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There, we've put it all together.

Joints and fibre cables in one complete solution.

A brand of the

Prysmian
Group

Joints and fibre cables in one complete solution.

Now you're able to buy both the cable and the joint from one manufacturer – us. And our pieces magically complete other puzzles as well: when used together with our cables the joints are made to measure, but they fit perfectly with other fibre cables on the market too. Add that we have them in stock with short lead times and all the service that you might need right here. It's all laid out for you.
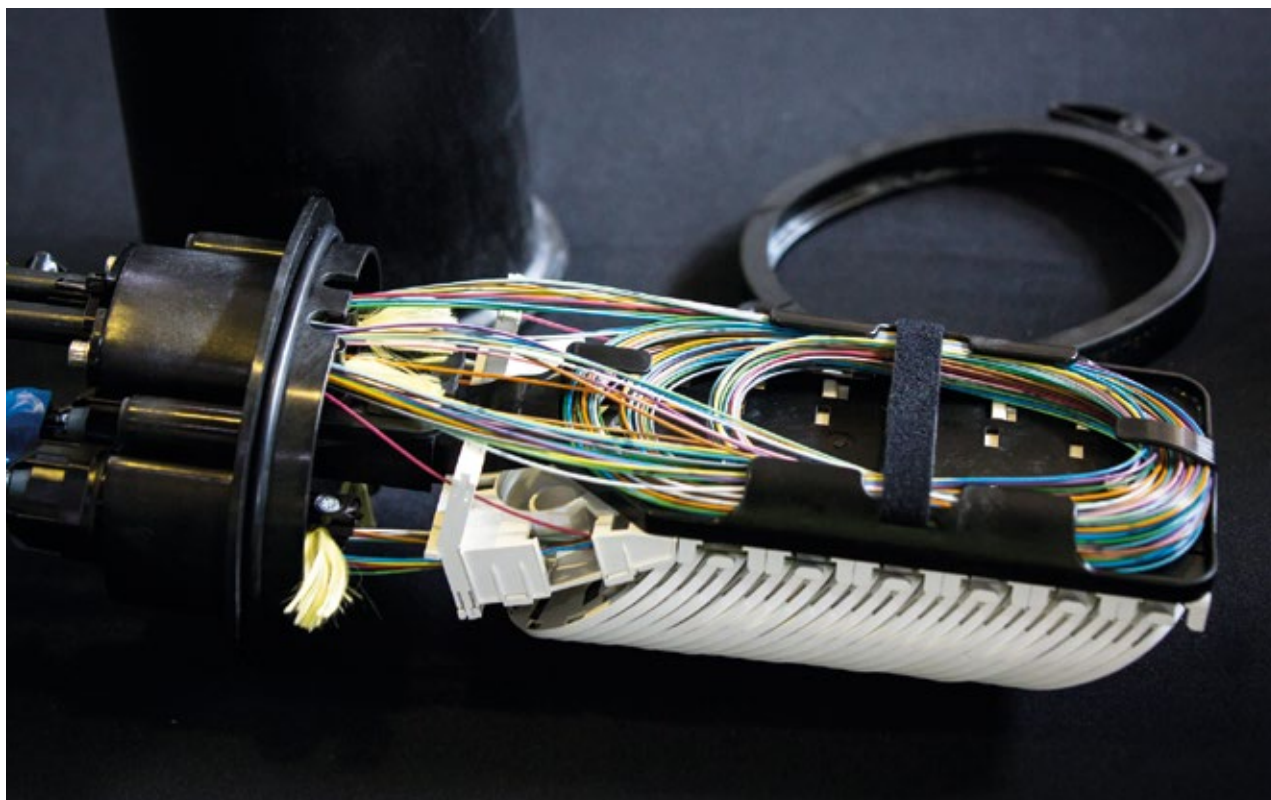
Contents

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Prysmian Universal Joints

From now on you only need one supplier to purchase both your fibre cables and joints. Our range of joints and accessories is perfectly compatible with our Prysmian smart solutions range of Standard Loose Tube, Mini Loose Tube and Flextube cables as well as other brands available in the marketplace.

Having only one supplier for both joints and cables means you only have to go to one place for support and service. In addition all our standard joints – small convenient Compact and Medium Multi-Function Joints (CMJ and MMJ) as well as Large Multi-Function Joints (LMJ) supporting our large Flextube designs – are stock items, securing fast and reliable deliveries.

