is strong vertically and on the sidewall. Most installations do not require specialist backfills, reducing installation costs.

Chambers can be adapted to suit on-site conditions with standard tools to overbuild over existing networks, Introduce duct entries for cable entry and for top-section fine adjustment.

Fortress can be supplied in 'flat pack' format to make shipping more efficient as well as allowing flexibility in delivery and installation.

Built by stacking sections to required depth, each part weighs just 8.1 kg, making it suitable for a single person to lift under manual handling guidelines.

FW4 / EN4 Footway 4 internal dimensions: 915 x 445 x 150mm

A frame and concrete cover is available for the Stakkabox Fortress, (S83-0681) as well as a cable management furniture kit (S83-0683) and galvanised drop in step (S83-0684).

#### B) FW4 FDN Closure Mobra Arm

Cubis' universal FDN closure support arm has been designed and developed to provide a "Mobra Arm' solution that can fit the Prysmian UM/ICM/IM/I / Prysmian LMI and HellermannTyton 59 Port closures (Fibre Distribution Nodes) within the S83-4506 Cubis Fortress STAKKAbox<sup>TM</sup> FW4 access chamber.

Note: When ordering, please specify requirement from the closure options listed below.

- 1. For Prysmian UMJ/CMJ/MMJ closures
- 2. For Prysmian LMJ closure
- 3. For HellermannTyton 59 Port closure

#### C) Frame & Concrete Cover

AX-S<sup>™</sup> Concrete Infill access covers offer flexibility in size and design with options for locking. For use with STAKKAbox Ultima Section 2320 x 740mm.

#### D) Bolt on Step for Fortress & Ultima Chambers

Bolt on step for S83-4506 Fortress and S83-4508 Ultima plastic chambers that mounts to the chamber wall (using bolts and backing plate supplied) to provide stepped access.

#### E) Cable Management Kit

Cable management furniture kit for STAKKAbox JMF102, STAKKAbox JMF104, Quad and Fortress chambers comprising:

- 2 x Drop in Wall Bearers
- 2 x Cable Bearers
- and 2 x Locking Pins

	PARI NO.	DESCRIPTION
	S83-4506	A) STAKKABOX FORTRESS CHAMBER SECTION 915 X 445MM CLEAR OPENING 150MM DEEP
FW4	I-MOBRA-ARM	B) FW4 FDN CLOSURE MOBRA ARM
	S83-0681	C) FRAME & CONCRETE COVER, 915 X 445 MM B125 LOADING CLASS
	S83-4642	D) BOLT ON STEP FOR FORTRESS & ULTIMA CHAMBERS
	S83-0683	E) CABLE MANAGEMENT KIT FOR STAKKABOX JMF 104 & FORTRESS CHAMBERS

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# A) STAKKABOX ULTIMA CHAMBER SECTION 2320 X 740MM CLEAR OPENING 150MM DEEP

STAKKAbox<sup>™</sup> ULTIMA offers a flexible access chamber system with no compromise on strength. Due to the design and the material used (GRP). ULTIMA should be used anywhere where sidewall loading is a concern, such as alongside highways or railway tracks.

STAKKAbox™ chambers are significantly faster to install than conventional alternatives, with complete installations typically taking less than one hour. The STAKKAbox™ is manufactured in nitrogenfoamed High Density Polyethylene (HDPE), of which up to 70% is recycled material. HDPE possesses excellent strength-to-weight properties.

Chambers are built to required depth by adding 150mm sections. Due to the twinwall design, individual sections are light meaning they can be manually lifted. Each access chamber possesses vertical and horizontal ribs, resulting in a product that is strong vertically and on the sidewall. For most applications, ULTIMA doesn't require specialist backfills, reducing installation costs.

Fire Retardancy: ULTIMA won't catch fire and has low smoke properties. This means the product can be used in enclosed areas such as tunnels and underground transport.

Due to the sectional twinwall design and the GRP material, most ULTIMA ISOmm deep sections fall under 25kg in weight, making it suitable for a single person to lift under manual handling regulations.

FW10 / EN10 Footway 10 internal dimensions 2320 x 740 x 150mm



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#### B) FW10 FDN Closure Mobra Arm

Cubis' universal FDN closure support arm has been designed and developed to provide a 'Mobra Arm' solution that can fit the Prysmian UMJ/CMJ/ MMJ / Prysmian LMJ and HellermannTyton 59 Port closures (Fibre Distribution Nodes) within the S83-4508 Cubis STAKKAbox ™ Ultima FW10 access chamber.

Note: When ordering, please specify requirement from the closure options listed below.

- I. For Prysmian UMJ/CMJ/MMJ closures
- 2. For Prysmian LMJ closure
- 3. For HellermannTyton 59 Port closure

#### C) Frame & Concrete Cover

AX-S<sup>™</sup> Concrete Infill access covers offer flexibility in size and design with options for locking. For use with STAKKAbox Ultima Section 2320 x 740mm.

#### D) Bolt-on Step for Fortress & Ultima Chambers

Bolt-on step for S83-4506 Fortress and S83-4508 Ultima plastic chambers that mounts to the chamber wall (using bolts and backing plate supplied) to provide stepped access.

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PARI NO.	DESCRIPT
S83-4508	A) STAKK
VI0-MOBRA-ARM	B) FW10 F
S83-4509	C) FRAME
593 4643	

STAKKABOX ULTIMA CHAMBER SECTION 2320 X 740MM CLEAR OPENING 150MM DEEP FW10 FDN CLOSURE MOBRA ARM FRAME & CONCRETE COVER 2320 X 740MM B125 LOADING CLASS BOLT-ON STEP FOR FORTRESS & ULTIMA CHAMBERS



Sales/Technical Support tel: 020 8833 2626

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#### **IOINT BOXES NO23 & NO26**

Prefabricated glass reinforced polyester joint boxes. These underground jointing enclosures offer significant advantages over the more traditional methods of forming a jointing enclosure

Lightweight yet immensely strong and rigid having no seams or welds, they are totally rot proof and will not support microbiological growth.

Typical uses include:- Telephone connection systems, connection of lighting standards to mains, traffic light connections, underground water metre housing, cable television connections, loop connections and cable communications

- · Joint box chambers moulded from first quality glass fibre reinforced polyester moulding compounds.
- Manufactured under a system of rigidly applied quality control to ensure optimum, fully cured mouldings.
- Made to ensure trouble free installations.
- · Available for installation in driveways, paths etc.
- Joint boxes cover sold separately.

A) JOINT BOX No23 Internal dimensions: 200 x 450 x 450mm deep. B) COVER JOINT BOX 23 Cast iron cover for Joint Box 23.

C) JOINT BOX NO26 Internal dimensions: 720 x 250 x 570mm deep.

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B



D D) FRAME & COVER

FOOTWAY NO.2 Steel with infilled concrete cover for

joint box 26.



PART NO.	DESCRIPTION
S83-2795	A) JOINT BOX 23
S83-2796	B) COVER JOINT BOX 23
S83-2797	C) JOINT BOX 26
S83-3695	D) FRAME & COVER FOOTWAY NO.2

#### FRAME & COVER CARRIAGEWAYS

These are a special order item. Please contact sales for a quote.

Frame and Cover Carriageway ductile iron manhole covers and frames. Manufactured to relevant BS standard.

- A) Frame & Cover Carriageway 1: 600 x 600mm clear opening. B) Frame & Cover Carriageway 2: 1200 x 675mm clear opening.
- C) Frame & Cover Carriageway 3: 1800 x 675mm clear opening.



#### PART NO. DESCRIPTION

S83-2778 A) FRAME & COVER CARRIAGEWAY I S83-2779 B) FRAME & COVER CARRIAGEWAY 2 S83-2780 C) FRAME & COVER CARRIAGEWAY 3

#### **GRATING SUMP 2A**

Grating Sump 2A. Used in Manholes and joint boxes, this is a 250 x 250mm PVC drainage sump. Ref: 094956.



PART NO. DESCRIPTION S83-2781 GRATING SUMP 2A



# ULTRACRETE PRODUCTS

#### A) UltraCrete Perma-Soil Stabiliser - 54x 25Kg Bags

#### B) UltraCrete Perma-Soil Stabiliser - 30x 25Kg Buckets

UltraCrete Perma-Soil turns excavated spoil into backfill within minutes, saving both time and money on-site. Ideal for use with small utility excavations, backfilling poles, water metres and tobies, Perma-Soil meets the requirements set out in the Utility WRAP Agreement

Supplied in 25kg bags and tubs.

#### C) UltraCrete Instant Road Repair 6mm Grade - 56x 25kg Bags D) UltraCrete Instant Road Repair 6mm Grade - 52x 25kg Tubs

UltraCrete Instant Road Repair® 6mm grade is designed for permanent asphalt repairs in footways, footpaths and cycle tracks. It gained HAPAS Approval in 2002 and is instantly trafficable causing minimal disruption to pedestrians.

#### E) UltraCrete Instant Road Repair 10mm Grade - 56x 25kg Bags F) UltraCrete Instant Road Repair lÓmm Grade - 52x 25kg Tubs

UltraCrete Instant Road Repair® 10mm grade is designed for permanent repairs in type 3 and 4 roads. HAPAS approved since 2002, Instant Road Repair offers a first-time permanent repair and is instantly trafficable causing minimal disruption to motorists.

#### G) UltraCrete Instaband ECO Thermoplastic **Overbanding Tape** - Box of 12

Instaband ECO® has been designed for the application to asphalt roads to prevent water ingress and progressive fretting. It has been HAPAS Approved since 2012 and prevents water ingress immediately, prolonging the life of your repair.

#### H) UltraCrete SCJ Seal and Tack Coat Spray 750ml - Box of 12

SCJ is a cold joint sealer that is applied onto vertical edges and surface base before the application of asphalt. HAPAS approved since 2005, SCJ prevents water ingress which improves bond and prolongs the life of your repair.

#### I) Ultracrete QC6 Surface Reinstatement **Concrete Pre-mix** - 56x 25kg Bags J) S00-3540 Ultracrete QC6 Surface Reinstatement Concrete Pre-mix

- 40x 25kg Buckets

QC6 is a non-shrink concrete designed for the surface reinstatement of 'picture frames' or areas around access covers and surface areas around street furniture. This shrinkage compensated reinstatement concrete has an excellent workability and sets in just 15 minutes thus difficult to deface, improving public image and limiting asset liability.



#### Please see website for further details

PART NO.	DESCRIPTION
S00-4015	A) ULTRACRETE PERMA-SOIL STABILISER - 54X 25KG BAGS
S00-4030	B) ULTRACRETE PERMA-SOIL STABILISER - 30X 25KG BUCKETS
S00-4012	C) ULTRACRETE INSTANT ROAD REPAIR 6MM GRADE - 56X 25KG BAGS
S00-403 I	D) ULTRACRETE INSTANT ROAD REPAIR 6MM GRADE - 52X 25KG TUBS
S00-4032	E) ULTRACRETE INSTANT ROAD REPAIR 10MM GRADE - 56X 25KG BAGS
S00-4033	F) ULTRACRETE INSTANT ROAD REPAIR 10MM GRADE - 52X 25KG TUBS
S00-4014	G) ULTRACRETE INSTABAND ECO THERMOPLASTIC OVERBANDING TAPE - BOX OF 12
S00-4107	H) ULTRACRETE SCJ SEAL AND TACK COAT SPRAY 750ML - BOX OF 12
S00-4034	I) ULTRACRETE QC6 SURFACE REINSTATEMENT CONCRETE PRE-MIX - 56X 25KG BAGS
S00-3540	J) ULTRACRETE QC6 SURFACE REINSTATEMENT CONCRETE PRE-MIX - 40X 25KG BUCKETS



### **ULTRACRETE PRODUCTS**

### A) UltraCrete PY4 Summer Grade CD534 Polyester Resin System - 30x 25kg Buckets

#### A) UltraCrete PY4 Winter Grade CD534 Polyester Resin System - 30x 25kg Buckets

PY4 produces a stiff supporting mortar and is effective for the rapid installation and reinstatement of manhole covers and frames in heavily trafficked areas. It is highly recommended for ductile ironwork and has been HAPAS approved since 2005. PY4 conforms to HA104/09, has a rapid strength gain and can be opened to traffic in 40 minutes.

