4000 Series - Simplex LC Fiber Buccaneer



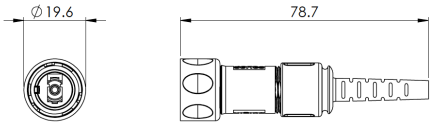
- Sealed to IP66 IP68 and IP69K when mated
- IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- Simplex LC-Type Interface
- Cabled Versions: 0S1, 0M1, 0M3
- Cable range from 5 to 450m
- Diameter over coupling ring 19.7mm
- Flex, Flex In-Line and Rear Panel
- Colour coded O-rings & washers for easy identificaiton 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

4000 Series - Simplex LC Fiber Buccaneer



PXF4050XXX

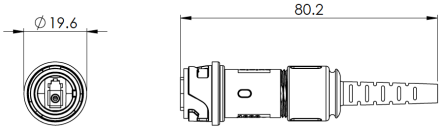
- Patchcords with IP68 connectors
- Available in 5 - 450m lengths
- Supplied with LC fiber plug
- 0S1, 0M1 or 0M3 cable options
- Termination options





PXF4051XXX

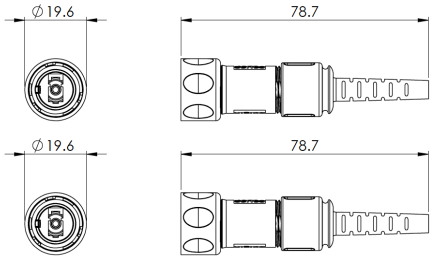
- Patchcords with IP68 connectors
- Available in 5 - 450m lengths
- Supplied with LC fiber plug
- 0S1, 0M1 or 0M3 cable options
- Termination options





PXF4054XXX

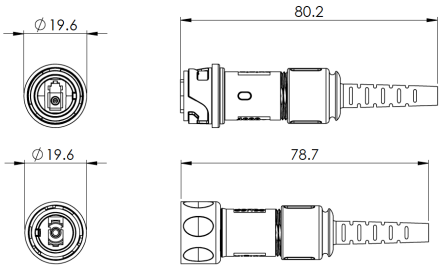
- Patchcords with IP68 connectors
- Available in 5 - 450m lengths
- Supplied with LC fiber plug
- 0S1, 0M1 or 0M3 cable options
- Termination options





PXF4055XXX

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

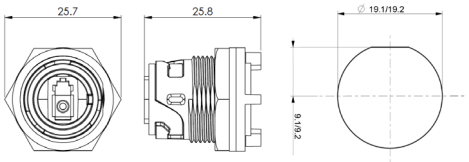


Rear Panel Mounting Connector



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.

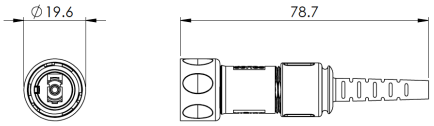
4000 Series - Simplex LC Fiber Buccaneer

Flex Cable Connector



PXF4050

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

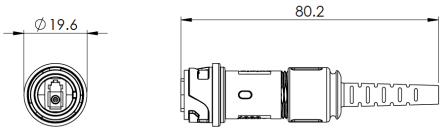


In-Line Flex Cable Connector



PXF4051

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

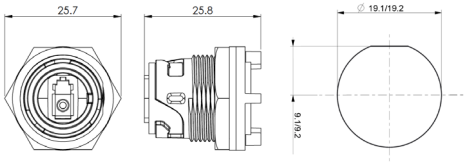


Rear Panel Mounting Connector



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

4000 Series - Simplex LC Fiber Buccaneer

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

Optical

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

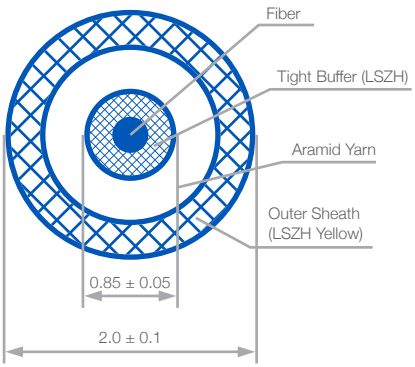
Material:

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

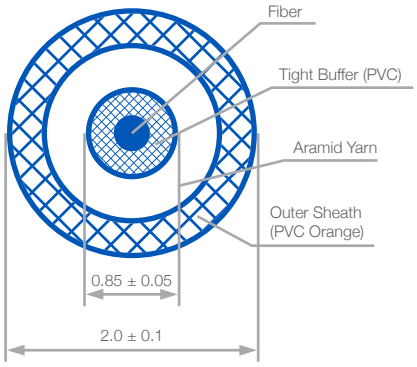
Min. bending radius of work	10mm
Other parameter meet standard	IEC60794-2-50, YD/T1258.2, ITU-T G.657

4000 Series - Simplex LC Fiber Buccaneer

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):

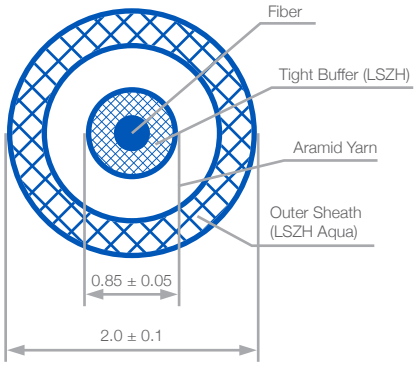


Optical Cable Specification

Item		Specification
Structure Parameter		
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
Transmission Performance		
Attenuation coefficient	Wavelength 850m	≤3.5dB/km
	Wavelength 1300nm	≤1.5dB/km
Other performances		
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	50μm±2.5μm
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		≤12.5μm
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:		≤20
Chromatic dispersion coefficient:	λ0min	1295nm
	λ0max	1340nm
	S0max(from1295nm≤λ0≤1310nm)	0.105ps/nm^2×km
	S0max(from1310nm≤λ0≤1340nm)	0.000375(1590-λ_0) ps/nm^2×km
Other parameters meet standard:	IEC 60793-2-10	



Optical Cable Specification

Item		Specification
Structure Parameter		
Tight buffer:	Material	LSZH
	Outer diameter	0.85mm±0.05mm
Strength member:	Material	Aramid yarn
Outer sheath:	Sheath material	LSZH
	Sheath color	Aqua(Pantone 3248C) Chromatic aberration E: ≤4.0
	Min. sheath thickness	0.3mm
	Dimension	2.0mm±0.1mm
Transmission Performance		
Attenuation coefficient:	Wavelength 850nm	≤3.5dB/km
	Wavelength 1300nm	≤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
Other performances		
Min. bending radius of work:		10mm
Other parameter meet standard:		IEC60794-2-50, YD/T1258.2

4000 Series - Simplex LC Fiber Buccaneer

PXF405 x	/ X	/ XX

Body Styles

PXF4050
PXF4051
PXF4053
PXF4054
PXF4055

Cable Type

Blank = No cable
A = OS1 (Singlemode)
B = OM1 (Multimode)
C = OM3 (Multimode)

Cable Length (m)

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

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