

## Double Armored Low Loss Patch Chords: 4 Core SM



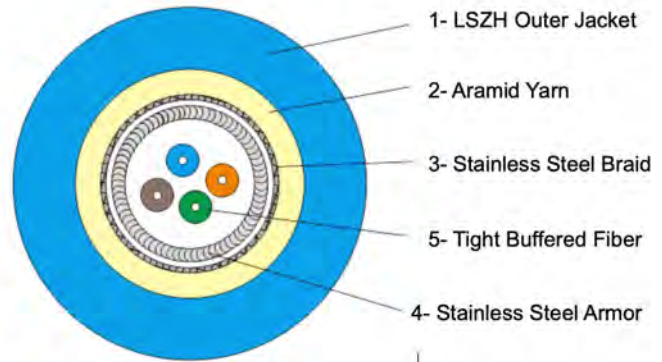
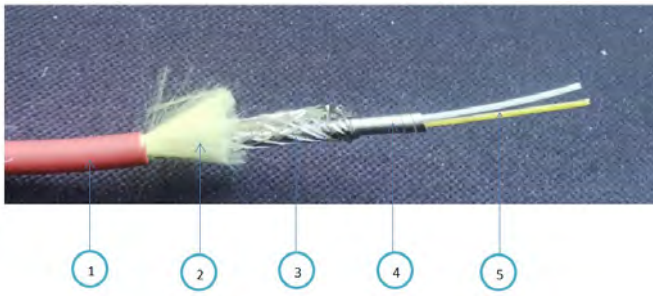
### Features

- Single Mode- G.652D or G.657A1 fiber
- Excellent Rodent protection and Resistance to Compressive Loads

### A. Product Specifications

Parameter	SC/UPC, LC/UPC or FC/UPC	SC/APC, LC/APC or FC/APC
Insertion Loss (Typ)	0.10 dB	0.10 dB
Insertion Loss (Max)	0.20 dB	0.20 dB
Return Loss (Typ)	60dB	65dB
Return Loss (Min)	56dB	60dB
Operating Wavelength	1490nm, 1310nm and 1550nm	
Fiber Size	Corning Make: 9/125um, Single Mode, ITU G.652D/ G.657.A1	
Cable Type	Indoor, LSZH Jacket, Round Cable, 4.8mm OD, Yellow	
Boot Type	Normal Strain Relief Boot	
Operating Temperature	-20 to +70°C	
Storage Temperature	-25 to +70°C	
Complying Standards	IEC 61753-021-2 FO interconnecting device performance standard IL Testing: IEC 61300-3-6 BR Testing: IEC IEC 61300-3-34	
Mating Durability	500 Cycles minimum (as per IEC 61300-2-2)	

## B: Cable Construction



## C. Optical Fiber Specifications

General description		Dispersion-unshifted fibre Matched cladding			
Performance		G652D		G657A1	
Characteristic	Units	Value		Value	
MFD, 1310nm	μm	9.2 ± 0.3		9.0 ± 0.4	
MFD, 1550nm	μm	10.4 ± 0.6		10.2 ± 0.6	
Core non-circularity	%	≤ 6.0		≤ 6.0	
Core/cladding concentricity error	μm	< 0.4		< 0.4	
Cladding diameter	μm	125.0± 0.3		125.0± 0.3	
Cladding non-circularity	%	≤ 0.5		≤ 0.5	
Coating diameter, uncoloured cloured	μm	242 ± 5 250± 15		242 ± 5 250± 15	
Coating/cladding concentricity error	μm	≤ 12		≤ 12	
Temperature sensitivity -60°C ≤ temp. ≤ +85°C	dB/km	≤ 0.05		≤ 0.05	
Point Discontinuity	dB	≤ 0.05		≤ 0.05	
Bending sensitivity 100 turns Ø50 mm; 1550 nm 100 turns Ø50 mm; 1625 nm 15 turns Ø15 mm; 1550 nm 15 turns Ø15 mm; 1625 nm 1 turn Ø10 mm; 1550 nm 1 turn Ø10 mm; 1625 nm	dB	≤ 0.05 ≤ 0.05		≤ 0.02 ≤ 0.03 ≤ 0.1 ≤ 0.3 ≤ 0.75 ≤ 1.5	
Proof stress level	GPa	≥ 0.7		≥ 0.7	
Fibre cut-off wavelength (λ <sub>c</sub> )	nm	≤ 1250		≤ 1250	
Chromatic dispersion 1285-1330nm 1550nm 1625nm	ps/nm.k m	≤ 3.0 ≤ 17.0 ≤ 21.0		≤ 3.2 ≤ 17.0 ≤ 21.0	
PMD (fibre)	ps/√km	≤ 0.1		≤ 0.1	
Attenuation @ 1310nm	dB/km	≤ 0.35		≤ 0.35	
Attenuation @ 1550nm	dB/km	≤ 0.24		≤ 0.24	