#### B) UltraCrete Envirobed CD534 High Performance Mortar x 48 18kg Bags C) UltraCrete Envirobed CD534 High Performance Mortar - 40x 18kg Buckets The environmentally friendly alternative to resin-based materials, specifically formulated for the bedding of all access covers. Envirobed® CD534 (formerly HA104) has been HAPAS Approved since 2005 and conforms to CD534. Its superior compressive, tensile and flexural strengths make it ideal for use in heavily trafficked / wheel track locations. It can be open to traffic after just 1 hour.

#### D) UltraCrete CD534 Flowable High Performance Mortar x 48 18kg Bags

Specifically formulated for utility reinstatements. Envirobed® CD534 Flowable (formerly HA104) provides all the performance of Envirobed® CD534 but is significantly easier to apply. It conforms to CD534 and is also BT LN550 and LN320 compliant. It offers superior compressive, tensile and flexural strengths in 3 hours and can be opened to traffic in I hour.

#### E) UltraCrete M60 Rapid Strength Bedding Mortar - 56x 25kg Bags F) UltraCrete M60 Rapid Strength Bedding Mortar - 40x 25kg Buckets

M60 is the market leading rapid strength mortar, for use with all access covers, as well as for the bonding of granite setts, flags and bedding kerbs. HAPAS approved since 2005, M60 also conforms to HD27/15, has a rapid strength gain and can be opened to traffic in 1 hour.

### G) UltraCrete QC10 F Rapid Set Flowable Concrete - 56x 25kg Bags

QC10 F is a rapid setting, fibre modified concrete for backfilling around manhole frames and gullies and can also be used for surface repairs. It has been HAPAS approved since 2005 and can be opened to traffic in 90 minutes.

#### H) UltraCrete Envirobed CD534 RED High Performance Mortar x 48 Buckets

Envirobed® CD534 Red. (part of UltraCrete's HAPAS Approved Ironwork Reinstatement System), is pigmented red as a prescriptive solution for specific contracts and frame works to easily identify the composition of work carried out. It is supplied as a two-component system, which contains a blend of special cements, polymer and aggregates and recycled gass. The combined components provide a high strength mortar, which can accommodate depths of 10-50mm in one pass. If necessary, greater depths can be achieved by using the layer-upon-layer method.

#### I) UltraCrete Envirobed CD534 RED Flowable High Performance Mortar x 48 Bags

UltraCrete Envirobed®CD534 Flowable Red is pigmented red as a prescriptive solution for specific contracts and frame works to easily identify the composition of work carried out. It combines as a bedding mortar and backfill and is ideal for installing access covers and frames.

#### J) UltraCrete Mortar Buoy - Access Frame Installation

The inflatable device that acts as a dam allowing a flowable mortar installation within seconds. The Mortar Buoy® inflatable dam prevents any mortar seeping into the access chamber providing a seamless finish to the chamber. This allows a single pour installation of Envirobed® CD534 Flowable/ Envirobed® CD534 Flowable Red, which encapsulates the flange of the access frame creating a solid bed and backfill in one.



#### PART NO. DESCRIPTION

S00-4035	A) ULTRACRETE PY4 SUMMER GRADE CD534 POLYESTER RESIN SYSTEM - 30X 25KG BUCKETS
S00-4048	A) ULTRACRETE PY4 WINTER GRADE CD534 POLYESTER RESIN SYSTEM - 30X 25KG BUCKETS
S00-4036	B) ULTRACRETE ENVIROBED CD534 HIGH PERFORMANCE MORTAR X 48 18KG BAGS
S00-4047	C) ULTRACRETE ENVIROBED CD534 HIGH PERFORMANCE MORTAR - 40X 18KG BUCKETS
S00-4037	D) ULTRACRETE ENVIROBED CD534 FLOWABLE HIGH PERFORMANCE MORTAR X 48 18KG BAGS
S00-4038	E) ULTRACRETE M60 RAPID STRENGTH BEDDING MORTAR - 56X 25KG BAGS
S00-4039	F) ULTRACRETE M60 RAPID STRENGTH BEDDING MORTAR - 40X 25KG BUCKETS
S00-4040	G) ULTRACRETE QC10 F RAPID SET FLOWABLE CONCRETE - 56X 25KG BAGS
S00-4045	H) ULTRACRETE ENVIROBED CD534 RED HIGH PERFORMANCE MORTAR X 48 BUCKETS
S00-4046	I) ULTRACRETE ENVIROBED CD534 RED FLOWABLE HIGH PERFORMANCE MORTAR X 48 BAGS
S00-4041	J) ULTRACRETE MORTAR BUOY - ACCESS FRAME INSTALLATION AID - GULLEY 450 X 450MM
S00-4042	J) ULTRACRETE MORTAR BUOY - ACCESS FRAME INSTALLATION AID - CW1 600 X 600MM
S00-4043	J) ULTRACRETE MORTAR BUOY - ACCESS FRAME INSTALLATION AID - CW2 1250 X 700MM
S00-4044	J) ULTRACRETE MORTAR BUOY - ACCESS FRAME INSTALLATION AID - CW3 1850 X 700MM



#### SAN-EARTH CONDUCTIVE CONCRETE AND EARTHING ELECTRODE PACKS

SAN-EARTH is a cementitious and carbonaceous material which provides an environmentally safe long term solution to many grounding problems. SAN-EARTH grounding electrodes are easily installed by spreading the dry powder in a strip over and around a conductor in a horizontal trench. When the trench is refilled SAN-EARTH absorbs moisture from the surrounding soil and hardens to become part of the grounding electrode

Supplied on a pallet of 36 bags and 9 electrodes, suitable for the installation of 9 cabinets.

Four bags and one electrode is the required pack for earthing a new install cabinet.



S83-4510

### **CABINET BASE** SEALANT - 2.5 LITRES

Two part sealant used to seal the base & ducts in street cabinets. For use in LV distribution cabinets, public lighting cabinets, cabinets for traffic control, and outdoor transformer station installations.

- · Easy to use and accurate filling process when pouring the resin
- · Seals the cable ducts against water & gas pressures
- Prevents ingress of moisture, pests and the instrusion of weeds, roots and plants
- Re-enterable, so new cables can be added









SAN-EARTH CONDUCTIVE CONCRETE AND EARTHING ELECTRODE PACKS (36 PACKS)

#### DESCRIPTION PART NO. S83-3122 CABINET BASE SEALANT - 2.5 LITRES

#### A) PRYSMIAN SJC SMALL JOINT CLOSURE WITH 4 CABLE ENTRIES FOR CABLE 5-9MM (MAXIMUM CAPACITY 24 FIBRES)

The SJC Closure is a splice closure that is used for track or branch applications. It has 4 cable entry ports, a splice cassette for 24 splices and a cable management and storage area. The closure is sealed to IP68 for water and dust tightness. The closure is supplied with four knockout ports and two entry glands. Up to two additional entry glands can be ordered separately.

Prysmian Group





#### **B) CABLE ENTRY KITS** FOR SIC ENCLOSURES

The cable entry kit is used to install an additional cable into the joint. It contains a cable gland, a cable tie and foam tape. For cables between 6-12mm.

#### PART NO. DESCRIPTION XJTSC02335 A) SJC SMALL JOINT CLOSURE 24 SPLICES FOR CABLE 5-9MM XJTSC02470 A) SJC SMALL JOINT CLOSURE 24 SPLICES FOR CABLE 6-12MM XJTSC02336 B) SJC CABLE ENTRY KIT 5-9MM XJTSC02471 B) SJC CABLE ENTRY KIT 6-12MM XITSC02542 B) SIC CABLE ENTRY KIT 4-6MM (2 ENTRIES)





The Ultra Compact Multi Function Joint (UMJ) is ideal for use as a Cable Chamber Joint, Track Joint, Spur Joint or Distribution Joint due to its capacity and compact size. It has a maximum capacity of 72 fibres, the splice trays are factory fitted and each tray can accommodate up to 12 spliced fibres. A multi-functional bracket can be supplied with the joint which enables wall or pole mounting of the joint vertically or horizontally. The joint has four circular ports for mechanical entry glands, one oval port for heat shrink or mechanical entry and two additional small circular ports also for heat shrink entry.

The UMJ is supplied with 6 single element trays each able to accommodate 12 splices providing a maximum capacity of 72 fibres, or 6 single circuit splice trays. Each single circuit splice tray has two storage sections providing a total of 12 trays per joint with each tray accommodating up to 4 splices providing a total capacity of 48 fibres. The UMJ can be supplied with a pressure test valve for flash testing and earthing.

A full range of single Entry Gland Kit, Multi Way Entry Gland Kits, Oval Port Entry Kit, Silicone Grease, Emergency Port Cable Entry, Optical Splitters, Splice Protectors, Mounting Bracket / Support Tool are shown on page 85.

PART NO. DESCRIPTION UMJ-F-X-XXXX-X-X-X UMJ COMPLETE WITH TRAYS NO KITS



#### PRYSMIAN XMJ (CMJ) PRE-CONNECTORISED CLOSURE

The pre-connectorised XMJ closure range (CMJ) is designed for the jointing of optical fibre cables. The joint is ideal for use as a final drop solution due to its capacity and compact size.

It has a maximum capacity of 72 fibre splices (MMJ). The connectorised pigtails are factory fitted and each tray can accommodate up to 12 spliced fibres.

The single element 2.2 tray also has the ability to house up to  $1 \times 1$ :8 splitter, which can also be factory fitted.

A multi-functional bracket can be supplied with the joint which enables wall or pole mounting of the joint vertically or horizontally.

The joint has four circular ports for mechanical entry glands, one oval port for heat shrink or mechanical entry and two additional small circular ports also for heat shrink entry.

#### Design and Construction

- Supplied with up to 2 single element trays each able to accommodate 12 splices providing a maximum capacity of 24 fibres.
- Drop cable capacity 12SC / 24LC
   Each tray has the provision to mount optical splitters.

- The closure base has 4 circular entry ports and an oval port. Cables up to 23mm in diameter can be installed into each port.
- Drop cables are installed through a split seal and routed around the input mandrels
- A further two small ports are available as emergency ports. These ports are for heat shrink entry and can accommodate a cable of up to 12mm in diameter.
- Circular port cables are sealed using a split mechanical sealing gland.
- Oval port cables are sealed using adhesive lined heat shrink sleeves or using a mechanical oval port entry kit.
- Multi Way Split Entry Glands are available to allow the installation of several cables into one circular port.
- Splice trays hinge upwards individually, allowing full access to spliced fibres without disturbance to live fibres in adjacent trays.
- Integrated loop storage basket for mid-span applications.
- Can be supplied with a pole/wall mounting bracket.
- Can be supplied with a flash test valve or a pressure relief

valve. These can also be used for earthing.

