

3M™ Expanded Beam Optical (EBO) Connector Kit, MP12

Product Description

The 3M™ Expanded Beam Optical (EBO) Connector Kit, MP12 is a multi-fiber connector system based on expanded beam ferrule technology. It features 3M™ Expanded Beam Optical Ferrule 12F which collimates and expands the beam, reducing its sensitivity to signal interference from dust and debris. The kit supports a parallel-aligned ferrule design which allows the beam to travel between ferrules without physical contact, virtually eliminating installation time related to cleaning and inspection. This design also achieves critical mating for reliable signal transmission without the potential variances associated with holes and pins. The properly assembled connector kit delivers low insertion loss and high return loss for single mode or multimode fibers. Keyed design helps prevent mating with hardware not intended for 12-fiber connectivity. Genderless ferrule geometry eliminates the need for separate male/female connectors. 3M™ Expanded Beam Optical (EBO) ferrules support loose tube and ribbon termination.

Key Features

- Genderless ferrule geometry eliminates the need for separate male and female connectors
- Ferrule design supports 12 single mode or multimode fibers
- Floating ferrule design provides low mating force (< 1 N)
- Cable OD range 2.0mm – 3.0 mm

Parts included in the 3M™ EBO Connector Kit, MP12:

- 3M™ Expanded Beam Optical Connector, MP12 Cassette (1)
- 3M™ Expanded Beam Optical Connector, MP12 Cover (2)
- 3M™ Expanded Beam Optical Connector, MP12 Sleeve (3)
- 3M™ Expanded Beam Optical Connector, MP12 Dust Cap (4)
- 3M™ Expanded Beam Optical Connector, MP12 Sleeve Spring (5) (2 pcs)

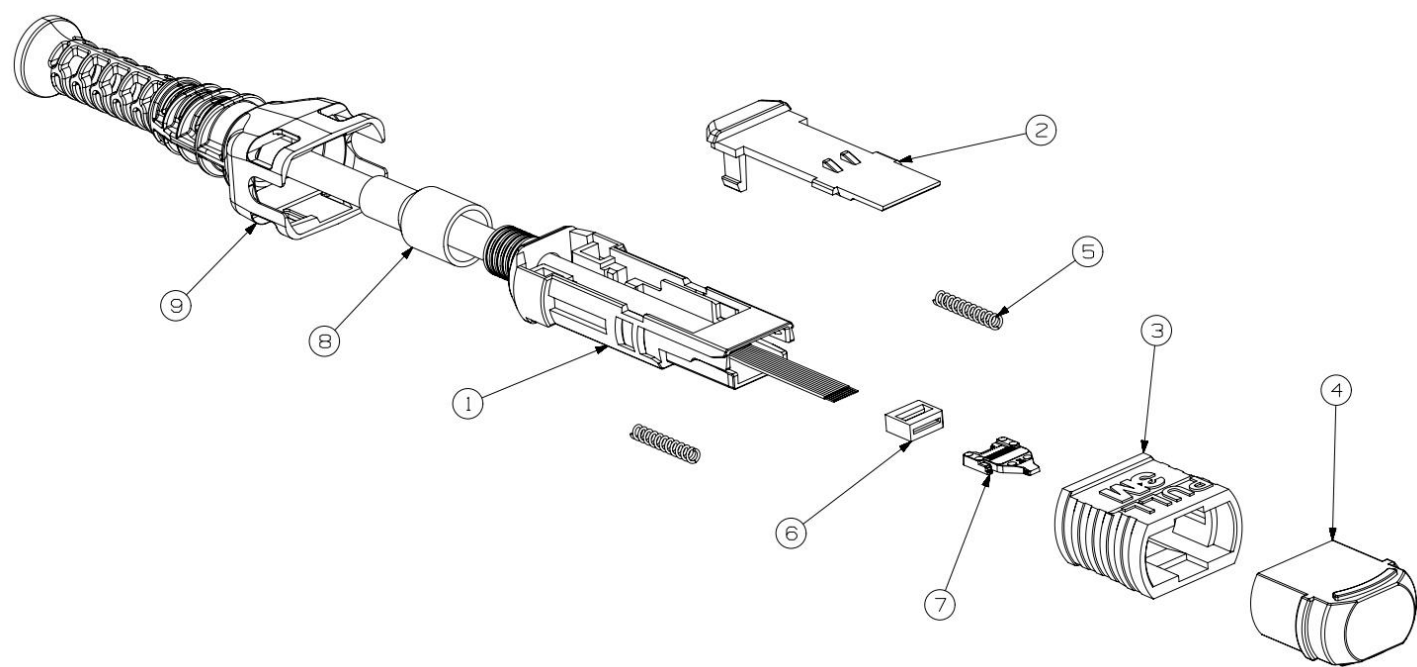
Adapters for use with 3M™ Expanded Beam Optical Connector, MP12:

- 3M™ Expanded Beam Optical Connector, MP12 is compatible with opposed key (Type A) MPO adapters

Parts not included in the 3M™ EBO Connector Kit, MP12– available for purchase: Refer to ordering guide.

- Boots (9)
- Crimps (8)
- Collets (6)
- Ferrules (7)

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Product Construction

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Expanded Beam Optical Connector Kit, MP12	
Property	Value
Number of optical fibers	12
Type of optical fiber	Single mode or multimode
Connector colors	Green – single mode; Aqua – multimode, Violet – multimode
Connector strain relief boot color	Black

Applications

- Data center multi-fiber optical interconnect
- Multi-fiber trunks, patch cord and fanout assemblies
- Multi-fiber pluggable transceiver interface
- Multi-fiber interconnect for test and measurement

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Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Expanded Beam Optical Connector Kit, MP12		
Property	Single mode (SM)	Multimode (MM)
Property	Single mode	Multimode
Operating wavelength	1310 nm	850 nm
Insertion loss maximum	0.70 dB	0.30 dB
Insertion loss typical	0.35 dB	0.20 dB
Return loss minimum	55 dB	35 dB
Operating temperature range	-10°C to +60°C	-10°C to +60°C
Compliance to GR-1435 Controlled Env.	✓	✓

Certificate of Conformance

The 3M Certificate of Conformance for this product is established when the product is manufactured and deemed commercially available from 3M. Contact your local 3M representative for this product’s CoC.

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Safety Data Sheet: Consult Safety Data Sheet before use.

Regulatory: For regulatory information about this product, visit 3M.com/regs or contact your 3M representative.

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