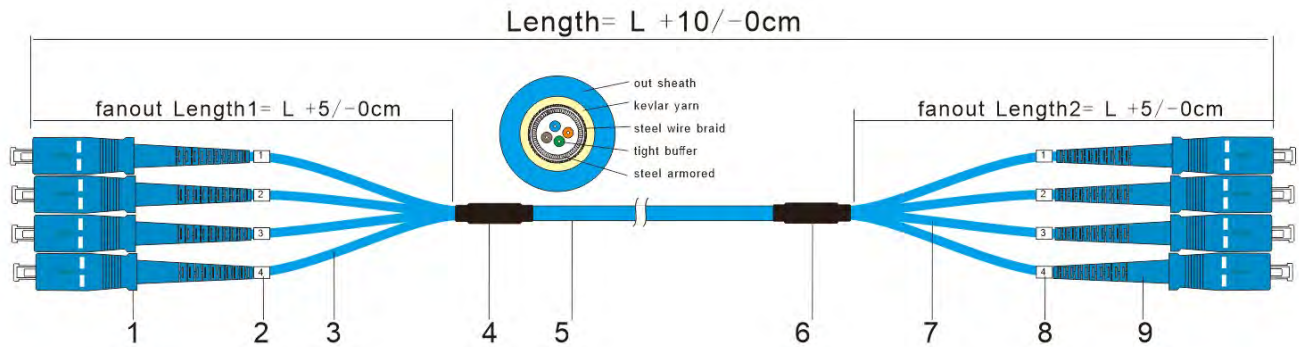
## D. Cable Characteristics: Physical

Items		Specifications
Fiber Type		Single Mode G.652D: 9/125um
Fiber Count		4
Tight-buffered Fiber	Dimension	600±50µm
	Material	LSZH
	Color	Blue, Orange, Green & Brown
Stainless Steel Armor	Dimension (OD)	2.4±0.1mm
	Material	Non-magnetic Stainless Steel
	Thickness	0.22±0.02 mm
Stainless Steel Braid	Material	SUS304
	Number	3 branches
Outer Jacket	Dimension	4.8±0.2mm
	Material	LSZH
	Color	Yellow

## E. Cable Characteristics: Mechanical & Environmental

Items	Unit	Specifications
Tension (Long Term)	N	200
Tension (Short Term)	N	400
Crush (Long Term)	N/10cm	3000
Crush (Short Term)	N/10cm	5000
Min. Bend Radius - Dynamic	mm	20D
Min. Bend Radius- Static	mm	10D
Operating Temperature	°C	-20 to +70
Storage Temperature	°C	-20 to +70

## F. Product Drawing



1. SC Connector (Or LC or FC Connector)
2. Channel ID Label
3. 3mm Furcation Tube (SS Armored- Not Braided)
4. Fanout Device
5. 4 Core Double Armored Single Mode Cable

Note: Standard Fanout Length = 30cm, other lengths available as per customer specification

## How to order:

PHL- **XXX**-**YYY**-SM-A54- **ZZ**m

**XXX: End-1, YYY: End-2**

- : SCD: SC/UPC with Duplex Clips
- : SCAD: SC/APC with Dx Clips
- : SC: SC/UPC without Dx Clips
- : SCA: SC/APC without Dx Clips
- : LCD: LC/UPC with Dx Clips
- : LCAD: LC/APC with Dx Clips
- : FC: FC/UPC
- : FCA: FC/APC

**ZZ:** Stands for product length in meters  
 Example: 1m, 1.5m, 2m, 3m, etc

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