



Fibre Wall Outlet

SC SX / LX DX adaptor and connectorised drop cable

Application/Product Description

The Pre-Terminated Fibre Wall Outlet (FWO) solution provides a fibre optic cable connection point within the end user home which is a connectorised to bare end solution which allows all splicing of fibre cable to be performed at the Floor Distribution or Building Entry Point.

The Pre-Terminated FWO uses a 2 fibre G657.A1 cable and can accommodate a maximum of 2 SC SX or LC DX adaptors. The pre-terminated adaptor is placed in to the wall outlet and the cable is routed out of the rear exit point. The pre-terminated cable is available in lengths from 5m to 25m in 5m steps and from 30m to 100m in 10m steps.

The small single socket size enclosure can be discretely mounted on the wall close to the building entry point providing the connection point for a router or active equipment. The closure is manufactured from ABS plastic and tamper proof latches secure the cover to the base. The closure has 2 bottom and 1 rear cable entry point, and two fibre adaptor mounting points (SC simplex or LC duplex).

Fibre management features ensure a minimum bend radius of 25mm is maintained as the bare fibre is routed through the outlet and press fit strain relief features secure the incoming cable whilst cable tie anchor points are provided for additional strain relief.

Screw holes allow for easy installation and positioning, alternatively the recessed base means the closure can be fastened with adhesive, maintaining the outlet flush to the wall.

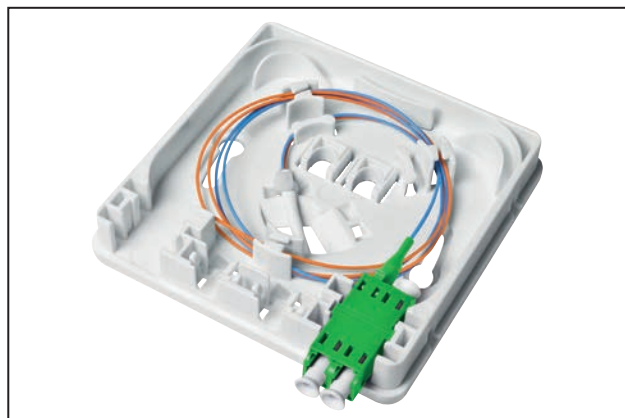
FWOA Technical Data

Dimensions (mm)	H	W	D
	85	85	16
Type of Adaptors	2 x SC Simplex 2 x LC Duplex		
Quantity of Adaptors	2		
Maximum No of Splices	2		
Weight (kg)	0.045		
Housing Material	ABS		
Colour	RAL 9003 White		
IK Rating	IK07		

Drop Cable Technical Data

Mechanical Data	Specification	
Number of Fibres	2	
Nominal Outer Diameter (mm)	3.0 ± 0.15	
Nominal Weight (kg/km)	7.0	76
	Short-term	Long-term
Minimum Bend Radius (mm)	20D	10D
Max. Tensile Strength (N)	150	80
Max. Crush Resistance (N/100mm)	500	100

*Actual Values for cable weight and diameter may deviate from the values given in the table above.



Fibre Wall Outlet with LC Adaptor and connectorised drop cable through the wall (Image for illustration purposes only)

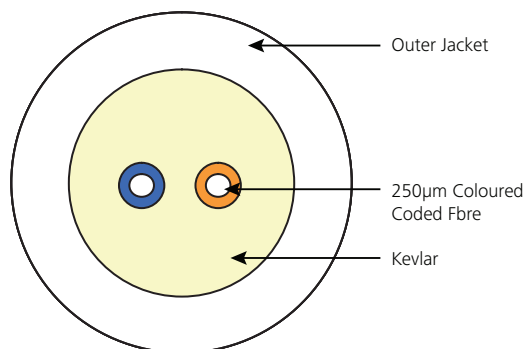
Features and Benefits:

- Maximum capacity: 2 SC Simplex or LC Duplex adaptors
- Pre-terminated internal connection cable 5m - 100m
- Install directly on the wall or onto a flush-mount back box
- Cable entry at the base or through the rear of the unit
- Recessed base for use with adhesive
- Accommodates up to 2 splice protectors (up to 45mm)
- Quality surface finish
- Tamper-proof latches
- Positive fibre management to ensure a 25mm minimum bend radius

Standard Kit Accessories:

- 2 x Screws
- 2 x Bushings
- 2 x Splice Sleeves 45mm
- 1 x Laser Sticker

Cable Construction





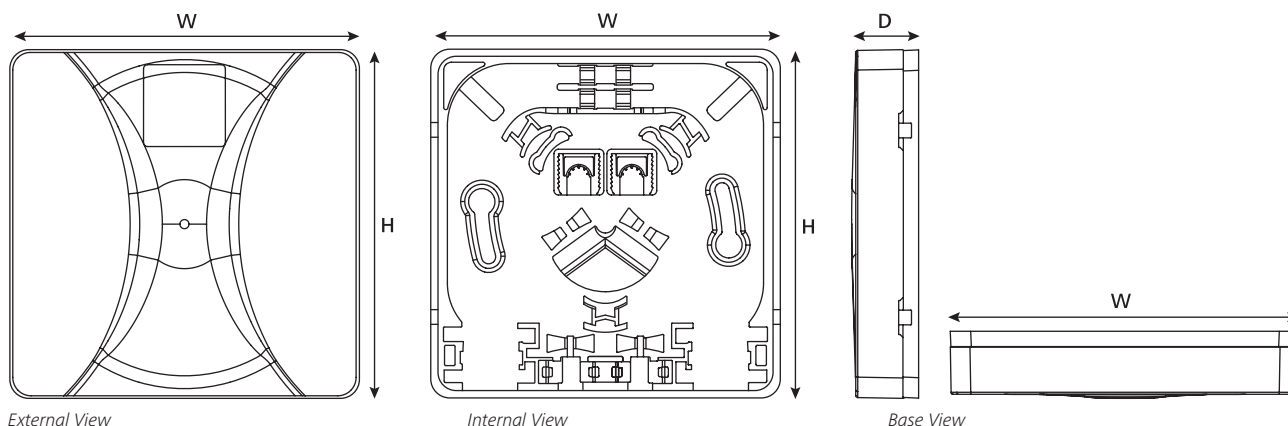
Characteristics	Conditions	Specified Values
Geometrical characteristics		
Cladding diameter (µm)		125.0±0.7
Cladding non-circularity (%)		≤0.7
Coating diameter (µm)		242±5
Coating/cladding concentricity error (µm)		<12
Core/cladding concentricity error (µm)		≤0.5
Curl (m)		≥4

Environmental characteristics 1310nm, 1550nm & 1625nm		
Temperature cycling (dB/km)	-60°C to +85°C	≤0.05
Temperature-humidity cycling (dB/km)	-10°C to +85°C, 4% to 98% RH	≤0.05
Water immersion (dB/km)	23°C, 30 days	≤0.05
Dry heat (dB/km)	85°C, 30 days	≤0.05
Damp heat (dB/km)	85°C, 85%RH, 30 days	≤0.05

Mechanical specification		
Proof test (kpsi)		≥100
Macro bending induced loss		
1Turns @10mm Radius (dB)	1550nm	≤0.5
1Turns @10mm Radius (dB)	1625nm	≤1.5
10Turns @15mm Radius (dB)	1550nm	≤0.05
10Turns @15mm Radius (dB)	1625nm	≤0.20
100Turns @25mm Radius (dB)	1310,1550 & 1625nm	≤0.01
Dynamic stress corrosion susceptibility parameter		27

Optical characteristics		
Attenuation (dB/km)	1310nm	≤0.4
	1383nm	≤0.4
	1490nm	≤0.3
	1550nm	≤0.3
	1625nm	≤0.3
Attenuation vs. Wavelength max. A difference (MHz*km)	1285~1330nm	≤0.03
	1525~1575nm	≤0.02
Dispersion coefficient (ps/(nm*km))	1550nm	≤18
	1625nm	≤22
Zero dispersion wavelength (nm)		1304~1324
Zero dispersion slope (ps/(nm ² *km))		≤0.092
PMD maximum individual fibre (ps/km ^{1/2})		≤0.1
PMD design link value (ps/km ^{1/2})		≤0.04
Cable cut off wavelength (nm)		≤1260
Mode field diameter (µm)	1310nm	8.8~9.6
	1550nm	9.9~10.9
Group index of refraction	1310nm	1.469
	1550nm	1.470

Technical Diagrams



Part Numbers

Part No.	UNS No.	Description
FWOA-VXW21-010/WH	857-01296	Fibre Wall Outlet, SC SX APC Adpt, 10.0m SC SX APC Drop Cable, 1 x SC SX APC Connector
FWOA-VVW22-010/WH	857-01339	Fibre Wall Outlet, 2 x SC SX APC Adpt, 10.0m SC SX APC Drop Cable, 2 x SC SX APC Connectors
FWOA-SXW21-010/WH	857-01352	Fibre Wall Outlet, SC SX PC Adpt, 10.0m SC SX PC Drop Cable, 1 x SC SX APC Connector
FWOA-SSW22-010/WH	857-01365	Fibre Wall Outlet, 2 x SC SX PC Adpt, 10.0m SC SX PC Drop Cable, 2 x SC SX APC Connectors
FWOA-AXW21-010/WH	857-01378	Fibre Wall Outlet, LC DX APC Adpt, 10.0m Drop Cable, 1 x LC SX APC Connector
FWOA-LXW21-010/WH	857-01391	Fibre Wall Outlet, LC DX PC Adpt, 10.0m Drop Cable, 1 x LC SX PC Connector

The above part codes show 10m lengths only. Other variants are available on request.