• Closure and glands sealed to IP68. Technical Data

#### Technical Dat

- Minimum Fibre Bend Radius (mm): 30 (Note: The input manifold contains mandrels to cross fibres from one side of the stack to the other. These are limited to 20mm radius if used).
- Number of Cable Ports: 4 circular and I oval (also contains 2 additional small emergency ports)
- Cable Diameter Range (mm):
- Circular Port: 4 to 23
- Multi Port (in circular port): 3-5mm round (4 Way), 3-5mm round (8 Way), 5-7mm round (2 Way)
- Oval Port: 7 to 21 (Heat Shrink), 5 to 14.8 (mechanical)
- Emergency Port: 4 to 12
- Cable Retention (N):
- Circular Port: > Cable (Ø/45) x 1000N with central strength member secured.
- 4 Way Multi Way (in circular port): > 150N for cables with Aramid yarns, > 30N for cables without Aramid yarns
- Multi way gland: 100N for preconnectorised cables
- Maximum number of splice trays: 2

#### Single Element

- Maximum fibre capacity of Joint: 24 Single Element
- Splitter capacity: Optical splitters of 4mm x 4mm x 60mm on trays - 2
- Required space envelope (mm): (I) 305 x (w) 231 x (d) 164
- Operating temperature: -40oC to + 70oC (5 to 95% RH)

#### Material

- Cap: GF Polypropylene
- Base: GF Polypropylene
- Clamp: GF Nylon
- Splice Trays: FR ABS

#### Testing

- Closure Sealing: IP68 (5 metres) (IEC 61300-2-23)
- Optical: Tested 1310nm,1550nm and 1625nm
- Change of Temperature: IEC 61300-2-22
- Dry Heat: BS EN 60068-2-2 Test Bb
- Damp Heat: IEC 60068-2-3: 1969
- Vibration: IEC 61300-2-1
- Torsion: IEC 61300-2-5
- Bending: IEC 61300-2-37
- Impact: IEC 61300-2-12
- Cable Retention: IEC 61300-2-4
- Crush Resistance: IEC 61300-2-10





#### PRYSMIAN CMJ COMPACT MULTI-FUNCTION JOINT WITH TRAYS (MAXIMUM CAPACITY OF 144 FIBRES)



- An input manifold manages the tubes to a common routing channel and has the provision to mount up to four optical splitters.
- The closure base has 4 circular entry ports and an oval port. Cables up to 23mm in diameter can be installed into each port. A further two small ports are available as emergency ports. These ports are for heat shrink entry and can accommodate a cable of up to 12mm in diameter.
- Oval port cables are sealed using adhesive lined heat shrink sleeves or using a mechanical oval port entry kit.
- Multi Way Entry Glands are available to allow the installation of a number of cables into one circular port.
- Can be supplied with a pressure test valve for flash testing and earthing.

The Compact Multi Function Joint (CMJ) is for jointing optical fibre cables. The joint is ideal for use as a Cable Chamber Joint, Track Joint, Spur Joint or Distribution Joint due to its capacity and compact size.

It has a maximum capacity of 144 fibres. The splice trays are factory fitted and each tray can accommodate up to 12 spliced fibres.

A multi-functional bracket can be supplied with the joint which enables wall or pole mounting of the joint vertically or horizontally.

The joint has four circular ports for mechanical entry glands, one oval port for heat shrink or mechanical entry and two additional small circular ports also for heat shrink entry.

Supplied with 12 single element trays each able to accommodate 12 splices providing a maximum capacity of 144 fibres, or 12 single circuit splice trays. Each single circuit splice tray has two storage sections providing a total of 24 trays per joint. Each tray can accommodate up to 4 splices providing a total capacity of 96 fibres.

#### Visit millsltd.com for more info

#### For MOBRA Mounting - See page 85

#### The CMJ is supplied as standard with:

I x Base, I x Cap, I x Clamp, I x O Seal, I x Fibre Routing Manifold, 2 x Tube Retainers, 4 x Tube Retainer Covers, I x Loop Storage Basket

A full range of single Entry Gland Kit, Multi Way Entry Gland Kits, Oval Port Entry Kit, Silicone Grease, Emergency Port Cable Entry, Optical Splitters, Splice Protectors, Mounting Bracket / Support Tool are shown on page 85.

#### DESCRIPTION

PART NO.

CMJ-F-X-XXXX-X-X-X CMJ COMPLETE WITH TRAYS NO KITS CMJ-F-X-XXXX-Y-X-X CMJ COMPLETE WITH TRAYS AND TEST VALVE - NO KITS CMJ-F-X-XXXX-Y-X-X PRYSMIAN CMJ COMPACT MULTI-FUNCTION JOINT SE 2.2 WITH TRAYS AND WALL/POLE BRACKET, NO KITS CMJ-F-X-XXXX-Y-Y-X PRYSMIAN CMJ COMPACT MULTI-FUNCTION JOINT SE 2.2 WITH TRAYS, TEST VALVE, WALL/POLE BRACKET, NO KITS

Prysmian Group

#### PRYSMIAN XMJ (MMJ) PRE-CONNECTORISED CLOSURE

The pre-connectorised XMJ closure range (MMJ) is designed for the jointing of optical fibre cables. The joint is ideal for use as a final drop solution due to its capacity and compact size.

It has a maximum capacity of 72 fibre splices. The connectorised pigtails are factory fitted and each tray can accommodate up to 12 spliced fibres.

The single element 2.2 tray also has the ability to house up to 1x1:8 splitter, which can also be factory fitted.

A multi-functional bracket can be supplied with the joint which enables wall or pole mounting of the joint vertically or horizontally.

The joint has four circular ports for mechanical entry glands, one oval port for heat shrink or mechanical entry and two additional small circular ports also for heat shrink entry.

#### Design and Construction

- Supplied with up to 6 single element trays each able to accommodate 12 splices providing a maximum capacity of 72 fibres.
- Drop cable capacity 24SC / 48LC \*MMJ closure cannot support 48 individual drop cables. Multifibre drops should be used to utilise the full capacity.

- Each tray has the provision to mount optical splitters.
  - The closure base has 4 circular entry ports and an oval port. Cables up to 23mm in diameter can be installed into each port.
- Drop cables are installed through a split seal and routed around the input mandrels
- A further two small ports are available as emergency ports. These ports are for heat shrink entry and can accommodate a cable of up to 12mm in diameter.
- Circular port cables are sealed using a split mechanical sealing gland
- Oval port cables are sealed using adhesive lined heat shrink sleeves or using a mechanical oval port entry kit.
- Multi Way Split Entry Glands are available to allow the installation of several cables into one circular port.
- Splice trays hinge upwards individually, allowing full access to spliced fibres without disturbance to live fibres in adjacent trays.
- Integrated loop storage basket for mid-span applications
- Can be supplied with a pole/wall mounting bracket.
- · Can be supplied with a flash

test valve or a pressure relief valve. These can also be used for earthing.

 Closure and glands sealed to IP68. Technical Data

- · Minimum Fibre Bend Radius (mm): 30 (Note: The input manifold contains mandrels to cross fibres from one side of the stack to the other. These are limited to 20mm radius if used).
- Number of Cable Ports: 4 circular and L oval (also contains 2 additional small emergency ports)
- Cable Diameter Range (mm):
- Circular Port: 4 to 23
- Multi Port (in circular port): 3-5mm round (4 Way), 3-5mm round (8 Way), 5-7mm round (2 Way)
- Oval Port: 7 to 21 (Heat Shrink), 5 to 14.8 (mechanical)
- Emergency Port: 4 to 12
- Cable Retention (N):
- Circular Port: > Cable (Ø/45) x 1000N with central strength member secured.
- 4 Way Multi Way (in circular port): > 150N for cables with Aramid yarns, > 30N for cables without Aramid yarns
- Multi way gland: 100N for preconnectorised cables

- Maximum number of splice trays: 6 Single Element
- Maximum fibre capacity of Joint: 72 Single Element
- Splitter capacity: Optical splitters of 4mm x 4mm x 60mm on trays - 6
- Required space envelope (mm): (I) 390 x (w) 231 x (d) 164
- Operating temperature: -40oC to + 70oC (5 to 95% RH)

#### Material

- · Cap: GF Polypropylene
- Base: GF Polypropylene
- Clamp: GF Nylon
- Splice Trays: FR ABS
- Testing
- Closure Sealing: IP68 (5 metres) (IEC 61300-2-23)
- Optical: Tested 1310nm,1550nm and 1625nm
- Change of Temperature: IEC 61300-2-22
- Dry Heat: BS EN 60068-2-2 Test Rh
- Damp Heat: IEC 60068-2-3: 1969
- Vibration: IEC 61300-2-1
- Torsion: IEC 61300-2-5
- Bending: IEC 61300-2-37
- Impact: IEC 61300-2-12
- Cable Retention: IEC 61300-2-4
- Crush Resistance: IEC 61300-2-10





#### PRYSMIAN MMJ MEDIUM MULTI-FUNCTION JOINT WITH TRAYS (MAXIMUM CAPACITY OF 144 FIBRES)



The Medium Multi Function Joint (MMJ) is for jointing optical fibre cables.

The joint is ideal for use as a Cable Chamber Joint, Track Joint, Spur Joint or Distribution Joint due to its capacity and compact size. It has a maximum capacity of 288 fibres

The splice trays are factory fitted and each tray can accommodate up to 12 spliced fibres.

The joint has four circular ports for mechanical entry glands, one oval port for heat shrink or mechanical entry and two additional small circular ports also for heat shrink entry.

#### The MMJ is supplied with:

I x Base, I x Cap, I x Clamp, I x O Seal, I x Fibre Routing Manifold, 2 x Tube Retainers, 4 x Tube Retainer Covers, I x Loop Storage Basket

A full range of single Entry Gland Kit, Multi Way Entry Gland Kits, Oval Port Entry Kit, Silicone Grease, Emergency Port Cable Entry, Optical Splitters, Splice Protectors, Mounting Bracket / Support Tool are shown on page 85.

For MOBRA Mounting - See page 85

- · Supplied with 24 single element trays each able to accommodate 12 splices providing a maximum capacity of 288 fibres, or 24 single circuit splice trays. Each single circuit splice tray has two storage sections providing a total of 48 trays per joint. Each tray can accommodate up to 4 splices providing a total capacity of 192 fibres.
- The closure base has 4 circular entry ports and an oval port. Cables up to 23mm in diameter can be installed into each port. A further two small ports are available as emergency ports. These ports are for heat shrink entry and can accommodate a cable of up to 12mm in diameter.
- · Circular port cables are sealed using a mechanical sealing gland. The gland can be assembled onto the cable away from the joint and is then simply plugged into the base.
- · Oval port cables are sealed using adhesive-lined heat shrink sleeves or using a mechanical oval port entry kit.
- Multi-Way Entry Glands are available to allow the installation of a number of cables into one circular port.
- Can be supplied with a pressure test valve for flash testing and earthing.

