



- Sealed to IP66 IP68 and IP69K when mated
- IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- Simplex LC-Type Interface
- Cabled Versions: OS1, OM1, OM3
- Cable range from 5 to 450m
- Diameter over coupling ring 19.7mm
- Flex, Inline and Rear Panel
- Colour coded O-rings & washers for easy identification purposes
- Secure, proven locking system
- Flame Retardant moulding material - Polyamide UL94-V0
- Tamper proof construction
- Sealing caps available to maintain IP68 rating
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

CIRCULAR FIBER CONNECTORS  
**4000 Series - Simplex LC Fiber Buccaneer**

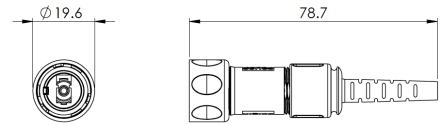


Flex to LC Fiber Cable



PXF4050XXX

- Patchcords with IP68 connectors
- Available in 5 - 450m lengths
- Supplied with LC fiber plug
- 0S1, 0M1 or 0M3 cable options
- Termination options

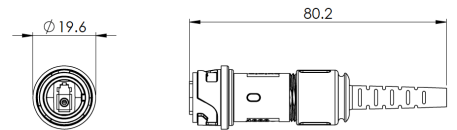


Inline to LC Fiber Cable



PXF4051XXX

- Patchcords with IP68 connectors
- Available in 5 - 450m lengths
- Supplied with LC fiber plug
- 0S1, 0M1 or 0M3 cable options
- Termination options

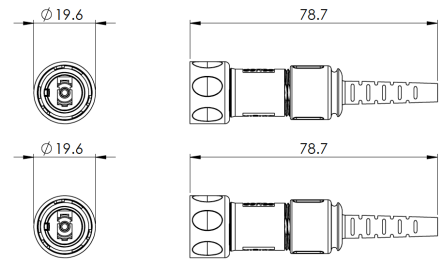


Flex to Flex Fiber Cable



PXF4054XXX

- Patchcords with IP68 connectors
- Available in 5 - 450m lengths
- Supplied with LC fiber plug
- 0S1, 0M1 or 0M3 cable options
- Termination options

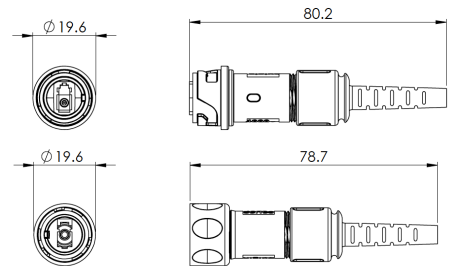


Flex to Inline Fiber Cable



PXF4055XXX

- Patchcords with IP68 connectors
- Available in 5 - 450m lengths
- Supplied with LC fiber plug
- 0S1, 0M1 or 0M3 cable options
- Termination options

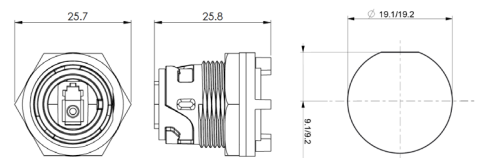


Rear Panel Mounting Connector



PXF4053XXX

- LC fiber adapter
- Leaded with LC connector
- Socket variant mates with PXF4050 type cables



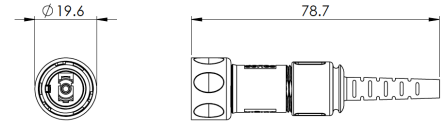
Part no.	Description
PXF4053	IP-Sealed LC Type, Rear Panel Mounted, LC Connector at Rear.

Flex Cable Connector



PXF4050

- Mates with Inline or Panel mounting versions PXF4051, PXF4053
- 30° turn locking ring
- Supplied without LC Connector

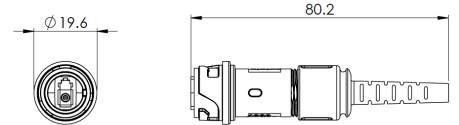


Inline Cable Connector



PXF4051

- Mates with Flex Cable connector PXF4050
- For Inline connection
- Supplied without LC Connector

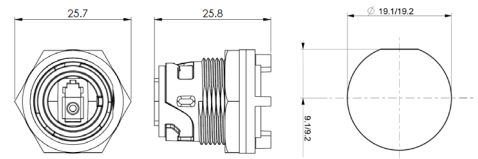


Rear Panel Mounting Connector



PXF4053

- Mates with Flex Cable connector PXF4050
- Rear Panel Mounting
- Single hole fixing
- Supplied without LC Connector



Sealing Caps



- Sealing caps to maintain IP rating when connectors are not in use

Part no.	Description
PXP4081	Sealing cap for use with PXF4050's
PXP4082	Sealing cap for use with PXF4051
PXP4083	Sealing cap for use with PXF4053's

O-ring & washer pack



Part no.	Description
PXP4089/YL	Yellow coloured O-ring and washer pack
PXP4089/BL	Blue coloured O-ring and washer pack
PXP4089/RD	Red coloured O-ring and washer pack
PXP4089/WH	White coloured O-ring and washer pack
PXP4089/GN	Green coloured O-ring and washer pack

