

MPO Series Optical Connector & Adapter

Product brief introduction

- Standard plastic body, good interchangeability
- Push-pull mechanism for quick connection and remove
- Axial locking devices for reliable connection
- Connect 12-core fiber simultaneously for high density installation
- Optical cable: ribbon optic fiber and ribbon optic cable
- Branch cable: $\phi 0.9$, $\phi 2$
- Standard: IEC61754-7, TIA/EIA-604-5-A

Applications

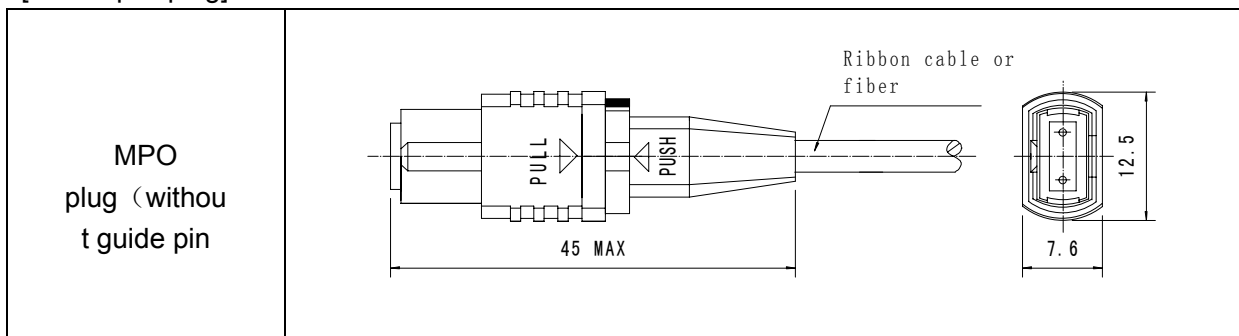
- Data and communication system
- Optical CATV, Video and Multimedia
- Parallel optical interconnect
- Optic-Electric module connection

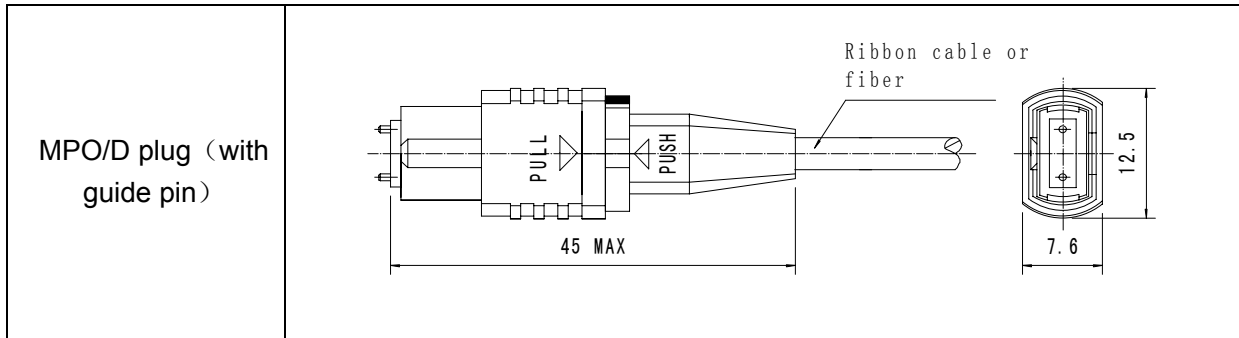
Performances

Parameters	SM	MM	Adapter
Insertion Loss (dB)	≤ 0.6 (typical) ≤ 1.0 (Max.)	≤ 0.4 (typical) ≤ 0.75 (Max.)	/
Return Loss (dB)	≥ 35	≥ 25	/
Repeatability (dB)	≤ 0.2		/
Durability (cycles)	≥ 500		≥ 500
Operating Temp. ($^{\circ}\text{C}$)	$-25 \sim +70$		$-25 \sim +70$
Tensile strength (N)	≥ 50 (this is not required for ribbon fiber)		/