Small Joint Closure – SJC

Part number: XJTSCO2335 – SJC with 2 cable entries for cable 5 – 9 mm
Part number: XJTSCO2470 – SJC with 2 cable entries for cables 6 – 12 mm

The SJC closure is a splice closure that is used for track, cable repair or branch applications. It has four 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 knock-out ports and two entry glands. Up to two additional entry glands can be ordered separately.

Features and benefits

- A compact closure for track and branch applications.
- Closure has four knock out ports.
- Each port accommodates a cable gland for cables 5-9 mm.
- Closure is supplied with two glands. Additional glands are available separately. See additional items.
- Contains a single splice tray for up to 24 splices.

- Splice tray accommodates 2.2 mm splice protectors.
- Cable management plate to secure cables and route fibres.
- Robust construction enabling direct buried applications.
- Can be used underground or can be mounted to a wall.
- Sealed to IP68 at 5 m and UV resistant to ISO 4892.

SMALL JOINT CLOSURE – SJC

Kit contents

1 × Base	1 × Cable management plate
1 × Cover	2 × Cable entry kits
1 × O Seal	1 × Splice tray (24 splices per tray)

Technical data

SMALL JOINT CLOSURE – SJC	
Number of cable ports	4 ports, 2 on each side
Maximum capacity each port	Cables or microducts: 5-9 mm
Number of splice cassettes	1
Maximum splice capacity	24
Minimum fibre bending radius	20 mm (fibre types ITU-T G.657 A1 and A2)
Splice protector type	Heat shrink 45 mm × 2.2 mm
Dimensions	L200 × W170 × D66 mm
Colour	Black
Material	Polypropylene housing and ABS inner parts
UV resistance	Resistant to ISO 4892 – 1000 hours
Temperature range	Transport and storage -30 °C to +60 °C Installation -10 °C to +50 °C Operation -20 °C to +60 °C
Cable retention	80 N
Impact resistance	10 Nm @ 20 °C, radius 100 mm
Static load	1000 N @ 20 °C on top surface of the box according to EN 50411-2-3
Water immersion	IP68 (No water ingress at 1.5 meter water pressure for 20 days)
Application area	Group 1 according to EN 124, placed minimum 25 cm below surface level Group 2 according to EN 124, placed minimum 30 cm below stone or concrete.

Logistics

Packing dimensions: L180 × W175 × D75 mm
(No. per euro pallet = 220 at 98 kg total weight)

Packed weight: 0.40 kg

Net weight: 0.39 kg

ADDITIONAL ITEMS

CABLE ENTRY KIT

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.

Part number: XJTSC02336

Cable diameter: 5 – 9 mm
Quantity: 1

Part number: XJTSC02471

Cable diameter: 6 – 12 mm
Quantity: 1

Part number: XJTSC02542

Cable diameter: 4 – 6 mm (2 entries)
Quantity: 1

SPLICE PROTECTORS

Part number: XKTSC00050

Splice protectors are used to protect the fibre splice.

Diameter: 2.2 mm
Length: 45 mm
Quantity: pack of 12

Compact & Medium Multi-Function Joint – CMJ / MMJ

Ideal for use as a cable chamber joint, track joint, spur joint or distribution joint due to their capacity and compact size.

Features and benefits

- Maximum capacity:
  CMJ: 144 single element fibres.
  MMJ: 288 single element fibres.
- Single element trays:
  CMJ: 12, each trays suitable to accommodate 12 splices.
  MMJ: 24, each trays suitable to accommodate 12 splices.
- CMJ: Ultra compact closure for the splicing of optical cables.
  MMJ: Compact closure for the splicing of optical cables
- Input manifold manages the tubes to a common routing channel and has the provision to mount up to four optical splitters.
- Integrated loop storage basket for mid-span applications and excess fibre storage.
- The joint is for use with heat shrink splice protectors of 1.3 mm in diameter and 30 mm in length. Splice trays compatible with 2.2 mm diameter and 45 mm in length splice protectors are optional.

- Supplied with a pole/wall mounting bracket.
- Splice trays hinge upwards individually allowing for full access to spliced fibres without disturbance to live fibres in adjacent trays.
- Entry kit:
  The joint has four circular ports for mechanical entry glands, one oval port for mechanical entry or heat shrink and two additional small circular ports also for heat shrink entry.
- Interchangeable:
  circular mechanical glands across CMJ, MMJ and LMJ, oval port entry kit across CMJ and MMJ.
- Closure is sealed to IP68.
- Pressure test valve for both flash testing and cable earthing can be fitted as an optional extra.