## Cables & connectors

### Mechanical

Sealing:	IP69K, DIN40050-9 IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks) IP66, EN60529:1992+A2:2013
Panel Mount Nut:	1.0-1.1Nm (91lb.in)
Operating temperature:	-25°C to +70°C
Salt Mist:	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

### Material:

Body Mouldings:	Polyamide
Flammability Rating:	UL94v-0
UV Resistance:	To EN 500021:1999

### Optical

IEC 61753-1:	
Max Insertion Loss:	0.2db } single mode
AVG Insertion Loss:	0.1db } single mode

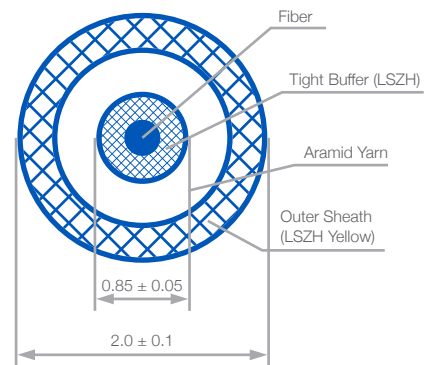
O Rings:	Silicone
Panel Sealing O Ring:	Silicone

**RoHS** Compliant

## Fiber Specification - SECTION OSI

Item	Detail	Specification
Fiber type:	/	G.657A2 (OS1)
Wavelength:		1310nm
Mode field diameter:	Range of nominal values	8.6µm-9.5µm±0.4µm
Cladding diameter:	Dimension	125.0µm±0.7µm
Core concentricity error:		≤0.5µm
Cladding non-circularity:		≤1%
Coating diameter:	Dimension	245µm±10µm
Coating-cladding concentricity error:		≤12.5µm
Cut-off wavelength:		≤1260nm
Uncabled fiber macrobending loss:	Radius(mm)	15    10    7.5
	Number of turns	10    1    1
	Max. at 1550nm(dB)	0.03    0.1    0.5
	Max. at 1625nm(dB)	0.1    0.2    1.0
Min. proof stress:		0.69GPa
Dynamic fatigue parameter:		≥20
Chromatic dispersion coefficient:	λ0min	1300nm
	λ0max	1324nm
	S0max	0.092ps/nm2×km
Other parameters meet standard:	ITU-T G.657	

**Cable Construction (in mm):**



## Optical Cable Specification

### Structure Parameter

Tight buffer:	Material	LSZH (Low-Smoke Zero-Halogen)
	Outer diameter	0.85mm±0.05mm
Strength member:	Material	Aramid yarn
Outer sheath:	Sheath material	LSZH (Low-Smoke Zero-Halogen)
	Sheath color	Yellow(Pantone 136C) Chromatic aberration E: ≤4.0
	Min. sheath thickness	0.3mm
	Dimension	2.0mm±0.1mm

### Transmission Performance

Attenuation coefficient:	Wavelength 1310nm~1625nm	≤0.4dB/km
	Maximum at 1383nm ±3nm	≤0.4dB/km
	Wavelength 1550nm	≤0.3dB/km
Macrobending loss	Radius(mm)	15    10    7.5
	Number of turns	10    1    1
	Max. at 1550nm(dB)	0.03    0.1    0.5
	Max. at 1625nm(dB)	0.1    0.2    1.0

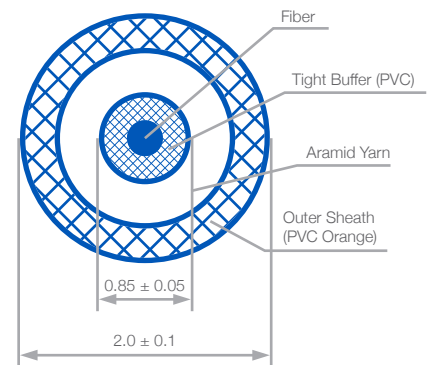
### Other performances

Min. bending radius of work	10mm
Other parameter meet standard	IEC60794-2-50, YD/T1258.2, ITU-T G.657

## Fiber Specification - SECTION OMI

Item	Detail	Specification
Fiber type:	/	62.5/125(A1b) (OM1)
Core diameter:	Dimension	62.5µm±3µm
Cladding diameter:	Dimension	125.0µm±2µm
Core-cladding concentricity error:		≤3µm
Cladding non-circularity:		≤2%
Core non-circularity:		≤6%
Primary coating diameter (uncoloured):	Dimension	245µm±10µm
Primary coating-cladding : concentricity error:	Radius(mm)	≤12.5µm 37.5
Uncabled fiber macrobending loss:	Number of turns At wavelengths 850nm & 1310nm	100 0.5(dB)
Min. proof stress:		0.69GPa
Dynamic fatigue parameter:		≥20
Minimum modal bandwidth- length:	Wavelength 850nm	200MHzkm
Product for overfilled launch:	Wavelength 1310nm	500MHzkm
Other parameters meet standard:	IEC 60793-2-10	