Visit millsltd.com for more info

DESCRIPTION PART NO. MMJ-F-X-XXXX-X-X-X MMJ COMPLETE WITH TRAYS NO KITS

MMJ-F-X-XXXX-Y-X-X MMJ COMPLETE WITH TRAYS AND TEST VALVE - NO KITS MMJ-F-X-XXXX-X-Y-X PRYSMIAN MMJ MEDIUM MULTI-FUNCTION JOINT SE 2.2 WITH TRAYS AND WALL/POLE BRACKET, NO KITS MMJ-F-X-XXXX-Y-Y-X PRYSMIAN MMJ MEDIUM MULTI-FUNCTION JOINT SE 2.2 WITH TRAYS, TEST VALVE, POLE/WALL BRACKET, NO KITS



#### CABLE ENTRY KITS FOR UMJ, CMJ AND MMJ PRYSMIAN MULTI-FUNCTION JOINTS

# A) MECHANICAL CIRCULAR PORT CABLE ENTRY KITS FOR USE WITH UMJ / CMJ / MMJ

Prysmian Circular Port Entry Glands are used to install cables into the ports of a joint closure base. The glands are mechanical in nature and are installed onto the cable, then simply pushed into the base of the joint.

- · Available in single, dual, quad and 8 way variations.
- · Each kit contains all necessary parts to seal the cable and secure the cable strength members.
- · Multi-way glands are useful when installing several
- smaller cables into one circular port.
- · For larger cables an Oval Port Kit is used.



#### C) HEAT SHRINK OVAL PORT CABLE ENTRY KITS FOR USE WITH UMJ / CMJ / MMJ

The UMJ / CMJ / MMJ Oval Port Heat Shrink Entry Kit is used to install a loop of cable into the oval port.

The kit contains all of the components required to prepare and install the cable, and route the cable fibres to the splice trays.

The cables are sealed into the oval port using a heat shrink sleeve.



#### D) SPLICE PROTECTORS FÓR USE WITH UMJ / CMJ / MMJ /LMJ

Prysmian splice protectors used to protect the fibre splice after splicing.

Available in different diameters and lengths.

D

# B) MECHANICAL OVAL PORT CABLE ENTRY KITS FOR USE WITH UMJ / CMJ / MMJ

Prysmian Oval Port Mechanical Entry Kits are used to install a loop of cable into the oval port of joint closures.

- · Available for the UMJ, CMJ & MMJ joint closures.
- · Each kit contains all components required to prepare and install cable and route fibre to the splice trays.
- · Cable sealed into the oval port using a mechanical gland system comprising of two plates and a rubber block.



# Prysmian Group

A) Mechanical Circular Port Cable Entry Kits for use with UMI / CMI / MMI

lor use with OHJ / CHJ / HHJ					
PART NO.	DESCRIPTION				
XJTSC02186	MECH SEAL - DUAL 5 TO 9 MM				
XJTSC02572	MECH SEAL - 4 WAY CSM CABLE GLAND				
XJTSC02767	MECH SEAL - 4 WAY CSM GLAND 4.0 TO 6.0				
XJTSC02768	MECH SEAL - 4 WAY CSM GLAND 5.0 TO 7.0				
XJTSC02769	MECH SEAL - 4 WAY CSM GLAND 7.0 TO 8.5				
XJTSC02260	MECH SEAL - 8 WAY GLAND 3MM ROUND CABLES				
XJTSC02193	MECH SEAL - CABLE ENTRY GLAND 20-23MM				
XJTSC02278	MECH SEAL - CIRCULAR ENTRY KIT 4-7MM				
XJTSC01755	MECH SEAL - MEDIUM 4 WAY ENTRY GLAND				
XJTSC01754	MECH SEAL - MEDIUM ENTRY GLAND 7-20MM				
XJTSC02352	MECH SEAL - 4 WAY SST CABLE KIT				
B) Mechani	ical Oval Port Cable Entry Kits				
for use with UMJ / CMJ / MMJ					
PART NO.	DESCRIPTION				
XJTSC02031	UMJ / CMJ / MMJ - MECH OVAL PORT KIT - 11 TO 13MM				
XJTSC02028	UMJ / CMJ / MMJ - MECH OVAL PORT KIT - 5 TO 7MM				
XJTSC02029	UMJ /CMJ / MMJ - MECH OVAL PORT KIT - 7 TO 9MM				
XJTSC02030	UMJ / CMJ / MMJ - MECH OVAL PORT KIT - 9 TO 11MM				
XJTSC01896	UMJ / CMJ / MMJ- MECH OVAL PORT KIT - 13.1 TO 14.8MM				
C) Heat Sh	rink Oval Port Cable Entry Kits				
for use wit	h UMJ / CMJ / MMJ				
PART NO.	DESCRIPTION				
XJTSC01756	UMJ / CMJ / MMJ HEAT SHRINK OVAL PORT KIT				
D) Splice Protectors for use with UMJ / CMJ / MMJ/LMJ					
PART NO.	DESCRIPTION				
XKTSC01284	SPLICE PROTECTORS 1.3MM (PACK OF 12)				
XPESC00057	SPLICE PROTECTORS 1.3MM (PACK OF 50)				
XKTSC00050	SPLICE PROTECTORS 2.2MM (PACK OF 12)				
XKTSC00079	SPLICE PROTECTORS CRIMP (PACK OF 12)				
XKTSC00078	SPLICE PROTECTORS CRIMP (PACK OF 50)				



### ACCESSORIES FOR UMJ, CMJ AND MMJ PRYSMIAN MULTI-FUNCTION JOINTS

#### E) SPLITTERS FOR USE WITH UMJ / CMJ / MMJ / LMJ

PLC splitters are used to provide a compact and reliable method to split the optical signal. This popular range of splitters is available with up to 32 outputs and has excellent uniformity and low PDL. 64 output splitters are available on request.

CTRIZAD352DDNC1



#### F) PRYSMIAN GLAND WRENCH

The gland spanner is used to tighten the cable glands used for circular port entry.

The spanner has a flat profile on one end and a cupped profile on the other end.



#### G) PRYSMIAN SILICON SEALING GREASE (PACK 5)

Silicone grease is used when installing a cable into one of the mechanical entry glands.

The grease is smeared onto the cable sheath to ensure that any imperfections in the sheath do not affect the cable sealing.

Supplied in a pack of 5.

### H) PRYSMIAN UMJ / CMJ / MMJ SUPPORT TOOL

The Support Tool allows the user to support the Joint within a portable workbench.

The bracket is designed to fit most commercially available workbenches.

#### I) PRYSMIAN EMERGENCY PORT ENTRY KIT HEAT SHRINK UMJ / CMJ / MMJ / LMJ

The Emergency Port Entry Kit is used to install an additional cable into one of the small circular ports of the joint.

The kit comprises a cable heat shrink, aluminium foil and an alcohol wipe.

#### J) PRYSMIAN HEAT SHRINK PORT ADAPTOR PLUG 16-30MM LMJ

Heat Shrink Port Adaptor Plug for use with Prysmian LMJ Joints.

For cables up to 30mm in diameter.









#### K) PRYSMIAN UMJ / CMJ / MMJ HALF SIZE MOBRA MOUNTING BRACKET

Prysmian MOBRA arms for use with UMJ, CMJ and MMJ Closures.

#### L) PRYSMIAN POLE/WALL MOUNTING BRACKET UMJ/ CMJ/MMJ

The Pole / Wall Mounting Bracket is a universal bracket fitted to the clamp of the joint.

It is used to mount the UMJ / CMJ or MMJ closure to a pole, wall, or wall of a footway box and allows storage in the horizontal or vertical position.





#### M) PRYSMIAN UMJ CMJ MMJ FLAT WALL / POLE MOUNTING BRACKET

Wall or pole mounting bracket that can allow the UMJ to site closer to the wall.

Perfect for congested pits where there is limited space

Tested to the IP68 specification.

Can be used with the UMJ, CMJ and the MMJ



### Prysmian Group

#### E) SPLITTERS FOR USE WITH UMJ / CMJ / MMJ / LMJ

PART NO. DESCRIPTION

 XSPSG00002
 SP-PL-1/04-XXX/XXX-2.0/2.0-SM08-250-DWWB

 XSPSG00003
 SP-PL-1/08-XXX/XXX-2.0/2.0-SM08-250-DWWB

 XSPSG00004
 SP-PL-1/16-XXX/XXX-2.0/2.0-SM08-250-DWWB

 XSPSG00005
 SP-PL-1/32-XXX/XXX-2.0/2.0-SM08-250-DWWB

#### F-J) GENERAL ACCESSORIES

FOR USE WITH UMJ / CMJ / MMJ/ LMJ				
XJTSC02320	F) MECH SEAL - SPANNER			
XBFSC00260	G) SILICON SEALING GREASE (PACK OF 5)			
XJTSC00075	H) UMJ / CMJ / MMJ SUPPORT TOOL			
XKTSC00401	I) EMERGENCY PORT KIT			
XJTSC02608	J) HEAT SHRINK PORT GLAND FOR CABLES OVER 16MM			

#### K-M) MOUNTING BRACKETS FOR USE WITH UMJ / CMJ / MMJ/ LMJ

XJTSC03265	K) UMJ/CMJ/MMJ HALF SIZE MOUNTING BRACKET
XJTSC02585	k) prysmian umj / cmj / mmj Full size mobra kit
XJTSC02405	K) PRYSMIAN UMJ CMJ MMJ MOUNTING BRACKET
XJTSC03286	K) PRYSMIAN UMJ/CMJ/MMJ UNIVERSAL MOBRA ARM MOUNTING KIT
XJTSC00136	L) UMJ / CMJ / MMJ POLE/WALL MOUNTING BRACKET
XITSC03020	N) FLAT BRACKET FOR UMJ / CMJ / MMJ





#### PRYSMIAN LMJ LARGE MULTI-FUNCTION JOINT - AVAILABLE IN SHORT, MEDIUM AND LARGE VERSIONS

 $\label{eq:prysmian LMJ Large Multi-Function Joint-available in short, medium and large versions$ 

The LMJ is used for access applications within the external optical network and can be used for track, spur and loop applications.

It can accommodate a wide variety of cables such as loose tube, central loose tube, Flextube and blown fibre.

The modular tray system is designed for positive fibre management for Single Circuit Management (SCM) and Single Element Management (SEM), and the splice trays can accommodate a variety of different types of splice protectors and splitters.

The joint has ten circular ports and one oval port for mechanical entry. Mechanical glands are used to seal cables into the circular ports.

#### Features and Benefits

- A large closure for optical cable splicing with two vertical tray stacks.
- Two input manifolds manage cable tubes to a common routing channel.
- · Input manifolds enable fibres to be passed from stack to stack.
- Cables are sealed using mechanical sealing glands. Cables from 4 to 23mm in diameter can be accommodated into each circular port.
- Multi-Way Entry Glands provide alternate mechanical entry to allow up to 8 cables in each circular port.
- Can accommodate a range of splitter modules from 1x2 to 2x64.
- The closure is sealed to IP68.

The LMJ is supplied as an empty closure with a cap, a base, a clamp, a sealing gasket and a support frame.

