

6000 Series Duplex LC Fiber Buccaneer

The 6000 Series Fiber connectors are built to withstand the harshest of environments. Rated IP66, IP68 and IP69K when mated, the connectors also feature a secure, yet easy to operate 30 degree locking mechanism. This tamperproof lock also prevents accidental un-mating. IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks Duplex LC-Type Interface, the connector also features EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1.



- Sealed to IP66 IP68 and IP69K when Mated
- IP68 Rating Tested at 1.054kg/sq cm (15lb/sq in) 10m Depth for 2 Weeks
- Duplex LC-Type Interface
- Cabled Versions: 0S1, 0M1, 0M3
- Cable Range from 5 to 450M
- Diameter Over Coupling Ring 32.0mm
- Flex, Flex In-Line & Rear Panel
- Secure, Proven Locking System
- 30° Twist Locking - Tamperproof Lock Prevents Accidental Un-Mating
- All Plastic Body Version; UL94-V0 Rated, UV Stable, Halogen Free
- Light-Weight, Self-Extinguishing Material Suitable for Long-Term Outdoor use.
- Sealing Caps available to Maintain IP68 Rating
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

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<p>Duplex LC Fiber</p>  <p>PXF6050XXX</p>	<ul style="list-style-type: none"> ○ Patchcords with IP68 Connectors ○ Available in 5 - 450m Lengths ○ Supplied with LC Fiber Plug ○ 0S1, 0M1 or 0M3 Cable Options 	
<p>Duplex LC Fiber</p>  <p>PXF6051XXX</p>	<ul style="list-style-type: none"> ○ Patchcords with IP68 Connectors ○ Available in 5 - 450m Lengths ○ Supplied with LC Fiber Plug ○ 0S1, 0M1 or 0M3 Cable Options 	
<p>Duplex LC Fiber</p>  <p>PXF6054XXX</p>	<ul style="list-style-type: none"> ○ Patchcords with IP68 Connectors ○ Available in 5 - 450m Lengths ○ Supplied with LC Fiber Plug ○ 0S1, 0M1 or 0M3 Cable Options 	
<p>Duplex LC Fiber</p>  <p>PXF6055XXX</p>	<ul style="list-style-type: none"> ○ Patchcords with IP68 Connectors ○ Available in 5 - 450m Lengths ○ Supplied with LC Fiber Plug ○ 0S1, 0M1 or 0M3 Cable Options 	
<p>Rear Panel Mounting Connector</p>  <p>PXF6052XXX</p>	<ul style="list-style-type: none"> ○ LC Fiber Adapter ○ Leaded with LC Connector ○ Socket Variant Mates with PXF6050 Type Connectors 	

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<p>Flex Cable Connector</p>  <p>PXF6050X</p>	<ul style="list-style-type: none"> ⬡ Mates with Flex In-Line or Panel Mounting versions PXF6051, PXF6053 ⬡ 30° Turn Locking Ring ⬡ Supplied without LC Connectors 	
<p>In-Line Flex Cable Connector</p>  <p>PXF6051X</p>	<ul style="list-style-type: none"> ⬡ Mates with Flex Cable Connector PXF6050 ⬡ For In-Line Connection ⬡ Supplied without LC Connectors 	
<p>Rear Panel Mounting Connector</p>  <p>PXF6052X</p>	<ul style="list-style-type: none"> ⬡ Mates with Flex Cable Connector PXF6050 ⬡ Rear Panel Mounting ⬡ Single Hole Fixing ⬡ Supplied without LC Connectors 	

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<p>Sealing Caps</p>  <p>PXP6081 PXP6083</p>	<ul style="list-style-type: none"> ⬡ Sealing Caps to Maintain IP Rating ⬡ PXP6081 for Cable Connectors PXF6050 ⬡ PXP6083 for Front Panel Mount Connectors PXF6052 & PXF6051 with 30° Twist Lock 	 <p>PXP6081</p> <p>PXP6083</p>
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Part No.	Description
PXP6081	Sealing Cap for Flex Cable Connectors (PXF6050)
PXP6083	Sealing Cap for Front Panel Mounting Connector (PXF6052, PXF6051)

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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

Flex and panel types: Polyamide

Body Mouldings: UL94v-0

Flammability Rating: To EN 500021:1999

UV Resistance:

Cable Outer Jacket: Polyethylene for UV and Weather Resistance

O Rings: Silicone

Panel Sealing O Ring: Silicone

RoHS Compliant

Fiber Specification - SECTION OSI:

Item:

Fiber Type:

Mode Field Diameter:

Cladding Diameter:

Core Concentricity Error:

Cladding Non-Circularity:

Coating Diameter:

Coating-Cladding Concentricity Error:

Cut-Off Wavelength:

Uncabled Fiber Macrobending Loss:

Min. Proof Stress:

Dynamic Fatigue Parameter:

Chromatic Dispersion Coefficient:

Other Parameters Meet Standard:

Detail:

/

Wavelength

Range of Nominal Values

Tolerance

Nominal

Tolerance

Nominal

Tolerance

Radius(mm)

Number of Turns

Max. at 1550nm(dB)

Max. at 1625 nm (dB)

λ_{0min}

λ_{0max}

S0max

ITU-T G.657

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

≤ 1260 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/nm² xkm

Cable Construction:



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Optical Cable Specification:

Structure Parameter

Tight Buffer:	Material	Polyolefin (POE)		
	Outer Diameter	0.85mm±0.05mm		
Strength Member:	Material	Aramid Yarn		
Outer Sheath:	Sheath Material	Polyolefin (POE)		
	Sheath Color	Yellow (Pantone 136C) Chromatic Aberration E: ≤4.0		
	Min. Sheath Thickness	0.3mm		
	Dimension	2.0mm±0.1mm		
Transmission Performance	Wavelength 1310nm~1625nm	≤0.4 dB/km		
	Maximum at 1383 nm ±3 nm	≤0.4 dB/km		
Attenuation Coefficient:	Wavelength 1550nm	≤0.3 dB/km		
Macrobending Loss:	Radius(mm)	15	10	7.5
	Number of Turns	10	1	1
	Max. at 1550 nm(dB)	0.03	0.1	0.5
	Max. at 1625 nm (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		

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Fiber Specification - SECTION OMI:

Item:	Detail:	Specification:
Fiber Type:	/	62.5/125(A1b) (OM1)
Core Diameter:	Normal Value	62.5 μm
	Tolerance	±3 μm
Cladding Diameter:	Nominal	125.0μm
	Tolerance	±2 μm
Core-Cladding Concentricity Error:		≤3μm
Cladding Non-Circularity:		≤2%
Core Non-Circularity:		≤6%
Primary Coating Diameter (Uncoloured):	Nominal	245μm
	Tolerance	±10μm
Primary Coating-Cladding Concentricity Error:		≤12.5μm
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:

Structure Parameter

Tight Buffer:	Material	Polyolefin (POE)
	Outer Diameter	0.85mm±0.05mm
Strength Member:	Material	Aramid Yarn
	Sheath Material	Polyolefin (POE)
Outer Sheath:	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	≤3.5 dB/km
	Wavelength 1300nm	≤1.5 dB/km

Other Performances

Min. Bending Radius of Work:	30mm
Other Parameter Meet Standard:	IEC60794-2-50, YD/T1258.2

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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
Primary Coating-Cladding	Tolerance	$\pm 10 \mu\text{m}$
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
	Overfilled Launch Bandwidth at 850nm	1500 MHz. km
Min. Mode Bandwidth:	Overfilled Launch Bandwidth at 1300nm	500 MHz. km
	Effective Laser Launch Bandwidth at 850nm	2000 MHz. km
		0.69 GPa
Min. Proof Stress:		≤ 20
Dynamic Fatigue Parameter:	$\lambda_{0\text{min}}$	1295 nm
	$\lambda_{0\text{max}}$	1340 nm
		0.105ps/nm ² ×km
Chromatic Dispersion Coefficient:	S0max (from1295nm $\leq\lambda_0\leq$ 1310nm)	0.000375(1590- λ_0) ps/nm ² ×km
	S0max (from1310nm $\leq\lambda_0\leq$ 1340nm)	
Other Parameters Meet Standard:	IEC 60793-2-10	

Cable Construction:



Optical Cable Specification:

Structure Parameter

Tight Buffer:	Material	Polyolefin (POE)
	Outer Diameter	0.85mm \pm 0.05mm
Strength Member:	Material	Aramid Yarn
	Sheath Material	Polyolefin (POE)
Outer Sheath:	Sheath Color	Aqua (Pantone 3248C) Chromatic Sberration E: ≤ 4.0
	Min. Sheath Thickness	0.3mm
	Dimension	2.0mm \pm 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
	Max. at 850 nm (dB)	0.1 0.2
	Max. at 1300 nm (dB)	0.3 0.5

Other Performances

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

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PXF605 x	X	XX
Body Styles	Cable Type	Contact Type
PXF6050	A = OM3 (Multimode)	Blank = No cable
PXF6051	B = OM1 (Multimode)	AA = 1 (1M on Chassis Version Only PXF6052)
PXF6052	C = OS1 (Single Mode)	AA = 5
PXF6054		AB = 10
PXF6055		AC = 15
		AD = 25
		AE = 50
		AF = 100
		AG = 150
		AH = 200
		AJ = 300
		AK = 450

Example:

PXF6050A = Flex connector, for OM3 (Multimode) no cable supplied

PXF6050AAA = Flex connector, OM3 multimode cable, 5 metre length to LC type connector

PXF6052BAA = Panel mount connector, OM1 multi mode cable, 1 metre length to LC type connector

Fiber Assignment:

