

Installation & Maintenance Manual for FO Splice Box

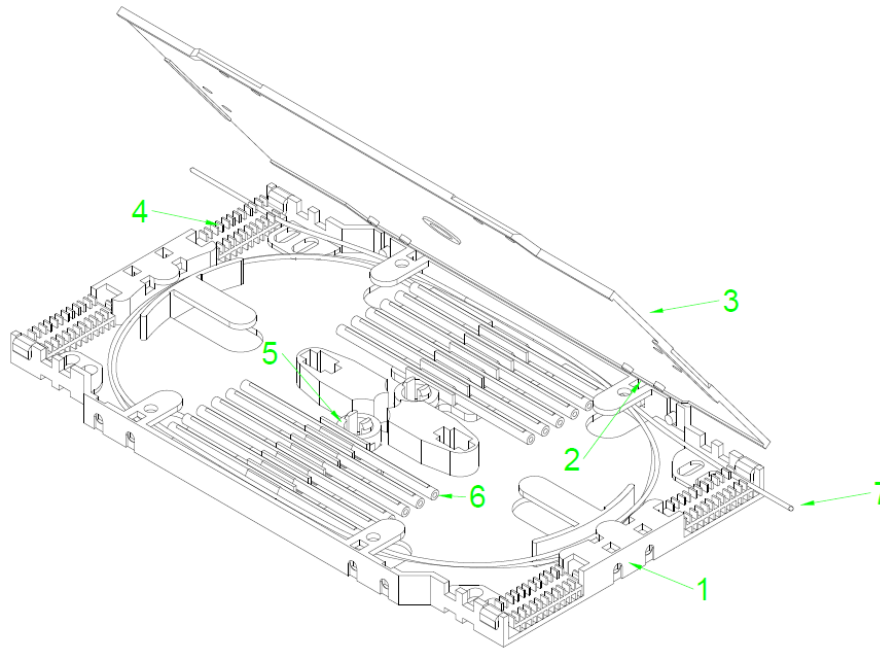
Specifications

Types	FXLS2.FO* - FO Splice Box fitted with fibre splice tray(s) (FXL fabricated steel enclosure) GR.TFO* - FO Splice Box fitted with fibre splice tray(s) (GR GRP enclosure)	
Hazardous Area	CML16ATEX3009X IECEX CML 16.0008X	
ATEX certificate number	CML16ATEX3009X	
IECEX certificate number	IECEX CML 16.0008X	
CE number	CE 0102	
Certification coding for ATEX/IECEX	Ex II 2 GD	Ex op pr IIC T5 Gb Ex tb IIIC Db T95°C
Ambient temperature range	-50°C to +55°C	
IP Rating	IP 66	
Frequency range	10MHz – 10GHz	
FO Splice Tray	Baseefa14ATEX0368U IECEX BAS 14.0169U	
ATEX certificate number	Baseefa14ATEX0368U	
IECEX certificate number	IECEX BAS 14.0169U	
Minimum bend radius	35mm	
Optical fibre quantity	6 with 1 splice protector holder, 12 with 2 splice protector holders	
Diameter	0.9 or 1.1mm	
Mechanical		
FXLS2.FO*		
Material	316L	
Finish	Electropolished	
Enclosure cover screw torque	2Nm	
GR.TFO.*		
Material	Glass Fibre Reinforced Polyester	
Finish	As moulded	
Enclosure cover screw torque	3.5Nm	
Entry threadform	M20 clearance holes	
Conformity	EN 60079-0: 2012+A11: 2013 EN 60079-31: 2014 EN 60529	EN 60079-28: 2015 DIN 47662

Typical Fibre Installation



Component identification



- 1) Splice tray
- 2) Hinge
- 3) Cover/lid
- 4) Strain relief
- 5) Splice protector holder
- 6) Splice protector
- 7) Optical fibre

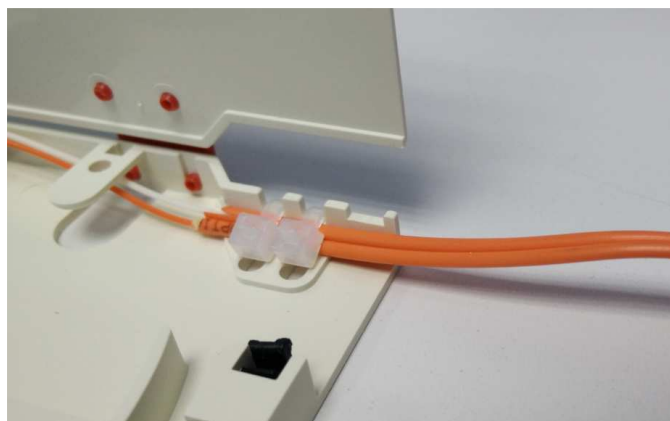
Installation

To minimise the risk of ignition by electrical apparatus in hazardous areas efficient installation, inspection and maintenance of apparatus and systems is essential and the work should be carried out by suitably trained personnel in accordance with the prevailing code of practice.

- 1) The enclosure should be mounted via the external fixing feet that are provided. The enclosure may be used as a template when marking fixing points, alternatively, the dimensions of the fixing centres are provided in the associated enclosure datasheet. Expanding bolts should be used when mounting on concrete, or suitably sized bolts, nuts and anti-vibration washers when mounting to a steel framework.
- 2) Only fusion splices may be stored within the splice tray.
- 3) The fibre optics may only be mounted with the supplied splice holders and heat-shrink splice protectors.
- 4) The splice tray must be securely mounted using the provided mounting stud.

Fibre splicing procedure:

- 1) Remove the cable insulation and multifibre loose buffers using a suitable tool.
- 2) Fasten the multifibre to the lower part of the splice tray using cable ties.



- 3) Make optical fibre splices in accordance with the instructions of the optical fibre splicing machine.



- 4) Lay the optical fibres inside the splice cassette in accordance with diagram shown above.
- 5) Place the splice protector into the splice protector holder.
- 6) Repeat for the remaining optical fibres.
- 7) Close the lid to the splice tray.
- 8) Make sure that the optical fibres and cable ties are firmly secured within the splice tray.
- 9) Cable entries should be made only with suitably approved Ex e/tb glands noting that this equipment is suitable for use with gas group IIC. IP ratings should be suitable for the intended area of installation.
- 10) All unused entries should be fitted with suitably approved Ex e/tb stopping plugs.
- 11) Once the cover is fitted, ensure that all fasteners are fully tightened.

Maintenance

Electrical apparatus installed in hazardous locations has design features that make it operationally safe under normal conditions. In order to ensure that the apparatus remains serviceable the following points should be attended to on a periodical basis. The period between inspections is not fixed, but should be adjusted to suit the environmental conditions where the equipment is situated. An initial inspection after 12 months of use is suggested.

- 1) Ensure that all fasteners are present.
- 2) Ensure that the enclosure is not damaged or distorted so as to prevent proper functioning of the gaskets.
- 3) Ensure that the enclosure is not corroded such as to affect its IP rating.
- 4) Ensure that all entry devices are in good condition and securely tightened.
- 5) Ensure that the certification label is present and legible
- 6) Ensure all optical fibres are held securely in place.
- 7) Ensure that any modifications that have been performed are in accordance with the previous section, making reference to the certification if necessary.
- 8) With the cover refitted, ensure that all fasteners are fully tightened.

Note: If the splice tray is damaged, it must be replaced. Repair work is not permitted.

Special Conditions for Safe Use

- 1) Connected optical bundles must be sufficiently supported within the equipment to prevent strain on the individual fibres as they enter the component.