

## Master LSH Patchcord

### Description:

We offer an extensive range of pre-terminated cable assemblies that are 100% tested to ensure conformance with your specifications. These assemblies are used for measuring and manufacturing of fiber optic components and optical network testing.



The Master patchcord is equipped with a Master connector according to the specifications below. The master connector is marked and specified with its Serial Number, which ensures traceability of transmission and geometrical parameters. The second connector is a standard type. For the hybrid patchcord version different types of master and standard connector types are also available.

### Specifications:

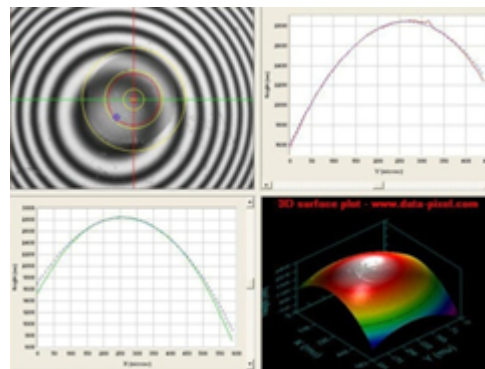
Insertion loss <sub>2</sub> (IL) (IEC 61300-3-4)	SM Ultra PC	SM Angle PC
	0.10 dB max	0.10 dB max
Return loss <sub>2</sub> (RL) (IEC 61300-3-6, method 1)	≥ 55 dB <sub>1</sub>	≥ 70 dB <sub>1</sub>
	PDL <sub>2</sub> max 0.1 dB	
Strain relief	max 100 N	
Allowable input power	max 1.0 W	
Strain relief	100 N	
Operating temperature	-30°C to +70°C	
Durability	min 1000 cycles	
Assembly procedure	glue and polish	
Connection	physical contact	
Lock mechanism	snap-on	
Standards	IEC 61753, IEC 61754-15, EN 50377-8, GR-326-CORE	
Ferrule material	full ceramic zirconia	
Connector material	UL 94-V0	
Adapter material	UL 94-V0, slotted ceramic sleeve	
Connector lifetime	20 years in environment defined by EN 61753-1:2007, category C	

### Geometrical parameters:

Eccentricity of core for the center of ferrule	$\leq 0.5 \mu\text{m}$	
Outer diameter of ferrule	2.5 mm connectors:	2.499 $\mu\text{m}$
	SFF connectors:	1.249 $\mu\text{m}$
End curve offset	$\leq 25 \mu\text{m}$	
Fiber height	-30 to +50 nm	
End curve radius: 2.5 mm connectors:	PC polishing:	10 - 18 mm
	APC polishing:	5 - 12 mm
SFF connectors:	PC/APC:	5 - 12 mm

### Features:

- ISO 9100 approved
- 100% Return loss test
- 100% Visual Inspection
- 100% Insertion loss test
- 100% Interferometric test
- Manufactured to meet IEC/EN Standards
- Batch traceability

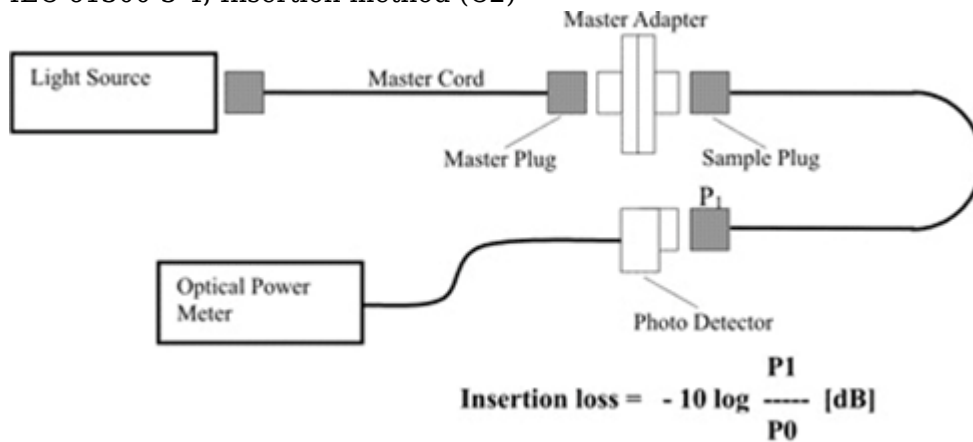


Single mode				
Allowable Defects and Scratches				
Zone	Description	Diameter	Defects (diameter)	Scratches (width)
1a	Core Zone	0 to 25 $\mu\text{m}$	none	none
1b	Cladding Zone	25 to 120 $\mu\text{m}$	any < 2 $\mu\text{m}$ 5 from 2 - 5 $\mu\text{m}$ none > 5 $\mu\text{m}$	none > 3 $\mu\text{m}$
-	Adhesive Zone	120 to 130 $\mu\text{m}$	any	any
2	Contact Zone	130 to 250 $\mu\text{m}$	none > 10 $\mu\text{m}$	any

## IEC Test Method::

Single mode:

IEC 61300-3-4, Insertion method (C2)



## Ordering code:

**M** - **YYY** / **AAA** - **20XXX** - **(LLL<sup>4</sup>)** /02

<b>YYY - Master Connector</b>	
<b>AAA<sup>3</sup> - Second Connector</b>	
<b>Type</b>	<b>Description</b>
<b>UE2</b>	LSH (E2000)/UPC
<b>NE2</b>	LSH (E2000)/APC

<b>20</b>	cable Ø 2.0 mm
<b>XXX - type of fiber</b>	
<b>S2D</b>	SM 9/125 µm (G.652D)
<b>S7A1</b>	SM 9/125 µm (G.657A1)

- Note:
- 1)  $RL \geq 58$  dB (UPC) and  $RL \geq 78$  dB (APC) measured with low coherence reflectometry (IEC 61300-3-6 method 3 OLCR)
  - 2) Valid over 1260-1650 nm wavelength range and within operation temperature range -30 to +70°C, tested according to IEC 61300-3-12
  - 3) AAA - second connector types according to relevant datasheets
  - 4) Standard Master patchcord length - 2 m, other on demand