**Cable Construction (in mm):**

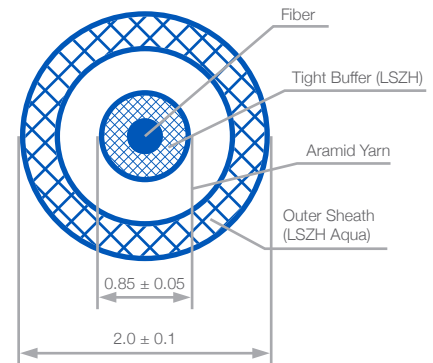


## Optical Cable Specification

Item	Specification
<b>Structure Parameter</b>	
Tight buffer:	Material: PVC Outer diameter: 0.85mm±0.05mm
Strength member:	Material: Aramid yarn
Outer sheath:	Sheath material: PVC Sheath color: Orange(Pantone 164C) Chromatic aberration E: ≤4.0 Min. sheath thickness: 0.3mm Dimension: 2.0mm±0.1mm
<b>Transmission Performance</b>	
Attenuation coefficient	Wavelength 850m: ≤3.5dB/km Wavelength 1300nm: ≤1.5dB/km
<b>Other performances</b>	
Min. bending radius of work	30mm
Other parameter meet standard	IEC60794-2-50, YD/T1258.2

**Fiber Specification - SECTION OM3**

Item	Detail	Specification
Fiber type:	/	50/125(OM3)
Core diameter:	Dimension	50 $\mu$ m $\pm$ 2.5 $\mu$ m
Cladding diameter:	Dimension	125.0 $\mu$ m $\pm$ 2 $\mu$ m
Core-cladding concentricity error:		$\leq$ 3 $\mu$ m
Cladding non-circularity:		$\leq$ 2%
Core non-circularity:		$\leq$ 6%
Primary coating diameter (uncoloured):	Dimension	245 $\mu$ m $\pm$ 10 $\mu$ m
Primary coating-cladding concentricity error		$\leq$ 12.5 $\mu$ m
Uncabled fiber macrobending loss	Radius(mm)	15    7.5
	Number of turns	2    2
	Max. at 850nm(dB)	0.1    0.2
	Max. at 1310nm(dB)	0.3    0.5
Min. mode bandwidth:	Overfilled launch bandwidth at 850nm	1500MHz.km
	Overfilled launch bandwidth at 1310nm	500MHz.km
	Effective laser launch bandwidth at 850nm	2000MHz.km
Min. proof stress:		0.69GPa
Dynamic fatigue parameter:		$\leq$ 20
	$\lambda$ 0min	1295nm
	$\lambda$ 0max	1340nm
Chromatic dispersion coefficient:	S0max(from1295nm $\leq\lambda$ 0 $\leq$ 1310nm)	0.105ps/nm <sup>2</sup> ×km
	S0max(from1310nm $\leq\lambda$ 0 $\leq$ 1340nm)	0.000375(1590- $\lambda$ <sub>v</sub> ) ps/nm <sup>2</sup> ×km
Other parameters meet standard:	IEC 60793-2-10	



**Optical Cable Specification**

Item	Specification
<b>Structure Parameter</b>	
Tight buffer:	Material: LSZH
	Outer diameter: 0.85mm $\pm$ 0.05mm
Strength member:	Material: Aramid yarn
Outer sheath:	Sheath material: LSZH
	Sheath color: Aqua(Pantone 3248C) Chromatic aberration E: $\leq$ 4.0
	Min. sheath thickness: 0.3mm
	Dimension: 2.0mm $\pm$ 0.1mm
<b>Transmission Performance</b>	
Attenuation coefficient:	Wavelength 850nm: $\leq$ 3.5dB/km
	Wavelength 1300nm: $\leq$ 1.5dB/km
Macrobending loss:	Radius (mm): 15    7.5
	Number of turns: 2    2
	Max. at 850nm(dB): 0.1    0.2
	Max. at 1310nm(dB): 0.3    0.5
<b>Other performances</b>	
Min. bending radius of work:	10mm
Other parameter meet standard:	IEC60794-2-50, YD/T1258.2



<b>PXF405 x</b>	<b>X</b>	<b>XX</b>
<p><b>Body Styles</b></p> <p>PXF4050 PXF4051 PXF4053 PXF4054 PXF4055</p>	<p><b>Cable Type</b></p> <p>Blank = No cable A = OS1 (Singlemode) B = OM1 (Multimode) C = OM3 (Multimode)</p>	<p><b>Cable Length (m)</b></p> <p>Blank = No Cable AA = 1 (1m on Chassis Version Only PXF4053) AA = 5 AB = 10 AC = 25 AD = 50 AE = 100 AF = 150 AG = 200 AH = 300 AJ = 450</p>

**Examples:**

**PXF4050** = Flex Connector, No Cable

**PXF4050AAA** = Flex Connector, OS1 Single Mode Cable, 5 Metre Length to LC Type Connector

**PXF4053BAA** = Panel Mount Connector, OM1 Multi Mode Cable, 1 Metre Length to LC Type Connector