#### A) PRYSMIAN LMJ - SHORT CAP CLOSURE 48 TRAYS (24+24) SPLICE CAPACITY 1152F

B) PRYSMIAN LMJ - MEDIUM CAP TOTAL TRAY CAPACITY: 80 TRAYS (40+40)

C) PRYSMIAN LMJ - LARGE CAP TOTAL TRAY CAPACITY: 112 TRAYS (56+56)

D) PRYSMIAN LMJ - SHORT CAP CLOSURE 48 TRAYS (24+24) SPLICE CAPACITY 1152F



#### PART NO. DESCRIPTION

 XJTSC02365
 A) LMJ - SHORT CAP CLOSURE + 48 SE2.2 TRAYS

 XJTSC02366
 B) LMJ - MEDIUM CAP CLOSURE + 80 SE2.2 TRAYS

- XJTSC02367 C) LMJ LONG CAP CLOSURE + 112 SE2.2 TRAYS
- XJTSC02357 D) LMJ SHORT CAP CLOSURE 48 TRAYS (24+24) SPLICE CAPACITY 1152F



G

Sales/Technical Support tel: 020 8833 2626





#### FOSC 400 & FOSC 450G EXTERNAL FIBRE OPTIC SPLICE CLOSURES

CommScope's FOSC 400 products are butt-type closures used in the outside plant network when mass splice storage is the main requirement.

They are available in four different sizes and are typically used as track joints. Depending on the closure size, the splice storage and organiser trays can accommodate from 6 to 768 single fibre splices. All splicing trays are hinged at one end and any fibre can be accessed without disturbing fibre on other trays, kinking buffer tubes, or introducing losses. All cable termination and sealing functions are provided with the closure. Uncut lose buffer tube storage is provided in optional storage baskets.



The FOSC 400 range is available with traditional heat shrink cable seals or TE's new gel sealing system. FOSC 450G gel sealed splice closures have the same splice capacity as standard FOSC 400 closures and feature the same reliable and easy-to use dome-to-base clamping system. The major difference with the FOSC 450G closures is that the cable sealing terminations use gel sealing technology instead of traditional heat shrink. Gel seal cable terminations automatically adjust to cable size and shape, and require no special tools, tapes or mastics to install. Gel seals enable quick and easy cable removal and are completely re-usable.

COMMSCOPE

### Ring sales for ordering guide or visit: millsltd.com

#### FIST-GC02 EXTERNAL FIBRE OPTIC SPLICE CLOSURES

CommScope's generic closure FIST-GCO2 is an environmentally sealed enclosure for the FIST fibre management system. The closure is a single-ended design made of a thermoplastic material. The base and dome are sealed with a clamp (or latches) and an O-ring system. One oval entry port for looped (uncut) cable and 6 or 16 round ports for single cable entry/exit are provided in the base. (8 round or 6 + 1 oval port for GCO2-FX version).

FIST-GCO2 has provision for all cable termination and sealing requirements. Cable seals are manufactured from heat-shrinkable or gel material.

The universal mounting system profiles provide the foundation for mounting combinations of SOSA2 Tray and/or SASA2 splitter modules, which consist of a modular groove plate and trays.

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Distributor

Mile



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#### COMMSCOPE FIST MSC MODULAR SPLICE CLOSURE

Single ended o-ring sealed dome closure for high capacity splicing in a versatile and modular build. Transient free and flexible FIST fibre management for optimised fibre routing and cable storage. Fully removable base for easy cable access during installation and provisioning. Compatible with high end environmental specifications for aerial, pedestal, underground or direct buried applications. Superior gel-sealing technology incorporated in interchangeable and fully wrap around gel segments.

Toolless and intuitive design in cable seals and cable attachments. Compatible with a wide range of fibre cable sizes and types.







### Commscope Wall / Pole Mounting Bracket for FIST-MSC Closures

Commscope Wall / Pole Mounting Bracket for FIST-MSC Closures

COMMSCOPE FIST MSC MODULAR SPLICE CLOSURE

COMMSCOPE WALL / POLE MOUNTING BRACKET

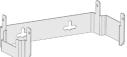
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#### COMMSCOPE FIST-EDSA FTTH ENCLOSURE

The FIST-EDSA features innovative sealing and cable retention for a range of cables, combined with proven gel-seal technology and FIST fibre management hardware.

#### Features:

- Single-ended base and dome design with only two latches
- Four long oval-shaped gel-sealed drop ports for 12 drop cables each (maximum 48 drops)
- · One oval shaped gel-sealed feeder port
- Feeder loop possibility
- Feeder cable diameter maximum 16mm
- Drop cable diameter range: 5-8mm
- Fast, easy, toolless installation
- Single-sided UMS (Universal Mounting System) frame allows mounting of FIST management grooveplates and trays
- · Repair and upgrade possibility
- Intuitive identification
- Eliminates need for waterblock connectors
- New cable attachment design: toolless and wrap-around installation.



PART NO

FIST-MSC

760242595

DESCRIPTION

FOR FIST-MSC CLOSURES

#### CommScope Wall Mounting bracket for FIST EDSA Fibre Closure

CommScope Wall Mounting bracket for FIST EDSA Fibre Closure.

Visit millsltd.com for more info



PART NO. DESCRIPTION FIST-EDSA COMMSCOPE FIST-EDSA FTTH ENCLOSURE EG2461-000 COMMSCOPE WALL MOUNTING BRACKET

COMMSCOPE WALL MOUNTING BRACKET FOR FIST EDSA FIBRE CLOSURE Distributor

COMMSCOPE"

Distributor

Mills

#### **TENIO FIBRE CLOSURES**

TENIO closures enable 30% faster, future-proof network deployments in 30% less space. TENIO closures feature modular building blocks and combine proven fibre management hardware with a new sealing system to simplify training and reduce inventory. The CommScope closure's 100-percent mechanical, tool-less and intuitive design facilitates lower-skilled network deployments. Full modularity of the closure platform supports a phased CAPEX network deployment scheme, reducing up-front CAPEX investment.

Designed for use with any cable construction (loose buffer tube, central core tube, loose fibre), the closures deploy in any environment (aerial, pedestal, handhole, manhole) and CommScope's superior gel-sealing technology guarantees sealing regardless of cable type and form.

#### **Reduced installation time**

- Optimized FIST fibre management system leading to 30% faster and more intuitive fibre routing and installation
- Up to 144 (12 x 12 fibres), 192 (8 x 24 fibres) or 288 (12 x 24 fibres) fibre splices

#### **Dedicated storage locations**

- · Separate location for optical device storage maintains full splice capacity
- · Storage basket for looped cable with tubes up to 2.4 mm in diameter
- · Integrated basket for drop cable, spare fibre storage

#### Fibre and cable technology independent

- Compatible with 652D fibre
- Minimum 1.2m over-length storage per splice side

Distributor

Control fibre/tube grow-out for up to +20 mm

Available in B6,C6 and C6H Sizes

### ACCESSORIES

#### Splice trays

Order separate splice trays to complete unloaded or partially loaded closures.

#### Patch trays

Order these trays for retrofit in TENIO-B6 or TENIO-C6 closures. These trays provide test/monitoring points.

Adaptors are ordered separately; only adaptors without flanges fit in these patch trays.

#### Field installable splitter sub-assemblies

Order this assembly and optical splitter module to add splitting capability to a new or previously installed TENIO closure.

To configure and receive a quotation for your Tenio, please contact our sales department.



#### MILLS MOBRA ARM MOUNTING KIT FOR COMMSCOPE TENIO CLOSURE

A complete mounting kit for mounting a standard CommScope Tenio enclosure directly to standard MOBRA arms.

#### The kit comprises:

- I x Tenio Enclosure Bracket
- 4 x Clevis Pins to attach Tenio to Bracket
- I x Tenio/Mobra Saddle Bracket

Visit millsltd.com for more info

#### PART NO. DESCRIPTION

S83-2581 MILLS MOBRA ARM MOUNTING KIT FOR COMMSCOPE TENIO CLOSURE



#### Sales/Technical Support tel: 020 8833 2626

2 J. J.

#### OFDC SPLICE CLOSURES FROM COMMSCOPE

Outdoor Fibre Distribution Closure (OFDC) family. Including three different series, the OFDC family accepts a wide range of distribution and drop cables thus responding to virtually all application requirements.

Each series has a common housing that can be configured to handle different connectivity solutions; such as splice-only, pre-connectorized drop cables, and fieldinstallable connectors (FIC) - significantly simplifying training.

The field-friendly design can be installed in pedestal, hand hole, pole or strand mount applications for fast and easy integration into the FTTx network. Strand, Ped and Pole mount bracket accessory kits are also available for easy installation.

#### B) OFDC-BG8.

The middle-size splicebox in the CommScope OFDC series. Finished with gel seals and splice cassettes.

- Indoor / outdoor use
- Enclosure class IP68
- Capacity of 66 joints
- 2 supply cables 11.5-15 mm
- 2 branches 8-11 mm
- 8 drop cables 1.5-5.5 mm
- 324 x 156 x 128 mm

C) OFDC-C12. The largest splicebox in the CommScope OFDC series. Finished with gel seals and splice cassettes.

- Indoor / outdoor use
- Enclosure class IP68
- Capacity of 96 joints
- · 2 supply cables 11.5-15 mm
- 2 branches 8-11 mm
- I2 drop cables 1.5-5.5 mm 370 x 314 x 118 mm

#### PART NO. DESCRIPTION

OFDC-A4 A) COMMSCOPE OFDC-A4 EXTERNAL FIBRE OPTIC SPLICE/PATCH CLOSURE OFDC-C12 B) COMMSCOPE OFDC-C12 EXTERNAL FIBRE OPTIC SPLICE/PATCH CLOSURE OFDC-BG8 C) COMMSCOPE OFDC-BG8 EXTERNAL FIBRE OPTIC SPLICE/PATCH CLOSURE S83-0115 D) MILLS MOBRA ARM MOUNTING KIT FOR COMMSCOPE OFDC BG-8 S83-5094 E) MILLS MOBRA ARM MOUNTING KIT FOR COMMSCOPE OFDC BG-12

- 760253871 F) COMMSCOPE UNIVERSAL FTTX BRACKET POLE/CHAMBER

D) Mills Mobra Arm Mounting Kit for Commscope OFDC BG-8

Accessory kit for mounting a standard Commscope OFDC BG-8 enclosure.

# Mounting Kit for Commscope OFDC BG-12

Accessory kit for mounting a standard Commscope OFDC BG-12 enclosure

#### F) CommScope Universal FTTx Bracket Pole/Chamber For OFDC & BUDI Enclosures.

Mounting brackets and accessorries for CommScope OFDC, BUDI and HST product solutions

 Universal FTTx bracket for OFDC enclosures

A) OFDC-A4. The smallest splicebox in

the CommScope OFDC series. Finished

with gel seals and splice cassettes.

Indoor / outdoor use Enclosure class IP68

Capacity of 24 joints

4 drop cables 2-6 mm Dimensions 211 x 94 x 70 mm

2 supply cables 4.5-12 mm

- Also suitable for BUDI IS & 2S enclosures
- DescriptionUniversal FTT<sub>x</sub> Bracket

Manufacturer Part Number:760253871



COMMSCOPE Distributor

THESE ARE CONFIGURABLE PRODUCTS Please call sales for further details



### email: sales@millsltd.com purchase online: www.millsltd.com

The kits comprise: • I x Star Shaped OFDC Saddle Bracket with pinch bolt 4 x M6 bolts and washers for

- attaching bracket to OFDC.
- E) S83-5094 Mills Mobra Arm

### **UNDERGROUND TOOLS**

# Mills supply an extensive range of equipment suitable to undertake underground cabling works.

Products include Rodders, Cable Drum Trailers, Cable Stands and Rollers, Cable Drum Jacks, Cable Pushers, Cover Lifters Cabling Guides and much more. All our equipment is designed to increase productivity and safety and to ensure the safe management and handling of underground cables. Here's just a small selection.

For further information and to see the complete range, please visit our website millsltd.com or call our highly trained sales staff on 020 8833 2626







**Mills** 

### **MILLS FIBRE HAND TOOLS**

# The Mills range of specialist fibre optic tools, fibre test equipment and fibre cleaning products are well known for quality, ease-of-use and value for money.

Here's just a brief overview of our extensive range. For further information and to see the complete range please visit our website millsltd.com or call our highly trained sales staff on 020 8833 2626



E00-2530 Mills MasterClass Single Hole Fibre Stripper



E00-6912 Mills Fibre Stripper IA







E00-6175 Mills MasterClass 5-Way Fibre Optic Stripper



E00-6626 Mills MasterClass Stripper Cable Sheath No 5



E70-5001 - Mills MasterClass Cable Sheath Stripping and Ringing Tool



E00-3819 Mills Stripmate ULW Drop Fibre Cable Stripper



C00-5465 Mills 1310/1550nm Optical Laser Source



B70-6917 Mills Heavy Duty Fibre Optic Toolbag



C05-0061 Mills Fibre Optic Cleaning Kit



C00-7676 Mills Live Fibre Identifier Pro



# **MILLS GENERAL HAND TOOLS**

Over 100 years Mills has built up an extensive range of specialist tooling for the telecommunication industry recognised for high quality, ease-of-use and value for money.

Here's just a brief overview of our extensive range. For further information and to see the complete range please visit our website millsltd.com or call our highly trained sales staff on 020 8833 2626



E00-4720 Mills Masterclass Heavy Duty Diagonal Cutter 160mm



E22-6386 ECO-TOOLS Mini Side Cutter 115mm (4 1/2")



E72-0617 Mills Flush Cutter 125 mm



E70-5013 Mills MasterClass RJ45 Ratchet Crimp Tool

A10-6197 - Fibre Splicer's Kit No.2 in Stanley Fatmax Waterproof Toolbox



N70-6372

Mills General Purpose Hacksaw



E00-6177 Mills CATV Coaxial Cable Stripper



C70-6865 Mills MasterClass | 10 Versatile Wire Inserter



E22-6585

**ECO-TOOLS Mini Saw** 

E00-1113

Mills MasterClass Cable

Cutters for 10.5mm OD

S83-0912 Mills Stripper Cable Sheath 8



F70-2884 - Mills MasterClass 7 Piece Professional 1000v Screwdriver Set



E66-6891 Mills MasterClass Cable Cutter No.1 - 450mm



E22-2624 ECO-TOOLS Cross Pein Hammer 450g (16oz)



E65-5463 Mills Scotchlok Crimp Plier



H87-7347 Mills VDE 1000V Insulated Cable Shears 200mm

Α		D	
	44 45	Dispenser Dropwire	64-65
Aerial Clamps	44, 45 62	Dispenser Diopwire Distribution Boxes	27
Anchor Stay Anchoring Clamps	46-47	Drawrope Dispenser	91
	40-47	Drop Cables	57
В		Drop Mandrel Clamps	47
Banding Tools	42	Dropwire Clamps	44-47
Barrel Clamps	47	Drum-Mate	90
Bellmouths	90-91	Duct Repair Kits	20, 21
Belts	66	Duct Sealing Kits	20-21
Blown Fibre	10, 11	Duct System	16-19
Bolts	50, 70	Ducting 13, 16	6, 17, 18, 19
Brace Coach Screw	40	E	
Brackets	22, 32, 44, 51	Extender Sockets	28
Brush Cylindrical	90	External Fibre Locking Mechanisms	45
С		Eyebolts	50
Cable Bearers	70	F	
Cable Cleats	51		00
Cable Drum Stand	91	F.I.G. (Fibre Installation Gun)	33 33-36
Cable Entry Kits	82	Fibre Blowing Machines Fibre Cables	10-12
Cable Guards	48-49	Fibre Cleaning Kit	92
Cable Lubricants	38	Fibre Identifier	92 92
Cable Management Bars	69	Fibre Strippers	92
Cable Management Kits	72-73	Fibre Terminals	58-59
Cable Pulling Winch	91	FODE's (Fibre Optic Dead Ends)	45
Cable Rollers	91	Frame & Covers	72-75
Cable Seals	15	G	-
Cable Sheaths	92-93		
Cable Ties	51	Grip Stay	44-45
Capping	24-25, 48-49	Grips Pulling	46
CBT Brackets	60	Guide Cabling	90-91
CBTs	56, 69	н	
Chambers	71-74	Hammers	93
Clamps Cable	44-47	Harnesses	66
Cleats	51	Hook Aerial Cable	42-43
CMJ	80, 82-83	Hydraulic Manhole Cover Lifter	91
Cobra Rod & Frame	90	1	
Compound 16A and DX5	31	Inflation Tools	22
Compressors	38	J	
Concrete Covers	72-75		
Concrete Packs	78	Joint Boxes	75
Connector Bends (Elephants Feet)	49	Joint Closures	78
Connectors	14	Joint Support Kit	69
Crimp Tool	93	К	
Cutters	93	Key Joint Box 5M	90



L		R	
Labellers	52, 53	Resin Packs	30-31
Labels	52-55	Rigging	65
Ladders	63	Ring Poleheads	40
Lanyards	66	Riser Guard	48
Lead ins	24	Road Repair	76-77
Letter Pole Labels	55	Rod Duct	90
Lifting Jacks	91	Rod Pusher	36
LMJ	84-85	Rod Telescopic	65
Locking Mechanism Fibre	45	S	
Locking Tool	14	Safety Equipment	66
Lubricant	38	Saws	93
М		Scissors	92
Malicoil	43	Screwdrivers	93
Measuring Gauge	14	Screws	40, 50
Microduct	13	Sling Wire Rope	65
Microduct Closure	15	Spanners	50
Microduct Seals	15	Splice Boxes	26-28
Minicables	11	Splice Closures	86-89
MMJ	81-83	Split Duct	16, 17, 18, 20
Mobra Arm Mounting Kits	88-89	Stakkabox	72-74
Mobra Brackets	69, 72	Step Manhole	70
Mobras	68	Step Pole	40
Mortar	77	Strips Aluminium	41
Multi-Function Joints	82-84	Suspension Clamps	48
N		Т	
Nail Bonding	41		52-54
Number Pole Labels	55	Tags TDUX Kit	22, 23
0		Tenio	88
Optical Laser Source	92	Tensioner 2B	65
P		Termination Boxes	26-27, 57
Pens	54	Toby Boxes	71
Pin Steel	41	Toolbags	92
Pliers	93	Toolbox	93
Plugs Creosoted	41	Tube Distribution Closure	15
Pole Brackets	42-43	U	
Pole Horse	64	UltraCrete	76-77
Pole Jack	64	ULW Cable	57
Pole Rings	40	UMJ	79, 82-83
Pole Steps	40	UPB (Universal Pole Bracket)	79, 02-03 42
Polemate	61		42
Printer Label Kits	52-53	W	
Prop Raising Telescopic	64	Washers	41
Pulling Eye	90	Wire Inserters	93

Mills

### Terms & Conditions



### STANDARD TERMS AND CONDITIONS OF BUSINESS

Mills Ltd. (the Supplier) agrees to supply goods/services to third parties (the Customer) on the following terms and conditions to the exclusion of any other terms and conditions and which may only be varied under the authority in writing of the Supplier. Read this page online at millsltd.com/terms-conditions

#### The customer's attention is drawn in particular to the provisions of clause 10.

#### Interpretation ... Definitions:

Business Day: a day (other than a Saturday, Sunday or public holiday) when banks in London are open for husiness

Conditions: the terms and conditions set out in this document as amended from time to time in accordance with clause 12.5.

Contract: the contract between the Supplier and the Customer for the sale and purchase of the Goods in accordance with these Conditions.

Customer: the person or firm who purchases the Goods from the Supplier.

Data Protection Legislation: the UK Data Protection Legislation and (for so long as and to the extent that the law of the European Union has legal effect in the UK) the GDPR and any other directly applicable European Union regulation relating to privacy.

Force Majeure Event: an event or circumstance beyond a party's reasonable control.

GDPR: General Data Protection Regulation ((EU) 2016/679).

Goods: the goods (or any part of them) set out in the Order.

Order: the Customer's order for the Goods, as set out in the Customer's written acceptance of the Supplier's quotation.

Specification: any specification for the Goods, including any related plans and drawings, that is agreed by the Customer and the Supplier.

Supplier: Mills Limited (registered in England and Wales with company number 00282704). UK Data Protection Legislation: any data protection legislation from time to time in force in the UK including the Data Protection Act 1998 or 2018 or any successor legislation.

Interpretation:

- 1.2
- a reference to a statute or statutory provision is a reference to such statute or provision as amended or re-enacted. A reference to a statute or statutory provision includes any subordinate legislation made under that statute or statutory provision, as amended or re-enacted. (a)
- any phrase introduced by the terms **including**, **include**, **in particular** or any similar expression shall be construed as illustrative and shall not limit the sense of the words preceding those terms. (b)
- (c) a reference to writing or written includes faxes and emails.
- Basis of contract 2.
- 2.1 These Conditions apply to the Contract to the exclusion of any other terms that the Customer seeks to impose or incorporate, or which are implied by trade, custom, practice or course of dealing.
- The Order constitutes an offer by the Customer to purchase the Goods in accordance with these Conditions. The Customer is responsible for ensuing that the terms of the Order and any applicable Specification submitted by the Customer are complete and accurate. 2.2
- The Order shall only be deemed to be accepted when the Supplier issues a form of acknowledgement accepting the Order, at which point the Contract shall come into existence. At this time, the Customer shall also ensure is provides the Supplier with full details of the individual whom is authorised to accept service of the delivery. In the event the details of the individual whom is authorised to accept Suncifier immediately. 2.3 Supplier immediately
- The Customer waives any right it might otherwise have to rely on any term endorsed upon, delivered with or contained in any documents of the Customer that is inconsistent with these Conditions. 2.4
- Any samples, drawing, descriptions to the Guatamer usis a inconsistent with these Controlloffs. Any samples, drawing, descriptions thater or adversing produced by the Suppler and any advectiptions or illustrations contained in the Supplier's catalogues or brochures are produced for the sole purpose of giving an approximate idea of the Goods referred to in them. They shall not form part of the Contract nor have any contractual force. 2.5
- A quotation for the Goods given by the Supplier shall not constitute an offer. A quotation shall only be valid for a period of 30 calendar days from its date of issue. 2.6

#### 3. Goods

- 3.1 The Goods are described in the Supplier's catalogue as modified by any applicable Specification.
- The Guoda are described in the supplier's scatalogue as modeled by any applicable specification. The Guatomer abilital indemnify the Supplier against all liabilities, costs, expenses, danges and losses (including any dirsct, indirect or consequential losses, loss of profit, loss of reportation and all interest, connection with any claim made against the Supplier for scatal or alleged infinigement of a dird party's intellectual property rights arising out of or in connection with the Supplier's use of the Specification. This clause 23 shall survive termination of the Contract. 3.2
- The Supplier reserves the right to amend the Specification if required by any applicable statutory or regulatory requirements. 3.3

