Ordering Guide

for FOSC-OPGW product range

TE connectivity

Ordering Guide of the Optical Grounding Wire Closure (FOSC-OPGW)

This document provides assistance with the selection of FOSC Closure Organizers for optical grounding wire applications. It includes the following sections:

1 Product description

The FOSC-OPGW closure is a single-ended closure system (cable entry/exit at the same end), environmentally sealed and specially developed for use on the optical grounding wires (earthing wires) of overhead electrical power network lines.
It can be used as a:
- Track Joint (TJ)
- Spur Joint (SJ)

FOSC-OPGW closures are suitable for use above ground attached to high voltage towers, poles, walls or other support structures.
The product is designed to allow splicing of the required fibers, for example, to connect OPGW cables to each other or to connect the OPGW cable to a central office or to make a branch to conventional plastic sheathed fiber-optic cable. The FOSC-OPGW closure provides termination and sealing for both OPGW and conventional fiber optic cables. The product can be tailored to almost any required configuration by adding an extra basket and/or extra FOSC trays.

2 Ordering information

2.1 Order Quantity / Lead times

Products and accessories are grouped in three classes.

Class A	standard products, small MOQ
Class B	standard products, standard MOQ
Class C	special products, higher MOQ, longer lead times, due to the lead time of the specific components in those products

The class of a component or accessory provides additional information on:

MOQ	Minimum Order Quantity
SPQ	Standard Packaging Quantity

Table 1: Component classification overview

		A		B		C	
		MOQ	SPQ	MOQ	SPQ	MOQ	SPQ
Closures	**A / B**	1	1	9	1	9	1
Accessories		1	1	See accessories list			

MOQ and SPQ are used to calculate the correct order quantity of the desired component and/or accessory:

$$\text{Order quantity} = \text{MOQ} + n \times \text{SPQ} \qquad (n \geq 0)$$

2.2 How to order this product

2.2.1 Order closure and accessories separately

For maximum flexibility, the closure (paragraph 2.3) and the accessories (paragraph 2.4) can be ordered as separate items.
Note that only following closures can be ordered by single piece (Closure Class A):
- FOSC-OPGW-B4NT-0-NNC
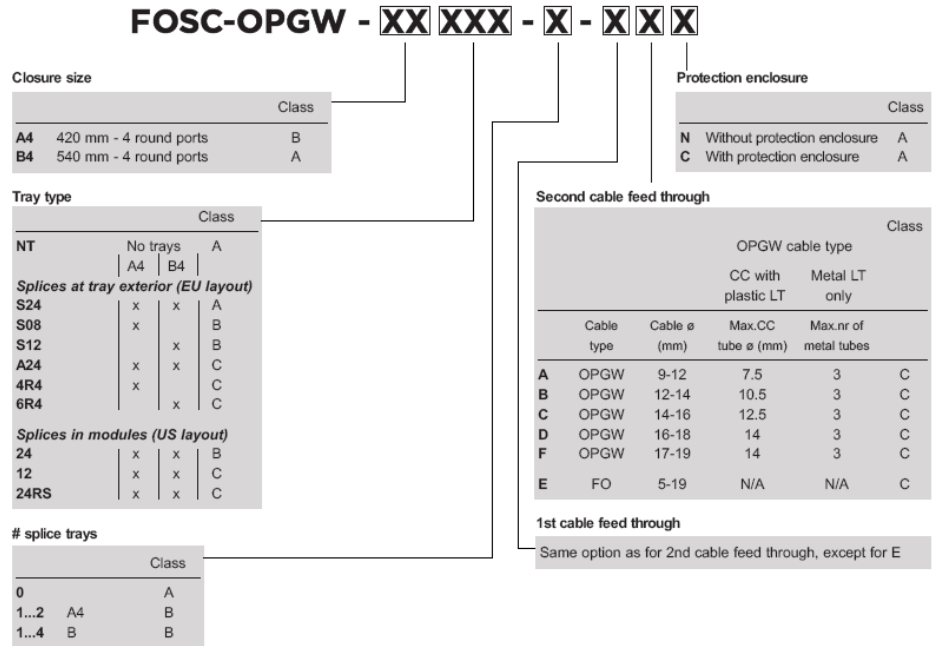- FOSC-OPGW-B4NT-0-NNN

2.2.2 Order a customized kit

Customer specific kits can be created using the closure name string (paragraph 2.3) and the accessories list (paragraph 2.4).
Note that a customized closure kit is always class B or C:
- The classification of the kit is B if all subcomponents are class A or B.
- The classification of the kit is C if one or more subcomponents are class C