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COMPACT MULTI-FUNCTION JOINT – CMJ

Part number: CMJ-E-X-XXXX-X-Y-X

For up to 144 single element fibres.

Kit contents

1 × Base
1 × Cap
1 × Clamp
1 × O Seal
1 × Fibre routing manifold
2 × Tube retainer
4 × Tube retainer cover
1 × Loop storage basket
12 × Splice trays
(12 splices per tray)
1 × Pressure test valve (optional)
1 × Pole/wall bracket

Technical data

COMPACT MULTI-FUNCTION JOINT – CMJ			
Number of cable ports	4 circular and 1 oval (also contains 2 additional small emergency ports)		
Cable diameter range (mm)			
Circular Port	7 to 23 mm		
Multi Port (in circular port)	5 to 7 (4 Way), 3×2 mm flat cable (8 Way), 5 to 9 mm (2 way), 3 mm (8 way)		
Oval Port	7 to 21 (Heat Shrink), 5 - 14.8 mm (mechanical)		
Minimum fibre bending radius	20 mm		
Emergency Port	4 to 12 mm		
Cable retention (N)			
Circular Port	> Cable (Ø/45) × 1000 N with central strength member secured		
4 Way Multi Way (in circular port)	> 150 N for cables with Aramid yarns, > 30 N for cables without Aramid yarns		
Maximum number of splice trays	12 Single Element		
Maximum fibre capacity of Joint	144 Single Element		
Splitter capacity	4 optical splitters of 4 mm × 4 mm × 60 mm		
Required space envelope	L290 × W231 × D164 mm		
Operating temperature	-40 °C to + 70 °C (5 to 95 % RH)		
Cap / Base	GF Polypropylene		
Clamp	GF Nylon		
Splice Trays	FR ABS		
Closure Sealing	IP68 (5 metres) (IEC 61300-2-23)		
Optical	Tested 1310 Nm, 1550 Nm and 1625 Nm		
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
Packing Dimensions	L480 × W250 × D210 mm		
Packed Weight / Net Weight	2.4 Kg / 1.9 Kg		

MEDIUM MULTI-FUNCTION JOINT – MMJ

Part number: MMJ-E-X-XXXX-X-Y-X

For up to 288 single element fibres.

Kit contents

1 × Base
1 × Cap
1 × Clamp
1 × O Seal
1 × Fibre routing manifold
4 × Tube retainer
1 × Loop storage basket
24 × Splice trays (12 splices per tray)
1 × Pressure test valve (optional)
1 × Pole/wall bracket

Technical data

MEDIUM MULTI-FUNCTION JOIN – MMJ			
Number of cable ports	4 circular and 1 oval (also contains 2 additional small emergency ports)		
Cable diameter range (mm)			
Circular Port	7 to 23 mm		
Multi Port (in circular port)	5 to 7 (4 Way), 3×2 mm flat cable (8 Way), 5 to 9 mm (2 way), 3 mm (8 way)		
Oval Port	7 to 21 (Heat Shrink), 5 to 14.8 (mechanical)		
Minimum fibre bending radius	20 mm		
Emergency Port	4 to 12 mm		
Cable retention (N)			
Circular Port	> Cable (Ø/45) × 1000 N with central strength member secured		
4 Way Multi Way (in circular port)	> 150 N for cables with Aramid yarns, > 30 N for cables without Aramid yarns		
Maximum number of splice trays	24 Single Element		
Maximum fibre capacity of Joint	288 Single Element		
Splitter capacity	4 optical splitters of 4 mm × 4 mm × 60 mm		
Max Loop Storage Capacity	3.4 m of flexible type cable elements – up to 24 elements 2.8 m of loose tube elements – up to 12 elements 2.0 mm		
Required space envelope	L380 × W231 × D164 mm		
Operating temperature	-40 °C to + 70 °C (5 to 95 % RH)		
Cap / Base	GF Polypropylene		
Clamp	GF Nylon		
Splice Trays	FR ABS		
Closure Sealing	IP68 (5 metres) (IEC 61300-2-23)		
Optical	Tested 1310 Nm, 1550 Nm and 1625 Nm		
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
Packiwng Dimensions	L480 × W250 × D210 mm		
Packed Weight / Net Weight	2.4 Kg / 1.9 Kg		

Joint Customisation

All joints can be delivered with the required input and output cable kits, brackets and valves included. Joints are kitted with 1.3 mm splice protectors trays as standard and stock items, however, 2.2 mm splice protector trays are available as an option.

Options:

CMJ - 1.3 mm splice protectors
MMJ - 1.3 mm splice protectors

Oval port for heat shrink or mechanical entry:

– Can accommodate cables up to 23 mm in diameter.
– Sealed using adhesive lined heat shrink sleeves or using a mechanical oval port entry kit.

CMJ - 2.2 mm splice protectors
MMJ - 2.2 mm splice protectors

Up to four circular ports for mechanical entry glands:

– Can accommodate cables up to 23 mm in diameter.
– Sealed using a mechanical sealing gland.
– Gland can be assembled onto the cable away from the joint and simply plugged into the base.
– Two small circular emergency ports available for heat shrink entry: Can accommodate cables up to 12 mm in diameter.
– Multi-way entry glands are available to allow the installation of a number of cables into one circular port.

ADDITIONAL ITEMS

SILICONE GREASE

Part number: XBFSC00260

Silicone grease is used when installing a cable into one of the entry glands. A sachet of grease is supplied with each gland. The purpose of this spare tube of grease is for use adding additional cables into the 4 Way gland at a later date. Quantity: pack of 5.

EMERGENCY PORT ENTRY KIT

Part number: XKTSC00401

The Emergency port entry kit is used to install an additional cable into one of the two small circular ports of the joint. The kit comprises of a cable heat shrink, aluminium foil and a alcohol wipe.

OVAL PORT ENTRY KIT

Oval port entry kits are used to install a loop of cable into the oval port of the multi function joint. Contains all of the components required to prepare and install the cable, and route the cable fibres to the splice trays.

OVAL PORT HEAT SHRINK ENTRY KIT

Part number: XJTSC01756

The cables are sealed into the oval port using a heat shrink sleeve.

OVAL PORT MECHANICAL ENTRY KIT

Part numbers: see table

The cables are sealed into the oval port using a mechanical gland system comprising of two plates and a rubber block that fits inside the oval port of the joint.

OVAL PORT MECHANICAL ENTRY KIT				
Part numbers	Gland type	Sealing type	Min. cable diameter	Max. cable diameter
XJTSC02028	Oval	Mechanical	5.0	7.0
XJTSC02029	Oval	Mechanical	7.1	9.0
XJTSC02030	Oval	Mechanical	9.1	11.0
XJTSC02031	Oval	Mechanical	11.1	13.0
XJTSC01896	Oval	Mechanical	13.1	14.8

CIRCULAR PORT ENTRY GLANDS

Part numbers: see table

Circular port entry glands are used to install cables into one of the 10 ports of the CMJ/MMJ base. The glands can be installed onto the cable and then simply pushed into the base of the joint. The kit contains all of the parts necessary to seal the cable and secure the strength members. Multi-way glands are available to install multiple smaller cables into one circular port.

CIRCULAR PORT ENTRY GLANDS					
Part numbers	Gland type	Number of entries	Min. cable diameter	Max. cable diameter	Used for
XJTSC02278	Single	1	4.0	7.0	Single cable with Aramid or CSM
XJTSC01754	Single	1	7.1	20.0	Single cable with Aramid or CSM
XJTSC02193	Single	1	20.1	23.0	Single cable with Aramid or CSM
XJTSC02186	Dual	2	5.0	9.0	For interface with flexible conduit
XJTSC01755	Quad	4	5.0	7.0	Up to four cables with Aramid
XJTSC02260	8 Way	8	3.0	3.0	Up to 8 cables – 3.0 mm diameter
XJTSC01878	8 Way	8	2.0	3.0	Up to 8 flat cables 2.0 × 3.0 mm

ADDITIONAL ITEMS

SPLICE PROTECTORS

Part number: XPESC00057

Splice protectors are used to protect the fibre splice.

Diameter: 1.3 mm
Length: 30 mm
Quantity: pack of 50

Part number: XPESC00053

Splice protectors are used to protect the fibre splice.

Diameter: 2.2 mm
Length: 45 mm
Quantity: pack of 50

SUPPORT TOOL

Part number: XJTSC00075

The support tool allows the user to support the joint within a portable workbench. The bracket is designed to fit most commercially available workbenches.

GLAND SPANNER

Part number: XJTSC02320

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. The cupped profile is used to tighten or loosen a gland already installed into the joint in cases where additional cable entry is required.

