

Master Patchcord

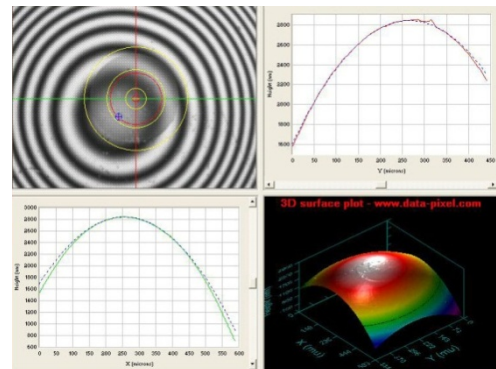
Description:

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 second connector is a standard type. For the hybrid patchcord version different types of master and standard connector types are also available.



M-UPC/UPC-28S7A



Interferometer testing

Specifications:

Insertion loss (IL)

Return loss (RL)

Geometrical parameters:

Eccentricity of core for the center of ferrule
Outer diameter of ferrule

End curve offset
Fiber height
End curve radius

APC angle

Temperature stability (-40°C to +80°C)
Mating durability (500 cycles)
Cable retention (Ø 2.8 mm)

Material:

Connector body
Ferrule material
Fiber
Crimp sleeve
Boot

Singlemode

≤ 0.1 dB
(λ = 1310, 1550, 1650 nm)
UPC ≥ 55 dB
APC ≥ 65 dB

Multimode

≤ 0.1 dB
(λ = 850, 1300 nm)
PC ≥ 30 dB

	≤ 0.5 μm	N/A
Standard connectors:	2.499 μm	
SFF connectors:	1.249 μm	
	≤ 25 μm	
	-30 to +50 nm	
Standard connectors:	PC polishing	10 – 18 mm
	APC polishing	5 – 12 mm
SFF connectors:	PC/APC	5 – 12 mm
	8 ± 0.1°	N/A
	< 0.2 dB	< 0.2 dB
	< 0.2 dB	< 0.2 dB
	100 N	100 N

metal, plastic	metal, plastic
full ceramic zirconia	full ceramic zirconia
9/125	50/125; 62.5/125
metal	metal
rubber	rubber

Features:		Visual inspection:				
<ul style="list-style-type: none"> • 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 		Singlemode				
		Allowable Defects and Scratches				
		Zone	Description	Diameter	Defects (diameter)	Scratches (width)
		1a	Core Zone	0 to 25 μm	none	none
		1b	Cladding Zone	25 to 120 μm	any < 2 μm 5 from 2 - 5 μm none > 5 μm	none > 3 μm
		-	Adhesive Zone	120 to 130 μm	any	any
2	Contact Zone	130 to 250 μm	none > 10 μm	any		

Ordering code:

M - YYY / AAA - XX XX(S²) - (LL³)

connectors		
	YYY – Master connector	AAA ¹ – standard connector
	code	type
LC	LC	LC/PC
	ULC	LC/UPC
	NLC	LC/APC
MU	MU	MU/PC
	UMU	MU/UPC
	NMU	MU/APC
FC	PC	FC/PC
	UPC	FC/UPC
	NPC	FC/APC
SC	SC	SC/PC
	USC	SC/UPC
	NSC	SC/APC
ST	SL	ST/PC
	USL	ST/UPC
LSH	PE2	LSH (E2000)/PC
	UE2	LSH(E2000)/UPC
	NE2	LSH(E2000)/APC

XX – \varnothing of cable	XX - type of fiber ²
17 cable \varnothing 1.7 mm	OM1 MM 62.5/125 μm
20 cable \varnothing 2.0 mm	OM2-4 MM 50/125 μm
24 cable \varnothing 2.4 mm	S2D SM 9/125 μm (G.652D)
28 cable \varnothing 2.8 mm	S5X ⁴ SM 9/125 μm (G.655X)
	S7X ⁴ SM 9/125 μm (G.657X)

Note:

- 1) AAA – additional connector types according to CON_13-01_EN - ORD_CODE datasheet
- 2) Mode scrambler shall be used for MM measurement
- 3) Standard master patchcord length – 2 m, other on demand
- 4) X – according fiber subtype (e.g. G.657A1)
 - NPC – 2.05 standard, 2.15 on demand
 - Other connector types on request
 - Polishing types:
 - PC – multimode connectors
 - UPC – ultra PC, singlemode connectors
 - APC – angled PC, 8° singlemode connectors

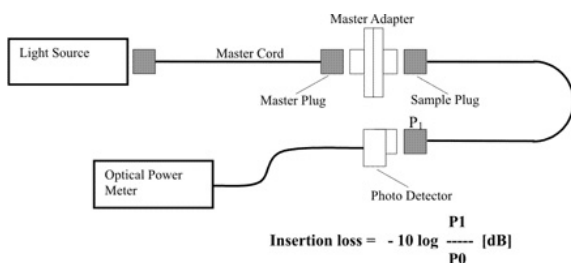
MASTER ADAPTOR:

Attenuation between two master plugs: < 0.15 dB

IEC Test Methods:

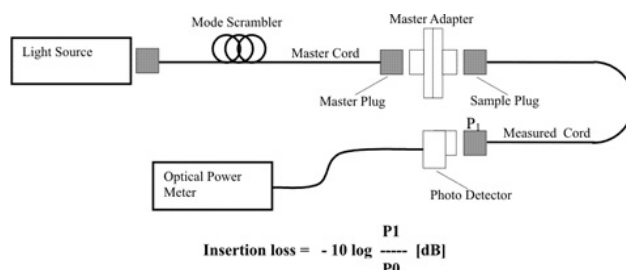
Singlemode:

IEC 874-1 4.4.7.4. Method 7



Multimode:

IEC 874-1 4.4.7.4. Method 7



Other IEC test methods – according to FOT_02-01_EN