

JUMPER MPO OM4 12 FIBRAS Hembra-Hembra XX Metros

Type A (Fibra Violeta 3mm)

Ref. MPOOM4HHxxTA

MPOOM4HH15TA	VALUE MPO Trunk Cable, MPO/MPO, OM4, 15m
MPOOM4HH10TA	VALUE MPO Trunk Cable, MPO/MPO, OM4, 10m
MPOOM4HH05TA	VALUE MPO Trunk Cable, MPO/MPO, OM4, 5m
MPOOM4HH03TA	VALUE MPO Trunk Cable, MPO/MPO, OM4, 3m



MPO (multi-fibre push-on) cabling system

The MPO (multi-fibre push-on) cabling system is an easy-to-use solution based on a high density connector and ribbon-fiber cables with 12 cores. This system is commonly used in data centers but also e.g. between server rooms. It is designed for reliable and quick operations with the obvious benefits of less space requirements and improved scalability. The pre-terminated MPO cables can fan-out to other connections, usually to LC, to interconnect with standard-density products or services, using modules or fan-out cables.

KEY FACTS MPO

- Fully supports all optical fiber applications within the Ethernet family
- Modular solution with reusable modules and cables
- High-density cabling saves pathway space and gives improved airflow compared to traditional cable bundles
- Cables are pre-terminated in the factory to the correct length with high density connectivity

MPO connectors contact usually 12 fibers in a single connection. A connection must be stable and its ends correctly aligned. These aspects are essential for achieving the required transmission parameters.

Therefore MPO connectors are available in a male version (with pins) or a female version (without pins). The pins ensure that the fronts of the connectors are exactly aligned on contact and that the end-faces of the fibers are not offset. Remark: all cables are halogen-free (LSOH). The connectors are low-loss connectors with a very low attenuation.

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Connection rules

- a) When creating an MPO connection, always use one male connector and one female connector plus one MPO adapter.
- b) Never connect a male to a male or a female to a female. With a female-to-female connection, the fiber cores of the two connectors will not be at the exact same height because the guide pins are missing. That will lead to losses in performance. A male-to-male connection has even more disastrous results. There the guide pins hit against guide pins so no contact is established. This can also damage the connectors.
- c) Never dismantle an MPO connector. The pins are difficult to detach from an MPO connector and the fibers might break in the process.

MPO-12 TYPE A (straight) Key-Up to Key-Down

SIDE A: 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12

SIDE B: 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12

MPO-Cables

MPO cables are delivered already terminated. That requires greater care in planning in advance but it has a number of advantages: short installation times, tested and guaranteed quality and great reliability.

Trunk cables: Trunk cables serve as a permanent link connecting the MPO modules to each other. Trunk cables are available with 12 fibers. Their ends are terminated with 12-fiber MPO connectors female version (without pins).

Fan-Out cables: Fan-Out cables are used for the connection of a MPO cable to standard-density connectors, usually to 12 LC connectors.

Fiber optic - Cable OM4: Please see Fiber optic jumper cable 50/125µm OM4 in our catalogue. The key point of each installation is to ensure the correct wiring from transceiver to receiver. In case of using a set of cassettes, trunkcables and duplex patchcords - you need to follow a certain guideline for the polarity method of the trunkcables. The case described in the graphic is according to the polarity A method, means the duplex fibre optic jumper cables MUST be CROSS connected on one side and STRAIGHT connected on the second side.

MPO-Adapters

Adapters are used to connect two MPO connectors. They enforce that both keys are up. So the two connectors are connected while in the same position in relation to each other.

MPO-Modules

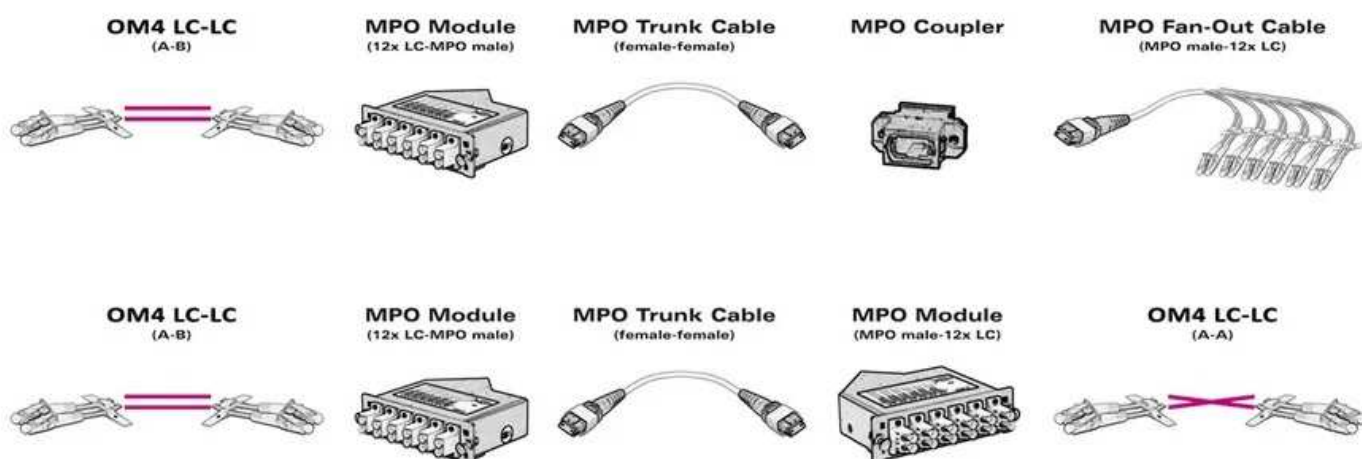
Modules and adapter plates are what connect the permanent link to the standard-density

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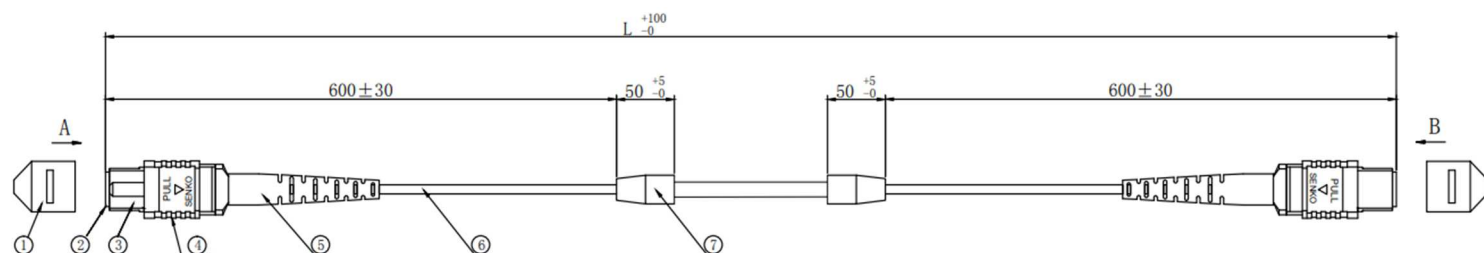
patch cable. The MPO module enables the user to take the fibers brought by a trunk cable and distribute them to a duplex cable. As already assembled units, the MPO modules are fitted with 12 fibers and have LC adapters on the front side and MPO at the rear. The modules can be built in panels to be installed in a 19" rack.

Technical specifications

Product group	Fibre optic cable
Product type	MPO (multi-fibre push-on)
Colour	violet
Quantity of fibre	12
Conductor composition	Compact conductor
External cable	No
Fibre section	50/125µm OM4
Side 1 Connector Type	MPO
Side 2 Connector Type	MPO
Aramid strain relief	Yes
Cable LSOH	Yes
Technical particularity	MPO-12 TYPE A (straight) Key-Up to Key-Down



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Note:

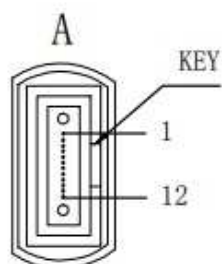
ROHS 2.0 & REACH Compliant

Test:

Grade Designation: Each to Reference

Type	Multi-Mode
	MPO/PC
Insertion Loss	$\leq 0.35\text{dB}$
Return Loss	$\geq 20\text{dB}$
Test Wavelength	850nm

⑧	12C $\varnothing 4.5\text{mm}$ Round cable, OM4 50/125, LSZH, Erika Violet	Lm	
⑦	Heat Shrink Tubing Black	2	
⑥	12C $\varnothing 3.0\text{mm}$ Round cable, OM4 50/125, LSZH, Erika Violet	L	
⑤	MPO Black Boot 3.0mm	2	
④	Aqua Housing (SENKO)	2	
③	Black Plastic Body (SENKO)	2	
②	MPO PC MM Male Resin Ferrule (SENKO)	2	
①	MPO Black Dust Cover (SENKO)	2	



WIRING TYPE A

1	Blue
2	Orange
3	Green
4	Brown
5	Gray
6	White
7	Red
8	Black
9	Yellow
10	Violet
11	Pink
12	Aqua