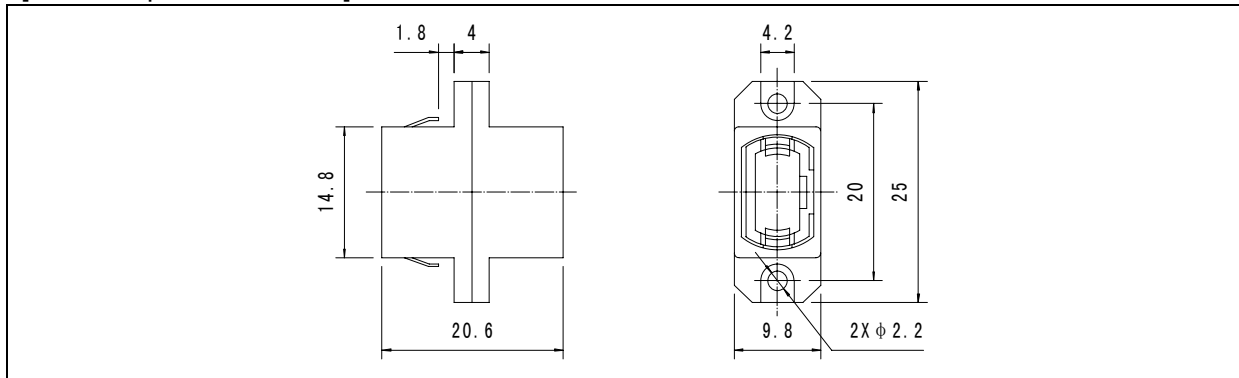
Outline dimensions

[MPO optic plug]

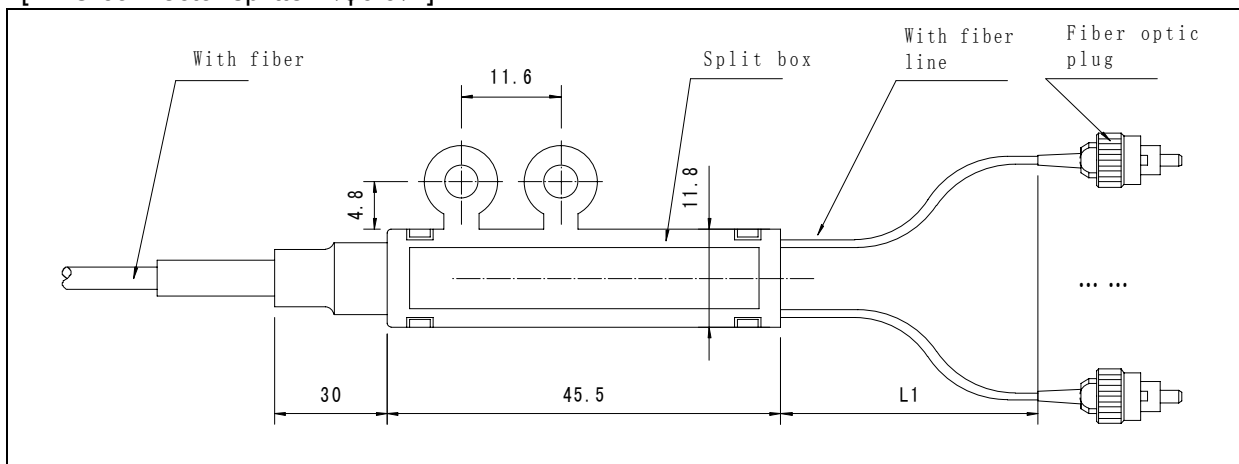




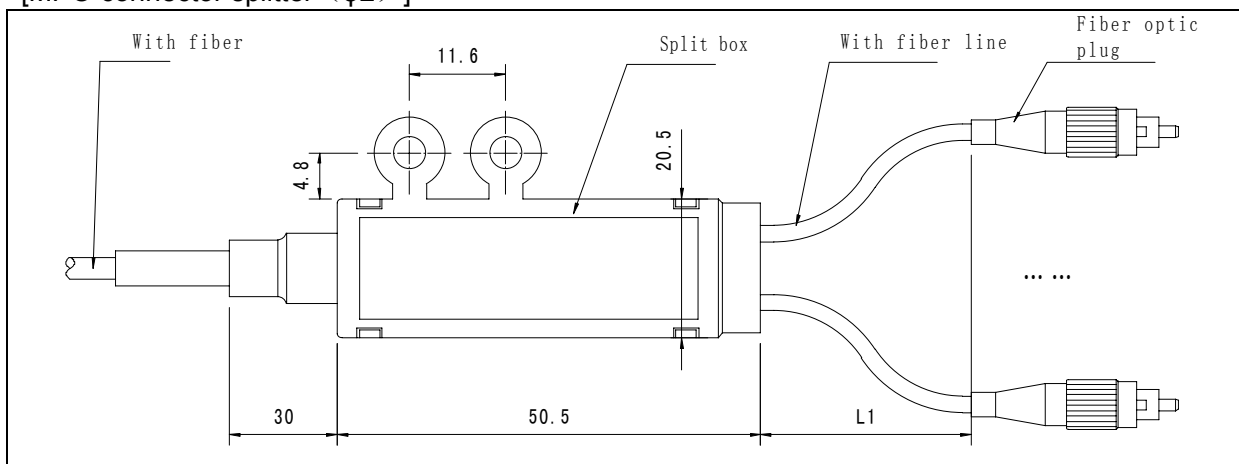
[MPO adapter (MPO-A)]



[MPO connector splitter (φ0.9)]

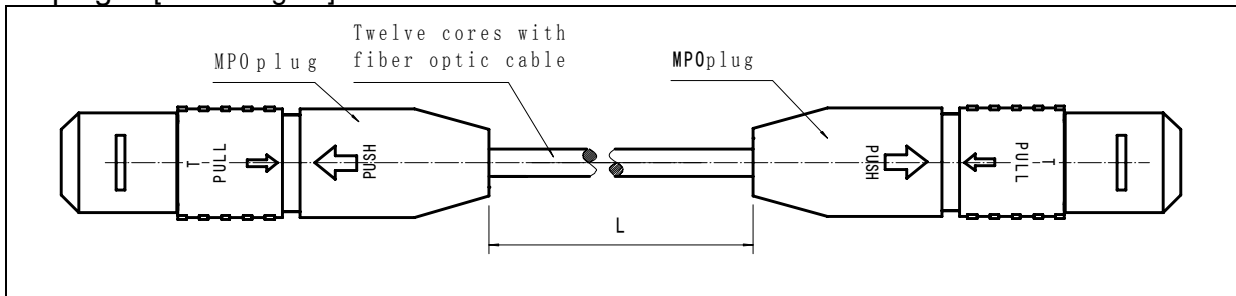


[MPO connector splitter (φ2)]



Ribbon/ Bundle Cable Fan-out Connectors

Standard MPO Optic cable connector (Both ends are MPO or MPO/D plug) [Outline figure]



Note: L is the cable length required by users.

Features: Both ends are MPO or MPO/D plug. Cable is 12-core ribbon cable. [Designation]

Basic series	RC	-MPO	-MPO	-M	5
Plug at end 1	MPO — without guide pin MPO/D — with guide pin				
Plug at end 2	MPO — without guide pin MPO/D — with guide pin				
Transmission mode	S — SM9/125 M — MM62.5/125 MI — MM50/125 MIV — MM50/125 (OM3)				
Optic cable length	Number (Unit m)				

[P/N example]

Example 1: RC-MPO-M2

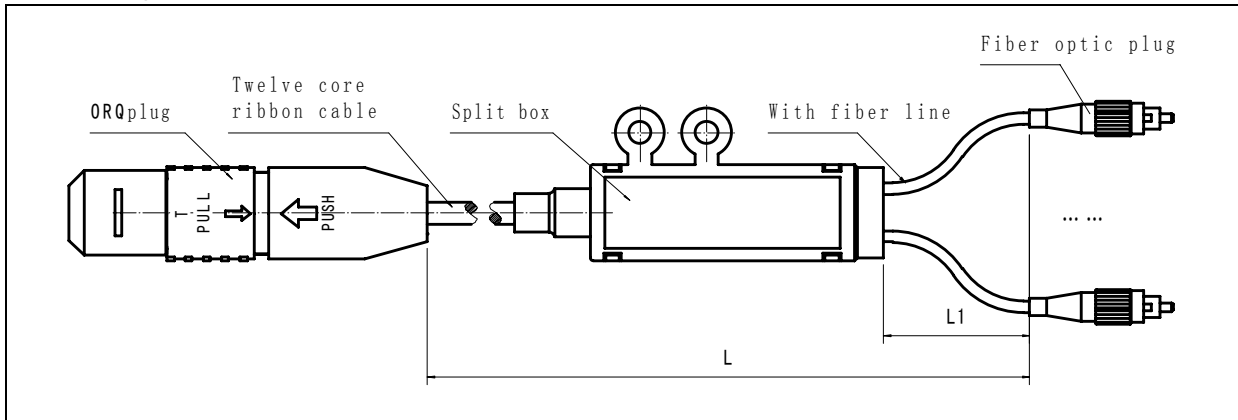
Explanation: Both ends are MPO plugs. Use MM62.5/125 cable for connection. Optic cable length is 2m.

Example 2: RC-MPO/D-MPO-S1

Explanation: End 1 is MPO/D plug and the other end is MPO plug, use SM9/125 cable for connection. Optic cable length is 1m.

Standard MPO Optic cable connector (End 1 is MPO or MPO/D plug, End 2 is a plug)

[Outline figure]



Note: L and L1 are the cable length/Branch cable length required by users.

Features: End 1 of cable is MPO plug and end 2 is optical plug. Cable is 12-core ribbon cable. [Designation]

Basic series	RC	-MPO	-12	LC	-2	S	5	/0.3
Plug at end 1	MPO without guide pin MPO/D—with guide pin							
Amount of plug at end 2								
Type of plug at end 2	LC、ST、FC、SC、DIN. or provide per user's requirement							
Branch cable diameter	2— ϕ 2mm 0.9— ϕ 0.9mm							
Transmission mode	S—SM9/125 M—MM62. 5/125 MI—MM50/125 MIV—MM50/125 (OM3)							
Optic cable length	Unit: m							
Branch cable length	Unit: m							

[P/N example]

