

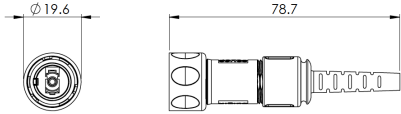
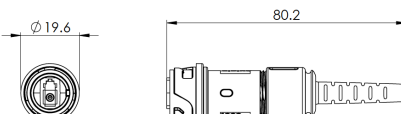
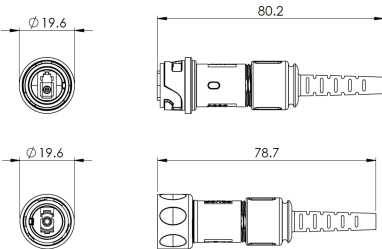
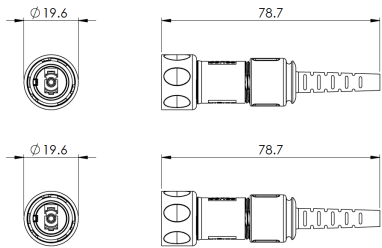
4000 Series Simplex LC Fiber Buccaneer

As the smallest rugged optical connector available on the market, the 4000 Series Fibre Simplex connector is ideal for outdoor broadcast, FTTX (fibre to the x), server room engineering, civil engineering, marine, aviation and rail applications. The connector's small form factor is particularly useful where installation space is limited or multiple connectors need to be accommodated.



- 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 & 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

4000 Series Simplex LC Fiber Buccaneer

Simplex LC Fiber  PXF4050XXX	- Patchcords with IP68 Connectors - Available in 5 - 450m Lengths - Supplied with LC Fiber Plug 0S1, 0M1 or 0M3 Cable Options - Termination Options	
Simplex LC Fiber  PXF4051XXX	- Patchcords with IP68 Connectors - Available in 5 - 450m Lengths - Supplied with LC Fiber Plug 0S1, 0M1 or 0M3 Cable Options - Termination Options	
Simplex LC Fiber  PXF4054XXX	- Patchcords with IP68 Connectors - Available in 5 - 450m Lengths - Supplied with LC Fiber Plug 0S1, 0M1 or 0M3 Cable Options - Termination Options	
Simplex LC Fiber  PXF4055XXX	- Patchcords with IP68 Connectors - Available in 5 - 450m Lengths - Supplied with LC Fiber Plug 0S1, 0M1 or 0M3 Cable Options - Termination Options	

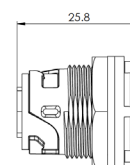
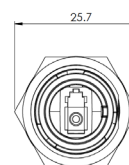
4000 Series Simplex LC Fiber Buccaneer

Rear Panel Mounting Connector



PXF4053XXX

- ⬡ LC Fiber Adapter
- ⬡ Leaded with LC Connector
- ⬡ Socket variant Mates with PXF4050 Type Cables



Part No.

Description

PXF4053

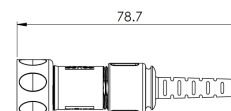
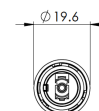
IP-Sealed LC Type, Rear Panel Mounted, LC Connector at Rear

Flex Cable Connector



PXF4050

- ⬡ Mates with Flex In-Line or
- ⬡ Panel Mounting Versions PXF4051, PXF4053
- ⬡ 30° Turn Locking Ring
- ⬡ Supplied without LC Connector

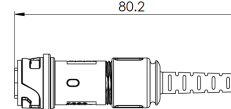
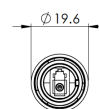


In-Line Flex Cable Connector



PXF4051

- ⬡ Mates with Flex Cable Connector PXF4050
- ⬡ For In-Line Connection
- ⬡ Supplied without LC Connector

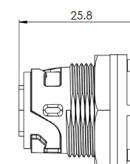


Rear Panel Mounting Connector



PXF4053

- ⬡ Mates with Flex Cable connector PXF4050
- ⬡ Rear Panel Mounting
- ⬡ Single Hole Fixing
- ⬡ Supplied without LC Connector



4000 Series Simplex LC Fiber Buccaneer

Sealing Caps



PXP4081
PXP4082, PXP4083

⬡ Maintains IP-Sealed Rating of Unmated Connectors

Part No.	Description
PXP4081	Sealing Cap for use with PXF4050
PXP4082	Sealing Cap for use with PXF4051
PXP4083	Sealing Cap for use with PXF4053