SPLITTERS

A range of optical splitters are available to install into the joint. The splitters have 2 metre input and output legs with 900 micron G657. A1 fibre. For full technical information on the splitters refer to data sheet AC005.

Part number:	Type
XSPSG00002	1 × 4
XSPSG00003	1 × 8
XSPSG00004	1 × 16
XSPSG00005	1 × 32

Large Multi-Function Joint – LMJ

The LMJ is used for access applications within the external optical network and can be used for loop applications. It can accommodate a wide variety of cables such as loose tube, mini loose tube, central loose tube, Flextube and blown fibre. The LMJ comes in three different sizes: small, medium and large.

Features and benefits

- Maximum capacity: the largest version of the joint can cater up to 4032 splices.
- Large closure for optical cable splicing with two vertical tray stacks.
- Two input manifold manages the tubes to a common routing channel and enables the fibres to be passed from stack to stack.
- Mechanical oval port and central loop storage for mid-span applications and excess fibre storage.

- Mechanical oval port cable entry for cables up to 18 mm.
- Ten circular port cable entries. Cables are sealed using mechanical sealing glands. Cables from 4 to 23 mm 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 1 × 2 to 2 × 64.
- Closure is sealed to IP68.

Kit contents

1 × Closure cap	1 × Pressure test valve	**3 Joint sizes**	**3 Tray sizes**
1 × Closure base	1 × Joint chassis	48 × Splice trays	12 × Splices per tray
1 × Seal	2 × Input manifold	80 × Splice trays	24 × Splices per tray
1 × Clamp		112 × Splice tray	36 × Splices per tray

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LARGE MULTI-FUNTION JOINT – LMJ

UPGRADE KITS

CLOSURE UPGRADE KITS – LMJ

Part numbers: see table

Closure upgrade kits can be used to upgrade a joint to a larger size after it has been installed. The upgrade kit contains a larger cap and additional chassis plates. It contains all of the fixings required and an installation guide to describe the upgrade process. It does not include additional splice trays which are ordered separately.

CLOSURE UPGRADE KITS – LMJ			
Part numbers	Description	From (Tray capacity)	To (Tray capacity)
XJTSC02321	Short cap to medium cap	48	80
XJTSC02322	Short cap to long cap	48	112
XJTSC02323	Medium cap to long cap	80	112

LARGE MULTI-FUNCTION JOINT – LMJ				
Part numbers	Joint size	Total tray capacity	Splice capacity	Required space envelope (L × D) mm
XJTSC02356	Short cap	48 (24 + 24)	576	493 × 310
XJTSC02357	Short cap	48 (24 + 24) DD	1152	493 × 310
Contact Prysmian	Short cap	48 (24 + 24) TD	1728	493 × 310
XJTSC02359	Medium cap	80 (40 + 40)	960	600 × 310
XJTSC02360	Medium cap	80 (40 + 40) DD	1920	600 × 310
Contact Prysmian	Medium cap	80 (40 + 40) TD	2880	600 × 310
XJTSC02362	Long cap	112 (56 + 56)	1344	721 × 310
XJTSC02363	Long cap	112 (56 + 56) DD	2688	721 × 310
Contact Prysmian	Long cap	112 (56 + 56) TD	4032	721 × 310

The three LMJ's can be delivered with the required input and output cable kits. Joints are kitted with 1.3 mm splice protectors trays as standard and stock items, however, 2.2 mm splice protector trays are available as option only as single element version.

ADDITIONAL ITEMS

OVAL PORT ENTRY KIT

Part numbers: see table

The LMJ oval port mechanical entry kit is used to install a loop of cable into the oval port of the LMJ. 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 mechanical gland system comprising of two plates and a rubber block that fits inside the oval port of the joint. It is important to order the correct kit dependant on the diameter of the cables to be sealed.

OVAL PORT MECHANICAL ENTRY KIT – LMJ				
Part numbers	Gland type	Sealing type	Min. cable diameter	Max. cable diameter
XJTSC02382	Oval	Mechanical	6.0	8.0
XJTSC02269	Oval	Mechanical	8.1	10.0
XJTSC02270	Oval	Mechanical	10.1	12.0
XJTSC02271	Oval	Mechanical	12.1	14.0
XJTSC02272	Oval	Mechanical	14.1	16.0
XJTSC02273	Oval	Mechanical	16.1	18.0
XJTSC02555	Oval	Mechanical	18.1	20.0
XJTSC02556	Oval	Mechanical	20.1	21.5

CIRCULAR PORT ENTRY GLANDS

Part numbers: see table

Circular port entry glands are used to install cables into one of the 10 ports of the LMJ base. The glands can be installed onto the cable and then simply pushed into the base of the joint. The kit contains all of the parts necessary to seal the cable and secure the strength members. Multi-way glands are available to install multiple smaller cables into one circular port.