#### Delivery 4.

- 4.1 The Supplier shall ensure that:
- ach delivery of the Goods is accompanied by a delivery note that shows the date of the Order of despatch, all relevant Customer and Supplier reference numbers, the type and quantity of the Goods (including the code number of the Goods, where supplicable), psecial storage instructions (if any) and, if the Goods are being delivered by instalments, the outstanding balance of Goods remaining to be delivered-out of the Goods. (a) delivered: and
- If the Supplier requires the Customer to return any packaging materials to the Supplier, that fact is clearly stated on the delivery note. The Customer shall make any such packaging materials available for collection at such times as the Supplier shall reasonably request. Returns of packaging materials shall be at the Supplier's expense. (b)
- The Supplier shall deliver the Goods to the location set out in the Order or such other location as the 4 2 The supplier shall believe the Goods to the location set out in the Order or such other location parties may agree, including but limited to the Supplier's premises (**Delivery Location**) at any tir the Supplier notifies the Customer that the Goods are ready.
- Delivery is completed on the completion of unloading of the Goods at the Delivery Location. 43
- Delivery is completed on the completion of unloading of the Goods at the Delivery Location. Any dates quoted for delivery are approximate only, and the time of delivery is not of the essence. The Supplier shall not be liable for any deliy in delivery of the Goods that is caused by a Force Miguery Event or the Customer's failure to provide the Supplier with adequate delivery instructions or any other instructions that are relevant to the supply of the Goods. If the Customer fails to accept or table delivery of the Goods within three Business Days of the Supplier notifying the Customer that the Goods are ready, then, except where such failure or deliy is caused by a Force Relevance Frenc or the Supplier's failure to comply with its obligations under the Contract. 4.4
- 4.5
- (a) delivery of the Goods shall be deemed to have been completed at 5.30pm on the third Business Day after the day on which the Supplier notified the Customer that the Goods were ready; and
- the Supplier shall store the Goods until delivery takes place, and charge the Customer for all related (b) costs and expenses (including insurance).
- 4.6 If four Business Days after the day on which the Supplier notified the Customer that the Goods were ready for delivery the Customer has not accepted delivery of them, the Supplier may resell or otherwise dispose of part or all of the Goods.
- In the event of any deliveries of any cabinets, these will be made to the curb side delivery only (from reception or loading bay only). If the Customer would like two individuals of the Supplier to assist with the delivery, this will be at the cost of the Customer, such cost to be agreed prior to delivery and determined exclusively by the Supplier. 4.7

- 4.8 If the Supplier delivers up to and including 5% more or less than the quantity of Goods ordered the Customer may not reject them.
- 49 The Supplier may deliver the Goods by instalments, which shall be invoiced and paid for separately. Any delay in delivery or defect in an instalment shall not entitle the Customer to cancel any other instalment. 4.10
- The Supplier will not be held responsible for any loss or damage to the Goods following completion of delivery to the Customer. 4.11
- Where the Supplier uses the services of third party couriers for the delivery of Goods, the Supplier will not be held responsible for any fees incurred by the Customer as a result of a failed delivery of Goods. 4.12 Where the Supplier is able to offer next working day delivery for the delivery of Goods, the Customer must order the Goods:
- before 5pm where the order is placed on Monday to Thursday inclusive; or
- (b) before 4pm where the order is placed on Friday; or
- before 3pm where the order relates to pallet deliveries placed from Monday to Friday inclusive. (c)
- Quality 5.
- 5.1 The Supplier warrants that Goods supplied will:
- (a) conform in all material respects with their description and any applicable Specification;
- be free from material defects in design, material and workmanship; and (b)
- be of satisfactory quality (within the meaning of the Sale of Goods Act 1979); and
- be fit for any purpose held out by the Supplier (d)
- but no warranty is given for any particular purpose other than the purpose commonly applied or those specified by the manufacturer. 5.2 Subject to clause 5.3, if:
- (a) the Customer gives notice in writing to the Supplier during the warranty period within a reasonable time of discovery that some or all of the Goods do not comply with the warranty set out in clause 5.1; (b) the Supplier is given a reasonable opportunity of examining such Goods; and
- the Customer (if asked to do so by the Supplier) returns such Goods to the Supplier's place of business at the Customer's cost, (c)
- the Supplier, once having had a reasonable opportunity to inspect the Goods and satisfy themselves they are defective, shall, at its option, repair or replace the defective Goods or refund the price of the defective Goods in full.
- Before any goods are returned to the Supplier in accordance with clause 5.2, the Customer shall obtain a RMA number before returning the goods. 5.3 5.4
- The Supplier reserves the right to refuse returns without a valid RMA number shown clearly on the exterior of the packaging. In such an event any items received will be returned to the Customer at the cost of the Customer. 5 5 The Supplier shall not be liable for the Goods' failure to comply with the warranty set out in clause 5.1
- n any of the following events: the Customer makes any further use of such Goods after giving notice in accordance with clause 5.2; (a)
- the defect arises because the Customer failed to follow the Supplier's oral or written instructions as to the storage, commissioning, installation, use and maintenance of the Goods or (if there are none) good trade practice regarding the same; (b)
- the defect arises as a result of the Supplier following any drawing, design or Specification supplied by the Customer; (c)
- the Customer alters or repairs such Goods without the written consent of the Supplier (e)
- the defect arises as a result of fair wear and tear, wilful damage, negligence, or abnormal storage or working conditions; or (f)
- the Goods differ from their description as a result of changes made to ensure they comply with applicable statutory or regulatory requirements. 5.6
- Except as provided in this clause 5, the Supplier shall have no liability to the Customer in respect of the Goods' failure to comply with the warranty set out in clause 5.1. 5.7
- The terms implied by sections 13 to 15 of the Sale of Goods Act 1979 are, to the fullest extent permitted by law, excluded from the Contract.
- 5.8 These Conditions shall apply to any repaired or replacement Goods supplied by the Supplier.
- - Keturns in the event the Customer needs to return the Goods because of a mistake or negligence on the part of the Customer, the Supplier reserves the right to invoice the Customer in respect of any costs or expenses, whatsoever and howsoever arising together with a handling feed of the higher of 120 or 23% of the total value of the Goods. For such returns, the customer must again request a RMA number prior to returning the Goods and the Goods must not be damaged in any way whatsoever on the sole view 6.1 of the Supplier, acting reasonably.
  - to the supplement, acting reasonably. In the event the Customer requests the collection of the Goods of a mistake or negligence on the part of the Customer, the Supplier reserves the right to invoice the customer in respect of any costs or expenses associated with the collection the higher of L15 excluding VAT or such collection flees as the Supplier deems reasonable on their sole view with regard to the collection location and logistical requirements. 6.2
  - 63 The Supplier will only accept the return or refund of Goods if defective and the provisions of this clause have been satisfied:
  - 1.1.1. Any Goods claimed to be damaged or defective must be returned with the appropriate receipt or evidence of purchase within 3 working days of purchase.
  - 1.1.2. Where it is agreed between the Supplier and Customer that the Goods were defective at the point of sale following an inspection of the Goods by the Supplier, the Supplier shall have the option to repair the Goods in the first instance or shall have the option to replace the Goods. This decision is at the sole discretion of the Supplier.
  - 1.1.3. Where an inspection of Goods requested by the Customer reveals the Goods are in proper working order, the Supplier reserves the right to invoice the Customer £50 excluding VAT for the inspection works undertaken
  - 7. Title and risk
  - 71 The risk in the Goods shall pass to the Customer on completion of delivery.
  - 7.2 Title to the Goods shall not pass to the Customer until the Supplier receives payment in full (in cash or cleared funds) for the Goods and any other goods that the Supplier has supplied to the Customer, in which case title to the Goods shall pass at the time of payment of all such sums; Until title to the Goods has passed to the Customer, the Customer shall:
- 7.3
- store the Goods separately from all other goods held by the Customer so that they remain readily identifiable as the Supplier's property; (a) (b)
  - not remove, deface or obscure any identifying mark or packaging on or relating to the Goods;
- maintain the Goods in satisfactory condition and keep them insured against all risks for their full price from the date of delivery; (c)
- (d) notify the Supplier immediately if it becomes subject to any of the events listed in clause 8.1; and give the Supplier such information relating to the Goods as the Supplier may require from time to time (e)