O-Ring And Washer Pack



⬡ Coloured O-Rings & Washer Pack

Part No.	Description
PXP4089/WH	White Coloured O-Ring & Washer Pack
PXP4089/RD	Red Coloured O-Ring & Washer Pack
PXP4089/BL	Blue Coloured O-Ring & Washer Pack
PXP4089/YL	Yellow Coloured O-Ring & Washer Pack
PXP4089/GN	Green Coloured O-Ring & 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 1.0 - 1.1NM (91lb.in)
Panel Mount Nut:	-25°C to +70°C
Operating Temperature:	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Salt Mist:	

Optical	
IEC 61753-1:	
Max Insertion Loss:	0.2db } Single Mode
AVG Insertion Loss:	0.1db } Single Mode

Material:

Flex & Panel Types:	Polyamide
Body Mouldings:	UL94v-0
Flammability Rating:	To EN 500021:1999
UV Resistance:	

O Rings:	Silicone
Panel Sealing O Ring:	Silicone
RoHS	Compliant

Fiber Specification - SECTION OSI

Item:

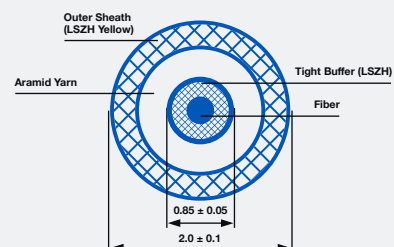
Fiber Type:	/
Mode Field Diameter:	Wavelength Range of Nominal Values Tolerance Nominal Tolerance
Cladding Diameter:	
Core Concentricity Error	
Cladding Non-Circularity	
Coating Diameter:	Nominal Tolerance
Coating-Cladding Concentricity:	
Error Cut-Off Wavelength:	
Uncabled Fiber Macrobending Loss:	Radius(mm) Number of Turns Max. at 1550nm(dB) Max. at 1625 nm (dB)
Min. Proof Stress:	
Dynamic Fatigue Parameter:	λ_{0min} λ_{0max} S_{0max}
Chromatic Dispersion Coefficient:	
Other Parameters Meet Standard:	ITU-T G.657

Detail:

Specification:

G.657A2 (OS1)
1310mm
8.6 μ m -9.5 μ m
$\pm 0.4 \mu$ m
125.0 μ m
$\pm 0.7 \mu$ m
$\leq 0.5 \mu$ m
$\leq 1\%$
245 μ m
$\pm 10 \mu$ m
$\leq 12.5 \mu$ m
$\leq 1260 \text{ nm}$
15 10 7.5
10 1 1
0.03 0.1 0.5
0.1 0.2 1.0
0.69 GPa
≥ 20
1300 nm
1324 nm
0.092 ps/nm ² ×km

Cable Construction:





4000 Series Simplex LC Fiber Buccaneer

Optical Cable Specification:

Structure Parameter

Tight Buffer:	Material	LSZH
	Outer Diameter	0.85mm±0.05mm
Strength Member:	Material	Aramid yarn
	Sheath Material	LSZH
Outer Sheath:	Sheath Color	Yellow (Pantone 136C) Chromatic aberration E: ≤4.0
	Min. Sheath Thickness	0.3mm
	Dimension	

Transmission Performance

Attenuation Coefficient:	Wavelength 1310nm~1625nm	2.0mm±0.1mm
	Maximum at 1383 nm ±3 nm	≤0.4 dB/km
Macrobending Loss:	Wavelength 1550nm	≤0.4 dB/km
	Radius(mm)	≤0.3 dB/km
	Number of Turns	15 10 7.5
	Max. at 1550 nm(dB)	10 1 1
	Max. at 1625 nm (dB)	0.03 0.1 0.5
		0.1 0.2 1.0

Other Performances

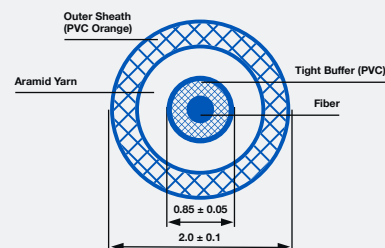
Min. Bending Radius of Work:	10mm
Other Parameter Meet Standard:	IEC60794-2-50, YD/T1258.2, ITU-T G.657

4000 Series Simplex LC Fiber Buccaneer

Fiber Specification - SECTION OMI

Item:	Detail:	Specification:
Fiber Type:	/	62.5/125(A1b) (OM1)
Core Diameter:	Normal Value	62.5 μm
	Tolerance	$\pm 3 \mu\text{m}$
Cladding Diameter:	Nominal	125.0 μm
	Tolerance	$\pm 2 \mu\text{m}$
Core-cladding Concentricity Error:		$\leq 3 \mu\text{m}$
Cladding Non-Circularity:		$\leq 2\%$
Core Non-Circularity:		$\leq 6\%$
Primary Coating Diameter (Uncoloured):	Nominal	245 μm
	Tolerance	$\pm 10 \mu\text{m}$
Primary Coating-Cladding:		$\leq 12.5 \mu\text{m}$
Concentricity Error:		
Uncabled Fiber Macrobending Loss:	Radius(mm)	37.5
	Number of Turns	100
	At Wavelengths 850 nm & 1300nm (dB)	0.5
Min. Proof Stress:		0.69 GPa
Dynamic Fatigue Parameter:		≥ 20
Minimum Modal Bandwidth- Length:	Wavelength 850 nm	200 MHzkm
Product For Overfilled Launch:	Wavelength 1300 nm	500 MHzkm
Other Parameters Meet Standard:	IEC 60793-2-10	

Cable Construction:



Optical Cable Specification:

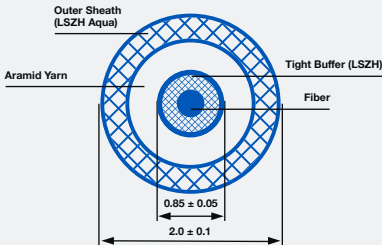
Item:		Specification:
<u>Structure Parameter</u>		
Tight Buffer:	Material	PVC
	Outer diameter	0.85mm $\pm$ 0.05mm
Strength Member:	Material	Aramid Yarn
Outer Sheath:	Sheath Material	PVC
	Sheath Color	Orange (Pantone 164C) Chromatic Aberration E: ≤ 4.0
	Min. Sheath Thickness	0.3mm
	Dimension	2.0mm $\pm$ 0.1mm
<u>Transmission Performance</u>		
Attenuation Coefficient:	Wavelength 850m	$\leq 3.5 \text{ dB/km}$
	Wavelength 1300nm	$\leq 1.5 \text{ dB/km}$
<u>Other Performances</u>		
Min. Bending Radius of Work:		30mm
Other Parameter Meet Standard:		IEC60794-2-50, YD/T1258.2

4000 Series Simplex LC Fiber Buccaneer

Fiber Specification - SECTION OM3

Item:	Detail:	Specification:
Fiber Type:	/	50/125(OM3)
Core Diameter:	Normal value	50 μm
	Tolerance	$\pm 2.5 \mu\text{m}$
Cladding Diameter:	Nominal	125.0 μm
	Tolerance	$\pm 2 \mu\text{m}$
Core-Cladding Concentricity Error:		$\leq 3 \mu\text{m}$
Cladding Non-Circularity:		$\leq 2\%$
Core Non-Circularity:		$\leq 6\%$
Primary Coating Diameter (Uncoloured):	Nominal	245 μm
	Tolerance	$\pm 10 \mu\text{m}$
Primary Coating-Cladding Concentricity Error		$\leq 12.5 \mu\text{m}$
Uncabled Fiber Macrobending Loss:	Radius(mm)	15 7.5
	Number of turns	2 2
	Max. at 850 nm (dB)	0.1 0.2
	Max. at 1300 nm (dB)	0.3 0.5
Min. Mode Bandwidth:	Overfilled Launch Bandwidth at 850nm	1500 MHz. km
	Overfilled Launch Bandwidth at 1300nm	500 MHz. km
	Effective Laser Launch Bandwidth at 850nm	2000 MHz. km
Min. Proof Stress:		0.69 GPa
Dynamic Fatigue Parameter:		≤ 20
	$\lambda_{0\text{min}}$	1295 nm
	$\lambda_{0\text{max}}$	1340 nm
Chromatic Dispersion Coefficient:	S ₀ max(from 1295nm $\leq\lambda_0\leq$ 1310nm)	0.105ps/nm2 $\times$ km
	S ₀ max(from 1310nm $\leq\lambda_0\leq$ 1340nm)	0.000375(1590- λ_0) ps/nm2 $\times$ km
Other Parameters Meet Standard:	IEC 60793-2-10	

Cable Construction:



4000 Series Simplex LC Fiber Buccaneer

Optical Cable Specification:

Item:

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 850m	≤3.5 dB/km
	Wavelength 1300nm	≤1.5 dB/km
Macrobending Loss:	Radius (mm)	15 7.5
	Number of Turns	2 2

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