2.3 Closure name string

FOSC-OPGW - XX XXX - X - X X X

Closure size

		Class
A4	420 mm - 4 round ports	B
B4	540 mm - 4 round ports	A

Tray type

			Class
NT	No trays		A
	A4	B4	
Splices at tray exterior (EU layout)			
S24	x	x	A
S08	x		B
S12		x	B
A24	x	x	C
4R4	x		C
6R4		x	C
Splices in modules (US layout)			
24	x	x	B
12	x	x	C
24RS	x	x	C

 # splice trays

		Class
0		A
1...2	A4	B
1...4	B	B

Protection enclosure

		Class
N	Without protection enclosure	A
C	With protection enclosure	A

Second cable feed through

					Class
			OPGW cable type		
			CC with plastic LT	Metal LT only	
	Cable type	Cable ø (mm)	Max.CC tube ø (mm)	Max.nr of metal tubes	
A	OPGW	9-12	7.5	3	C
B	OPGW	12-14	10.5	3	C
C	OPGW	14-16	12.5	3	C
D	OPGW	16-18	14	3	C
F	OPGW	17-19	14	3	C
E	FO	5-19	N/A	N/A	C

1st cable feed through

Same option as for 2nd cable feed through, except for E

Standard Kit content
- Galvanized steel mounting frame
- Stainless steel shot-gun protection enclosure (optional)
- Pole mounting kit (incl. mounting on a traverse strut)
- Dome   Clamp   O-ring
- Base including a tray tower to hold the splicing trays
- 1 oval port seal kit including cleaning tissues, aluminium tape and abrasive strips
- Loose tube storage sleeve for closure size A/B (not shown on the picture below)
- Installation instructions

2.4 Closure accessories

2.4.1 Cable feed-through & seal kit for OPGW cable

Name	Description	Class	MOQ	SPQ
FOSC-OPGW-CSEAL-A	for OPGW dia. 9-12 mm and central tube dia. max. 7.5 mm or 3 metal tube	C	1	1
FOSC-OPGW-CSEAL-B	for OPGW dia. 12-14 mm and central tube dia. max. 10.5 mm or 3 metal tube	C	1	1
FOSC-OPGW-CSEAL-C	for OPGW dia. 14-16 mm and central tube dia. max. 12.5 mm or 3 metal tube	C	1	1
FOSC-OPGW-CSEAL-D	for OPGW dia. 16-18 mm and central tube dia. max. 14 mm or 3 metal tube	C	1	1
FOSC-OPGW-CSEAL-F	for OPGW dia. 17-19 mm and central tube dia. max. 14 mm or 3 metal tube	C	1	1

2.4.2 Cable feed-through & seal kit for plastic sheathed FO cable

Name	Description	Class	MOQ	SPQ
FOSC-OPGW-CSEAL-E	for FO dia. 5-19 mm	C	1	1

2.4.3 Other closure accessories

Name	Description	Class	MOQ	SPQ
FOSC-OPGW-MCAP	Stainless steel shot-gun protection enclosure	C	1	1
FOSC-OPGW-CLAMP-3/4	OPGW cable clamp for two extra cables	C	1	1

2.4.4 Splicing trays and storage baskets

See the ordering guide of FOSC splicing trays and baskets for more information and ordering references of storage baskets and splicing trays.
Note: if a mixture of tray types is used, notice that trays with splices at the exterior of the tray do not fit on top of trays with splice modules, they only fit underneath.

2.4.5 Mounting kits

Name	Description	Class	MOQ	SPQ
MCO-MOBRA-1	Pole mounting bracket (included in a standard kit)	C	1	1

2.5 Tools

Name	Description	Class	MOQ	SPQ
FACC-HEAT-GUN-220V	1460W, 220V hot air gun to shrink the cable seals. The kit includes a hot air gun reflector.	C	1	1
FACC-HEAT-GUN-110V	1460W, 110V hot air gun to shrink the cable seals. The kit includes a hot air gun reflector	C	1	1
FACC-S-HOT-AIR-TORCH	Sievert hot air gas torch kit incl. handle and nozzle.	C	1	1

3 Product guide

3.1 Closure dimensions
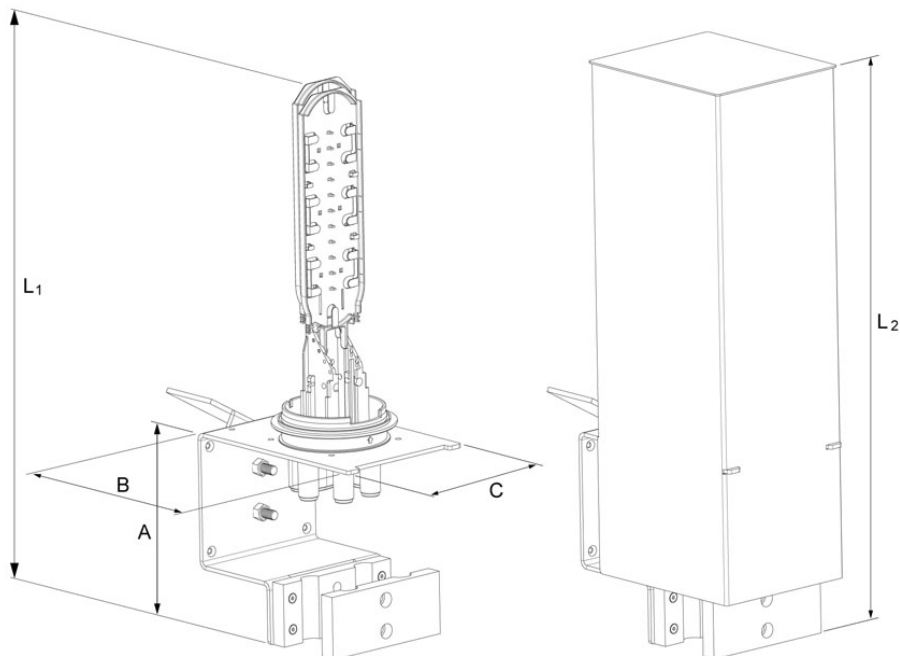
FOSC OPGW	Dimensions (in mm)				
Product size	L1 (nom.)	L2	A (nom.)	B (nom.)	C (nom.)
OPGW with FOSC-400A	610	730	250	278	190
OPGW with FOSC-400B	710	730	250	278	190

3.2 Closure capacity

	Closure size	
	A4	B4
FOSC tray capacity		
# FOSC trays (no storage basket)	2 / 3	4
# FOSC trays (with storage basket)	2	4
Splicing capacity		
Single fiber	48 / 72	96
Ribbon 12		
Cable ports		
1 oval port for 2 cables with ∅ range each	10-25 mm	10-25 mm
# round ports	4	4
cable ∅ range of the round ports	5-19 mm	5-19 mm

3.3 Closure accessories

3.3.1 Cable feed-through & seal kits for OPGW cable

FOSC-OPGWW-CSEAL-A (or –B, -C, -D, -F)
These kits contain all the necessary components to perform the feed-through and the protection and sealing of one cable:

a. Heat-shrinkable tubing seal to connect the central tube from the cable to the metal feed-through (b), including abrasive paper, cleaning tissue and alu-tape
b. Metal feed-through.
c. Cable built-up for single metal loose tube cable
d. Cable built-up for multiple metal loose tube cable

Select the **FOSC-OPGW-CSEAL-...** kit for the OPGW cable from the table in section 2.4.1 taking into account the OPGW cable diameter and central tube diameter or number of metal loose tubes.

3.3.2 Cable feed-through & seal kits for fiber-optic cable

FOSC-OPGWW-CSEAL-E
These kits contain all the necessary components to perform the feed-through and the protection and sealing of one cable.

a. Heat-shrinkable tubing seal, including abrasive paper, cleaning tissue and alu-tape
b. Metal dummy rod

Select the **FOSC-OPGW-CSEAL -...** kit for the conventional fiber optic cable from the table in section 2.4.2 taking into account the FO cable diameter.

3.3.3 Other closure accessories

FOSC-OPGW-MCAP
Stainless steel shot-gun protection enclosure

FOSC-OPGW-CLAMP-3/4
OPGW cable clamp for two extra cables

3.3.4 Mounting kits

Pole mounting kit
MCO-MOBRA-1
This kit allows mounting the FOSC-OPGW on a traverse profile of a high voltage tower, without the need to drill holes into the metal construction.

FOSCMCO4.JPG
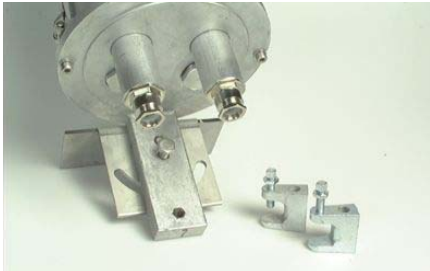
MCOMOBRA.JPG

3.4 Tools

FACC-HEAT-GUN-220V
A 1460W, 220V heat gun to shrink the cable seals as recommended.

FACC-HEAT-GUN-110V
A 1460W, 110V heat gun to shrink the cable seals as recommended.

TO26.JPG

FACC-S-HOT-AIR-TORCH
A flameless gas torch that can be used to shrink the cable seals if no 1500W power source is available.

TO11.JPG

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