CIRCULAR PORT ENTRY GLANDS – LMJ					
Part numbers	Gland type	Number of entries	Min. cable diameter	Max. cable diameter	Used for
XJTSC02278	Single	1	4.0	7.0	Single cable with Aramid or CSM
XJTSC01754	Single	1	7.1	20.0	Single cable with Aramid or CSM
XJTSC02193	Single	1	20.1	23.0	Single cable with Aramid or CSM
XJTSC02186	Dual	2	5.0	9.0	For interface with flexible conduit
XJTSC01755	Quad	4	5.0	7.0	Up to four cables with Aramid
XJTSC02260	8 Way	8	3.0	3.0	Up to 8 cables - 3.0 mm diameter
XJTSC01878	8 Way	8	2.0	3.0	Up to 8 flat cables 2.0 × 3.0 mm

GLAND SPANNER

Part number: XJTSC02320

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. The cupped profile is used to tighten or loosen a gland already installed into the joint in cases where additional cable entry is required.

SUPPORT TOOL

Part number: XJTSC02274

The support tool allows the user to support a joint within a portable workbench. The bracket is designed to fit most commercially available workbenches. It is dimensioned to enable a splicing machine to be placed on the workbench for close access to the splicing trays.

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ADDITIONAL ITEMS

SPLICING MODULES

Part numbers: see table

Single element modules for both 12f, 24f and 36f per tray can be utilised using 1.3 mm splice protectors. A 12f per tray module is also available for 2.2 mm splice protectors.

SPLICING MODULES – LMJ						
Part numbers	Tray type	Splice protector	No of trays	Fibres per tray	Fibre capacity	Tray positions used
XJTSC02144	Single Element 12	1.3 mm × 30 mm	4	12	48	4
XJTSC02261	Single Element 12	2.2 mm × 45 mm	4	12	48	4
XJTSC02262	Single Element 24	1.3 mm × 30 mm	4	24	96	4
XJTSC02468	Single Element 36	1.3 mm × 30 mm	4	36	144	4
XJTSC02582	Ribbon	Ribbon	2	24	48	4

SPLITTER MODULES

Part numbers: see table

Can be installed into the LMJ. The splitter modules are supplied with a splitter and the input fibre pre-installed into the bottom tray and the output fibres installed into a number of trays above depending on the size of the splitter. The splitter input tray is coloured green. Standard splitters use G657A1 fibre. Refer to data sheet AC005 for splitter technical information.

SPLITTER MODULES – LMJ								
Part numbers	Splitter ratio	Tray type	Input tray	Output trays	Spare trays	Outputs per tray	Splice protector mm	Tray positions used
XJTSC02310	1 × 4	SE12	1	1	2	4	1.3 × 30	4
XJTSC02312	1 × 8	SE12	1	1	2	8	1.3 × 30	4
XJTSC02314	1 × 16	SE12	1	2	1	8	1.3 × 30	4
XJTSC02316	1 × 32	SE24	1	2	1	16	1.3 × 30	4

SILICONE GREASE

Part number: XBFSC00260

Silicone grease is used when installing a cable into one of the entry glands. A sachet of grease is supplied with each gland. The purpose of this spare tube of grease is for use adding additional cables into the 4 Way gland at a later date. Quantity: pack of 5.

SPLICE PROTECTORS

Splice protectors are used to protect the fibre splice.

Part number: XPESC00057

Diameter: 1.3 mm
Length: 30 mm
Quantity: pack of 50

Part number: XPESC00053

Diameter: 2.2 mm
Length: 45 mm
Quantity: pack of 50

WALL MOUNTING BRACKET

Part number: XJTSC02275

The wall mounting bracket allows a Joint to be mounted vertically against a wall face or bulk head. The bracket is secured using either bolts or screws (provided). All jointing operations can be carried out whilst the joint is mounted in the bracket.

HANDLE KIT

Part number: XJTSC02548

The Handle Kit contains two handles and two long cable ties. The handles can be strapped to the LMJ cap to ease lifting in and out of the jointing pit.

Linking the future

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