

## FIBRE PATCH CORD

They comprise two tight buffer fibres housed within a common outer jacket in OM1, OM2, OM3, OM4, OS1, OS2 multi-mode and single mode variants. Both ends are terminated with a high performance hybrid or single type connector comprising of a SC, ST, FC, LC, MTRJ, E2000 connector in simplex and duplex. These are typically not ruggedized, depending on the application and a spring loaded electrical contact housed within LSHF plastic shell possible, making them suitable for internal use.



### COMPLIANCE

Telcordia (formerly Bellcore) GR-326-CORE Generic requirements for Single mode optical connectors and Jumper assemblies.

IEC 874-1 Generic specification for fibre optic connectors and cables  
ANSI/TIA-568-C.3, ISO/IEC 11801 2nd Ed., CENELEC EN 50173, UL94V-0

### KEY FEATURES

ST, SC, FC, LC, MT-RJ, E2000 connectors  
Duplex and Simplex versions niform and hybrid cord versions  
Position A/Position B markings  
100% factory transmission tested per ANSI/TIA-568-C.3  
Slim-profile boots with durable flexible cable strain relief  
Available in 0.9mm, 1.6mm, 2.0mm , 3.0mm sizes

### MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Range of Mode	Single or Multimode
Cable Type	Simplex or Duplex Zipcord
Connector Style	SC, FC, ST, LC, MTRJ, E2000
Polish or Ferrule Interface Type	PC, UPC, APC
Cable Diameter	0.9mm, 1.6mm, 2.0mm, 3.0mm
Lengths	Standard & Custom Lengths
Strength Member	Aramid Yarn
Outer Jacket	PVC or LSZH
Cable Assembly Length (<15 meter Tolerance)	-0/+100mm
Cable Assembly Length (>15 meter Tolerance)	-0/+10%
Jacket Colour (Multimode: OM1 & OM2)	Orange
Jacket Colour (Multimode: OM3 & OM4)	Aqua
Jacket Colour (Single Mode: OS1 & OS2)	Yellow
Durability	500 cycles(0.2 dB max increase), 1000mate/demate cycles
Operating Temp.	-20 °C to +70°C/+85°c (armoured)
Storage Temp.	-40 °C to +85 °C
Ferrule Concentricity	< 1µm, Other Ferrule Concentricity < 1µm
Humidity (FOTP-5)	90-95% at 40°C
Strength of Coupling Mechanism (FOTP-185)	33 N at 0° for 5 sec
Cable Retention (FOTP-6)	50 N at 0° for 5 sec.
Twist (FOTP-36)	15 N at 0° 5 turns, 10 cycles
Flex (FOTP-1)	0.5 Kg at 25 cm, +90° to -90°, 100 cycles

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## OPTICAL CHARACTERISTICS

Fibre Type	Max. Attenuation (dB/km)				Min. Overfill Launch Bandwidth (Mhz•km)		Min. Gigabit Ethernet Link Distance (m)		
							Gigabit		10Gigabit
	850nm	1300nm	1310nm	1550nm	850nm	1300nm	850nm	1300nm	850nm
OM1 62.5/125µm	≤2.7	≤0.6	-	-	≥200	≥600	275	550	-
OM2 50/125µm	≤2.5	≤0.7	-	-	≥500	≥500	550	550	-
OM3 50/125µm	≤2.3	≤0.6	-	-	≥1500	≥500	1000	600	300
OM4 50/125µm	≤2.3	≤0.6	-	-	≥3500	≥500	1000	600	550
OS1 9/125µm	-	-	≤0.34	≤0.20	-	-	-	-	-
OS2 9/125µm	-	-	≤0.34	≤0.24	-	-	-	-	-

## OPTICAL PERFORMANCE DATA

Item	Single mode			Multimode		
	PC	UPC	APC	62.5/125	50/125	50/125 10G
Insert. Loss/connector (single Fibre)	0.2dB Max. (0.15dB typ.)			0.3dB Max. (0.25dB typ.)		
Return Loss	≥45 dB	≥50 dB	≥60 dB	N.A		
Insert. Loss/MTRJ Connector	0.5dB Max. (0.45dB typ.)			0.5dB Max. (0.45dB typ.)		
Pull strength	≥98N	≥98N	≥98N	≥98N		

## TERMINATION SPECIFICATIONS

Geometric Specifications	
Radius of Curvature	7-25 mm
Apex Offset	0-50 µm
Radial Fibre Height	-50 to +50 nm
Angular Offset	<0.3 degrees
Fibre Roughness	0-25 nm
Ferrule Roughness	0-50 nm
End Face Defects	
Fibre Core	0 nm <sup>2</sup>
Mode field diameter	0 nm <sup>2</sup>
Ferrule contact zone	0 nm <sup>2</sup>
Testing & Inspection	100%
Epoxy	
Temperature Coeff. Tg	120
Curing Method	Out Gassed
Residual Epoxy	No Visible Epoxy Ring
Configuration Control	
Serialization	Each Cable is Serialized

