VALUE MPO Module, MPO-Male /12x LC - Female
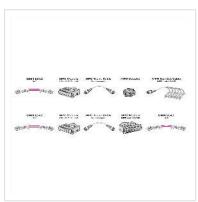
Product No.	21.99.1107
Manufacturer	VALUE
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EAN (single piece)	7630049611856

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.

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-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 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

Manufacturer	VALUE
Product group	MPO (multi-fibre push-on)
Product type	module
Colour	black
Height	37.5 mm
Width	74.7 mm
Depth	126.6 mm
Weight	295 g
Height of packaging (single piece)	70 mm
Width of packaging (single piece)	130 mm
Depth of packaging (single piece)	210 mm
Package weight (single piece)	0.44 kg