Example 1: TE-MPO-12LC-2S2/0.5

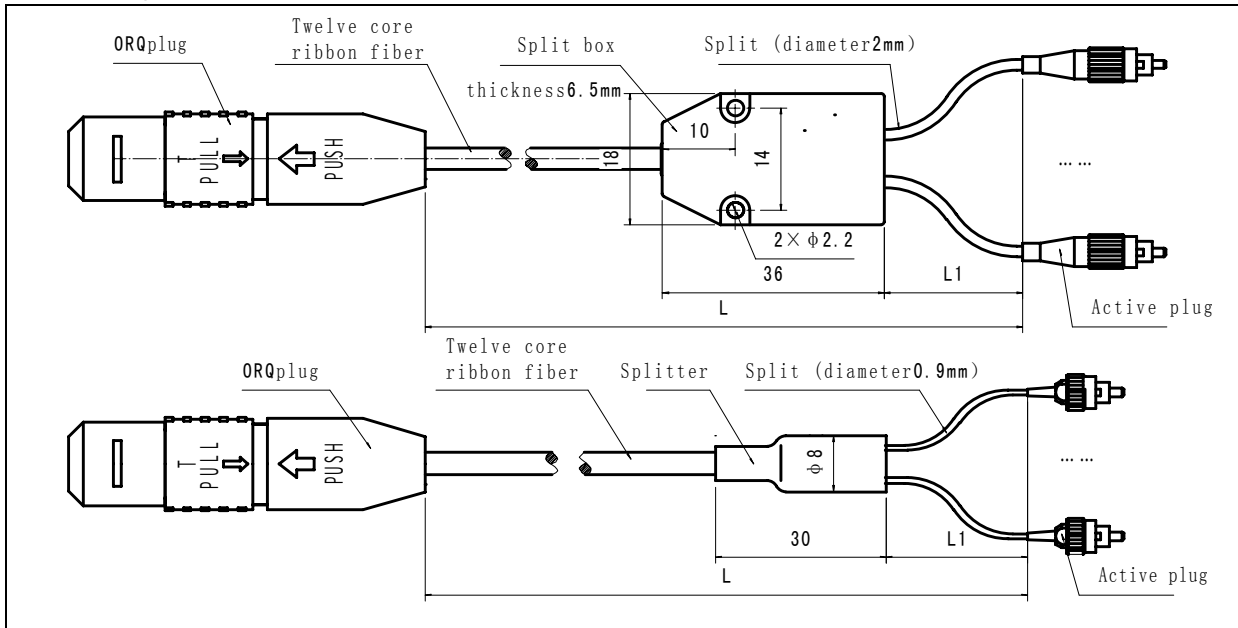
Explanation: End 1 is MPO plug and end 2 is 12 LC plugs. SM 12-core ribbon cable. Optic cable length 2m, Branch cable length 0.5m, Branch cable diameter ϕ 2mm.

Example 2: TE-MPO-12FC-0.9M1/0.3

Explanation: End 1 is MPO plug and end 2 is 12 FC plugs. MM62.5/125 12-core ribbon cable. Optic cable length 1m, Branch cable length 0.3m, Branch cable diameter ϕ 0.9mm.

MPOE (Not fully loaded) Optic cable connector

[Outline figure]



Note: L and L1 are the cable length/Branch cable length required by users.

Features: End 1 of cable is MPO plug (generally not fully loaded) and end 2 is optical plug.
Cable is 12-core ribbon cable. When MPO plug is not fully loaded, keep the cores near two sides and cut off the cores in the center. See the P/N example.

[Designation]

		RC	-MPOE	-6	FC	-2	S	1	/0.3
Basic series	TE-ribbon cable TH- ribbon fiber								
Plug at end 1	MPO —without guide pin MPO/D—with guide pin								
Amount of plug at end 2	1 to 12 (generally even numbers)								
Plug type at end 2	LC/ST/FC/SC/DIN, or provide per user's requirement								
Branch cable diameter	2— ϕ 2mm 0.9— ϕ 0.9mm								
Transmission mode	S—SM9/125 M—MM62.5/125 MI—MM50/125 MIV—MM50/125 (OM3)								
Optic cable length	Unit: m								
Branch cable length	Unit: m								

[P/N example]

Example 1: TE-MPOE-6LC-2S2/0.5

Explanation: End 1 is MPOE plug and end 2 has 6 LC plugs. Use SM9/125 cable for connection.



Optic cable length is 2m, Branch cable length is 0.5m, Branch cable diameter ϕ 2mm. Plug at splitter end corresponds to the number 1, 2, 3, 10, 11 and 12 core in MPO plug. Other cores are cut off.

Example 2: TH-MPOE-4FC-0.9M1/0.3

Explanation: End 1 is MPOE plug and end 2 has 4 LC plugs. Use MM62.5/125 fiber for connection.

Optic cable length is 1m, Branch cable length is 0.3m, Branch cable diameter ϕ 0.9mm. Plug at splitter end corresponds to the number 1, 2, 11 and 12 core in MPO plug. Other cores are cut off.