## FIBRE PATCH CORD

### LC – LC FIBRE PATCH CORD

LC-LC Singlemode Patch Cord	OS1 (9/125)	OS2 (G657.A1)
LC/PC-LC/PC 1m Duplex PVC	332-140S1L1L1001	332-147A1L1L1001
LC/PC-LC/PC 2m Duplex PVC	332-140S1L1L1002	332-147A1L1L1002
LC/PC-LC/PC 3m Duplex PVC	332-140S1L1L1003	332-147A1L1L1003
LC/PC-LC/PC 5m Duplex PVC	332-140S1L1L1005	332-147A1L1L1005
LC/PC-LC/PC 10m Duplex PVC	332-140S1L1L1010	332-147A1L1L1010
LC/PC-LC/PC 1m Duplex LSZH	332-240S1L1L1001	332-247A1L1L1001
LC/PC-LC/PC 2m Duplex LSZH	332-240S1L1L1002	332-247A1L1L1002
LC/PC-LC/PC 3m Duplex LSZH	332-240S1L1L1003	332-247A1L1L1003
LC/PC-LC/PC 5m Duplex LSZH	332-240S1L1L1005	332-247A1L1L1005
LC/PC-LC/PC 10m Duplex LSZH	332-240S1L1L1010	332-247A1L1L1010
LC/APC-LC/APC 1m Duplex PVC	332-140S1L3L3001	332-147A1L3L3001
LC/APC-LC/APC 2m Duplex PVC	332-140S1L3L3002	332-147A1L3L3002
LC/APC-LC/APC 3m Duplex PVC	332-140S1L3L3003	332-147A1L3L3003
LC/APC-LC/APC 5m Duplex PVC	332-140S1L3L3005	332-147A1L3L3005
LC/APC-LC/APC 10m Duplex PVC	332-140S1L3L3010	332-147A1L3L3010
LC/APC-LC/PC 1m Duplex PVC	332-140S1L3L1001	332-147A1L3L1001
LC/PC-LC/PC 1m Simplex PVC	331-140S1L1L1001	331-147A1L1L1001
LC/PC-LC/PC 3m Simplex PVC	331-140S1L1L1003	331-147A1L1L1003
LC/APC-LC/APC 1m Simplex PVC	331-140S1L3L3001	331-147A1L3L3001
LC/APC-LC/APC 3m Simplex PVC	331-140S1L3L3003	331-147A1L3L3003
LC/APC-LC/APC 3m Simplex LSZH	331-240S1L3L3003	331-247A1L3L3003

LC-LC Multimode Patch Cord	OM1 (62.5/125)	OM2 (50/125)	OM3 (50/125)	OM4 (50/125)
LC/PC-LC/PC 1m Duplex PVC	332-140M1L1L1001	332-140M2L1L1001	332-140M3L1L1001	332-140M4L1L1001
LC/PC-LC/PC 2m Duplex PVC	332-140M1L1L1002	332-140M2L1L1002	332-140M3L1L1002	332-140M4L1L1002
LC/PC-LC/PC 3m Duplex PVC	332-140M1L1L1003	332-140M2L1L1003	332-140M3L1L1003	332-140M4L1L1003
LC/PC-LC/PC 5m Duplex PVC	332-140M1L1L1005	332-140M2L1L1005	332-140M3L1L1005	332-140M4L1L1005
LC/PC-LC/PC 10m Duplex PVC	332-140M1L1L1010	332-140M2L1L1010	332-140M3L1L1010	332-140M4L1L1010
LC/PC-LC/PC 1m Duplex LSZH	332-240M1L1L1001	332-240M2L1L1001	332-240M3L1L1001	332-240M4L1L1001
LC/PC-LC/PC 2m Duplex LSZH	332-240M1L1L1002	332-240M2L1L1002	332-240M3L1L1002	332-240M4L1L1002
LC/PC-LC/PC 3m Duplex LSZH	332-240M1L1L1003	332-240M2L1L1003	332-240M3L1L1003	332-240M4L1L1003
LC/PC-LC/PC 5m Duplex LSZH	332-240M1L1L1005	332-240M2L1L1005	332-240M3L1L1005	332-240M4L1L1005
LC/PC-LC/PC 10m Duplex LSZH	332-240M1L1L1010	332-240M2L1L1010	332-240M3L1L1010	332-240M4L1L1010

### ORDERING GUIDE

Patch Cord	Outer Jacket	Cable Dia.	Fibre Type	Connector	Polish	Connector	Polish	Length
331: Simplex 332: Duplex	1: PVC 2: LSZH 3: PE 4: Arm./PVC 5: Arm./LSZH 7: OFNP 8: OFNR D: LSZH Dca L: LSZH (IEC 60331)	1:0.9mm 2:1.6mm 3:2.0mm 4:3.0mm	OM1 OM2 OM3 OM4 OM5 OS1 OS2 7A1 = G657.A1 7A2 = G657.A2 7B2 = G657.B2 7B3 = G657.B3 500 = G655	S : SC T : ST F : FC L : LC M: MTRJ E : E2000	1: PC 2: UPC 3: APC 4: APC 8°	S : SC T : ST F : FC L : LC M: MTRJ E : E2000	1: PC 2: UPC 3: APC 4: APC 8°	1m : 001 2m : 002 3m : 003 5m : 005 10m: 010 15m: 015