Sales/Technical Support tel: 020 8833 2626

Returns



### STANDARD TERMS AND CONDITIONS OF BUSINESS - CONTINUED

- Subject to clause 6.5, the Customer may resell or use the Goods in the ordinary course of its business (but not otherwise) before the Supplier receives payment for the Goods. However, if the Customer resells the Goods before that time: 7.4
- it does so as principal and not as the Supplier's agent; and (a)
- title to the Goods shall pass from the Supplier to the Customer immediately before the time at which resale by the Customer occurs. (b) 75
- If before title to the Goods passes to the Customer the Customer becomes subject to any of the events listed in clause 9.1, without limiting any other right or remedy the Supplier may have: the Customer's right to resell the Goods or use them in the ordinary course of its business ceases (a)
- odistoly (b) the Supplier may at any time:
- (i) require the Customer to deliver up all Goods in its possession that have not been resold, or irrevocably incorporated into another product; and
- (ii) if the Customer fails to do so promptly, enter any premises of the Customer or of any third party where the Goods are stored in order to recover them. 7.6
- The to any dood are surved to the Supplier following a request for inspection by the Customer where believed the Goods to faulty will past back to the Supplier. The Suppler recommends that all Goods should be unpacked and inspected prior to the Customer signing the delivery note. The Customer warrans that signature of the delivery note confirms that all the delivery note corresponding to the Customer's delivery address completes the delivery and the risk for the Goods will past to the Customer's delivery address completes the delivery and the risk for the Goods will past to the Customer's delivery address completes the delivery and the risk for the Goods will past to the Customer's delivery address completes the delivery and the risk for the Goods will past to the Customer's delivery address completes the delivery and the risk for the Goods will past to the Customer's delivery address completes the delivery and the risk for the Goods will past to the Customer's delivery address completes the deliver 7.7
- Price and payment
- The price of the Goods shall be the price set out in the Order, or, if no price is quoted, the price set out in the Supplier's published price list in force as at the date of delivery. The Supplier may, by giving notice to the Customer at any time 3 Business Days before delivery, increase the price of the Goods to reflect any increase in the cost of the Goods that is due to: 8 1
- any factor beyond the Supplier's control (including foreign exchange fluctuations, increases in taxes and duties, and increases in labour, materials and other manufacturing costs); (a)
- any request by the Customer to change the delivery date(s), quantities or types of Goods ordered, (b) the Specification; or
- any delay caused by any instructions of the Customer or failure of the Customer to give the Supplier adequate or accurate information or instructions. (c)
- The price of the Goods: 8 2
- (a)
- excludes amounts in respect of value added tax (**VAT**), which the Customer shall additionally be liable to pay to the Supplier at the prevailing rate, subject to the receipt of a valid VAT invoice; and excludes the excludes the excludes the subscription of the Goods, which shall be (b) invoiced to the Customer
- The Supplier may invoice the Customer for the Goods on or at any time after the completion of delivery. 84
- The supplier may invoice the customer for the subods on or at any time atter the completion of delivery. The Customer shall pay the invoice in full and in cleared funds within 30 days of the date of the invoice. Payment shall be made to the bank account noniniated in writing by the Supplier. Time for payment is of the essence. If the Customer hills to make any payment due to the Supplier under the Contract by the due date for payment, then the Customer shall pay interest on the overdue amount at the rate of 80 per snum above Lloyds Bank bear rate from time to form. Such interest shall accrue on a daily basis Customer and app the interest cagether with the overdue amount, whether before or after judgment. The Customer shall pay the interest cagether with the overdue amount.
- The Customer shall pay all anounces organic minimum or bottomer annual the second state of the second stat 85
- Termination
- Without limiting its other rights or remedies, the Supplier may terminate this Contract with immediate effect by giving written notice to the Customer if: 9.1
- the Customer commits a material breach of any term of the Contract and (if such a breach is remediable) fails to remedy that breach within 5 days of that party being notified in writing to do so; (a)
- and to reserve utata versary means any software party seeing induces an initiality of out out, the Customer states any reteor or action in connection with its centering administration to software the Customer states any reteor or action in connection with its centering administration to software restructuring), being wound up (whether volumarily or by order of the court, unless for the purpose of a software restructuring), having a receiver appointed to any of its assets or ceasing to carry on business or, if the steep or action is taken in another jurisdiction, in connection with any analogous procedure in the relevant jurisdiction; (b)
- the Customer suspends, threatens to suspend, ceases or threatens to cease to carry on all or a substantial part of its business; o
- the Customer's financial position deteriorates to such an extent that in the Supplier's opinion the Customer's capability to adequately fulfil its obligations under the Contract has been placed in jeopardy. (d) The Supplier, acting reasonably, is unable to fulfil the Order. (e)
- The supplier, acting reasonaby, is unable to num the order Without limiting its other rights or remedies, the Supplier may suspend provision of the Goods under the Contract or any other contract between the Customer and the Supplier rish order. The subject to any of the events listed in Cause 9.1 (d) or clause 9.1 (d), or the Supplier reasonably believes that the Customer is about to become subject to any of them, or if the Customer halts to pay any amount due under this Contract on the due dark for payment. 9.2
- Without limiting its other rights or remedies, the Supplier may terminate the Contract with immediate effect by giving written notice to the Customer if the Customer fails to pay any amount due under the Contract on the due date for payment. 93
- On termination of the Contract for any reason the Customer shall immediately pay to the Supplier all of 9.4 the Supplier's outstanding unpaid invoices and interest.
- ourse supporter a outstanting unpair invoces and interest. Termination of the Contract shall not affect any of the parties' rights and remedies that have accrued as at termination, including the right to claim damages in respect of any breach of this Contract that existed at or before the date of termination. 9.5
- Any provision of the Contract that expressly or by implication is intended to come into or continue in force on or after termination shall remain in full force and effect. 9.6
- Limitation of liability 10
- 10.1 Nothing in these Conditions shall limit or exclude the Supplier's liability for:
- death or personal injury caused by its negligence, or the negligence of its employees, agents or subcontractors (as applicable); (a)
- fraud or fraudulent misrepresentation; (b)
- (c) breach of the terms implied by section 12 of the Sale of Goods Act 1979; [or]
- defective products under the Consumer Protection Act 1987[; or] (d)
- any matter in respect of which it would be unlawful for the Supplier to exclude or restrict liability. (e) 102 Subject to clause 9.1:
- the Supplier shall under no circumstances whatsoever be liable to the Customer, whether in contract, tort (including neglignec), breach of statutory duty, or otherwise, for any loss of profit, or any indirect or consequential loss arising under or in connection with the Contract, and (a)
- of consequences analyging under un a concern respect of all other, save for matters arising from environmental matters where the Customer in respect of all other, save for matters arising from environmental matters where the Customer accepts liability, losses arising under or in connection with the Contract, whether in contract, tort (including negligence), breach of statutory duy, or otherwise, shall in no circumstances exceed the price of the Goods. (b)
- 10.3 Customers have a duty to use/operate all Goods supplied in accordance with manufacturers instructions

for safe use and to ensure that such instructions are made readily available prior to the use of the Good by any individual.

#### Force majeure н.

Neither party shall be in breach of this Contract nor liable for delay in performing, or failure to perform any of its obligations under this Contract if such delay or failure result from a Force Majeure Event. I the period of delay or non-performance continues for 4 weeks, the party not affected may terminate this Contract by giving 2 weeks written notice to the affected party General

#### 12 12.1 Assignment and other dealings

- The Supplier may at any time assign, transfer, mortgage, charge, subcontract or deal in any other manner with all or any of its rights or obligations under the Contract. (a)
- The Customer may not assign, transfer, mortgage, charge, subcontract, declare a trust over or deal (b) in any other manner with any or all of its rights or obligations under the Contract without the prior ritten consent of the Supplier

#### 12.2 Confidentiality.

- (a) Each party undertakes that it shall not at any time disclose to any person any confidential information concerning the business, affairs, customers, clients or suppliers of the other party or of any member of the group to which the other party belongs, except as permitted by clause 12.2 (b). For the purposes of this clause, **group** means, in relation to a party, that party, any subsidiary or holding company from time to time of that party, and any subsidiary from time to time of a holding company of that party.
- (b) Each party may disclose the other party's confidential information:

(i) to its employees, officers, representatives or advisers who need to know such information for the uproses of exercising the party's rights or carrying out its obligations under or in connection with this agreement. Each party shall ensure that its employees, officers, representatives or advisers to whom it discloses the other party's confidential information comply with this clause 12.2; and

(ii) as may be required by law, a court of competent jurisdiction or any governmental or regulatory authority

- (c) No party shall use any other party's confidential information for any purpose other than to exercise its rights and perform its obligations under or in connection with this agreement.
- 12.3 Trademark: The Customer shall not tamper with, alter the face or remove any of the names, logos or marks affixed to or marked on the goods or allow anyone else to do so. All Trademarks are acknowledged and belong to the Seller.
- 12.4 Entire agreement.
- This Contract constitutes the entire agreement between the parties and supersedes and extinguishes (a) all previous agreements, promises, assurances, warranties, representations and understandings between them, whether written or oral, relating to its subject matter.
- Each party agrees that it shall have no remedies in respect of any statement, representation, assurance or warranty (whether made innocently or negligently) that is not set out in this agreement. Each party agrees that it shall have no claim for innocent or negligent misrepresentation or negligent missistement (b) based on any statement in this agreement.
- 12.5 Mills Limited web account Customers will receive a password and account number upon completion of This climited web account customers will receive a password and account names approach competition of the registration process. All such information provided is confidential to the Customer and must not be shared with anyone whom is not the Customer or the Supplier. The Customer agrees to indennify the Supplier of any unauthorised use of the password or account number and any other breach of security
- 12.6 The Customer shall also ensure they sign out of their Mills Limited web account after every session and agrees to indemnify the Supplier of any unauthorised use of the password or account number and any other breach of security.
- 12.7 Variation. No variation of this Contract shall be effective unless it is in writing and signed by the parties (or their authorised representatives)
- Waiver. No failure or delay by a party to exercise any right or remedy provided under the Contract or by law shall constitute a waiver of that or any other right or remedy, nor shall its prevent or restrict the further exercise of that or any other right or remedy. No single or partial exercise of such right or remedy shall prevent or restrict the further exercise of that or any other right or remedy. 12.9
- 12.9 Severance. If any provision or part-provision of the Contract is or becomes invalid, illegal or unenforceable, it shall be deemed modified to the minimum extent necessary to make it valid, legal and enforceable. If such modification is not possible, the relevant provision or part-provision shall be deemed deleted. Any modification to or deletion of a provision or part-provision under this clause shall not affect the validity and enforceability of the rest of the Contract.

#### 12.10 Notices

- Any notice or other communication given to a party under or in connection with the Contract shall be in writing, addressed to that party at its registered office (if it is a company) or its principal place of business (in any other case) or such other address as that party may have specified to the other party in writing in accordance with this clause, and shall be delivered personally, sent by pre-paid first class post or other (a) next working day delivery service, commercial courier, or fax.
- A notice or other communication shall be deemed to have been received: if delivered personally, when (b) left at the address referred to in clause 12.7 (a)); if sent by pre-paid first class post or other next working day delivery service, at 900 am on the second Business Day after posting; if delivered by commercial courier, on the date and at the time that the courier's delivery receipt is signed, or, if sent by fax, one Business Day after transmiss
- The provisions of this clause shall not apply to the service of any proceedings or other documents (c) in any legal action
- 12.11 Third party rights. No one other than a party to this Contract shall have any right to enforce any of its terms
- 12.12 Governing law. The Contract, and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation, shall be governed by and construed in accordance with the law of England and Wales.
- 12.13 Jurisdiction. Each party irrevocably agrees that the courts of England and Wales shall have exclu iurisdiction to settle any dispute or claim (including non-contractual disputes or claims) arising out of or n connection with this Contract or its subject matter or formation.
- Data protection and data processing
- Data protection and sub processing Both parties will comply with all applicable requirements of the Data Protection Legislation. This clause 1 3 is in addition to, and does not relieve, remove or replace, a party's obligations under the Data Protection Legislation. In this clause 13, Applicable Laws means for so long as and to the exect that they apply to the Supplier) the law of the European Union, the law of any member state of the European Union addro Comestic UK Law; ad Domestic UK Law means the UK Data Protection Legislation and any other law that applies in the UK.
- 13.2 The parties acknowledge that for the purposes of the Data Protection Legislation, the Customer is the data controller and the Supplier is the data processor (where Data Controller and Data Processor have the meanings as defined in the Data Protection Legislation).





There's a Mills Business Development Manager covering pretty much everywhere in the UK and Ireland, offering technical support and advice to operators and contractors.

### Elliot Mills Business Development Director

Elliot joined Mills in 2015, as the fourth generation of the business and now heads up the Business Development team. He is always dedicated to providing a solution for any issues that are thrown his way and is a big believer in teamwork makes the dreamwork! elliot.mills@millsltd.com





### Ben Molloy Business Development Manager

Irishman Ben joined Mills in September 2021 as an internal sales account manager. He has since moved into the Business Development role, with a focus on Fremco fibre blowing machines, of which Mills is the exclusive partner for the UK and Ireland. ben.molloy@millsltd.com

### Elizabeth Bell Business Development Manager

Lizzy joined Mills in 2019 as an Internal Sales Account Manager. Since then, she has developed a wide range of knowledge within telecoms and has now grown into the Business Development role. She has a passion for ensuring her customers enjoy a smooth and reliable service at all times. She thrives on keeping her diary full of meetings! elizabeth.bell@millsltd.com





### Katie Sankhalpara Business Development Manager

Katie joined Mills in 2010, when copper was the core of the UK network build. Since then, she has been at the forefront of building knowledge in FTTx and supporting CP's and contractors in the push for Gigabit Britain. She loves travelling and plans to visit Costa Rica, country number 40 for her! katie.sankhalpara@millsltd.com





### Rob Carty Business Development Manager

Rob started with Mills at the beginning of 2020 and looks after our ISP and Contractor customers. He is also a Fremco fibre blowing machine specialist. At the weekend he enjoys playing football and golf and loves the occasional ski holiday.

robert.carty@millsltd.com

### Megan Holdship Business Development Manager

Megan joined Mills at the beginning of 2021 and has not looked back since. She started in internal sales and was promoted to Business Development Manager at the beginning of 2023. Megan works alongside our Contractor and ISP customers. She loves reading and her sausage dog, Baxter! megan.holdship@milldsltd.com



Whatever we can do to help, be it a fibre blowing machine demonstration, special project pricing support, product development and sourcing, help with putting together a customised tool kit, advice on PIA approved overhead and underground installations, help with smart energy installations or simple product information, this is the team to call.

# To request a visit, call **020 8833 2626** and ask for a member of the team



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Supporting operators in the race to get GIGABIT BRITAIN LIVE by 2025









