

# MPO Breakout Cable Datasheet

## IDEAL FOR DATA CENTER HIGH DENSITY CABLING SYSTEM

Designed for Storage Area Network (SAN) , Local Area Network (LAN) switch, Equipment Distribution Area (EDA) patch field applications.



## MPO Breakout Cable

MPO breakout assemblies are used in parallel optics and duplex transmission cross connect systems to increase cable density between switch and server cabinets. Designed for high-density fiber patching in data centers, they ensure peak performance throughout your local area network. Allow for rapid deployment of high-density, multi-port patch field connectivity for Storage Area Network (SAN) applications.

## Standards Compliance

- RoHS, CE (EN 50575 CPR) and ISO9001 Compliant
- IEC61754-7
- TIA 605-4 (FOCIS 5)
- YD/T1272.5

## Features

- Corning Clearcurve® multimode fiber, SMF-28® Ultra optical fiber
- MPO female/male, LC, SC, FC, ST connectors available
- OM4, OM3, OS2 available
- 0.35dB elite low loss connector
- Factory terminated and tested
- Pulling eyes are provided as an option to protect the fiber ends during installation

## Technical Specification

Construction	Description
<b>Fiber Count</b>	8/12 Fibers
<b>Fiber Mode</b>	Single mode: OS2 9/125μm Multimode: OM4 50/125μm, OM3 50/125μm
<b>Glass Fiber</b>	Corning ClearCurve® multimode fiber SMF-28® Ultra optical fiber
<b>Connector A</b>	MPO Female, Male
<b>Connector B</b>	LC, SC, FC, ST
<b>Polarity</b>	Type A, Type B
<b>Cable Jacket</b>	Low Smoke Zero Halogen (LSZH) Plenum (OFNP) Riser (PVC)

Color Codes	MPO	LC
<b>Cable Jackets</b>	OS2: Yellow OM4: Magenta OM3: Aqua	OS2: Yellow OM4: Magenta OM3: Aqua
<b>Connectors</b>	OS2: Green OM4/OM3: Aqua	Single Mode: UPC Blue, APC Green Multimode: Beige
<b>Boots</b>	Black	Single Mode: UPC Blue, APC Green Multimode: Beige

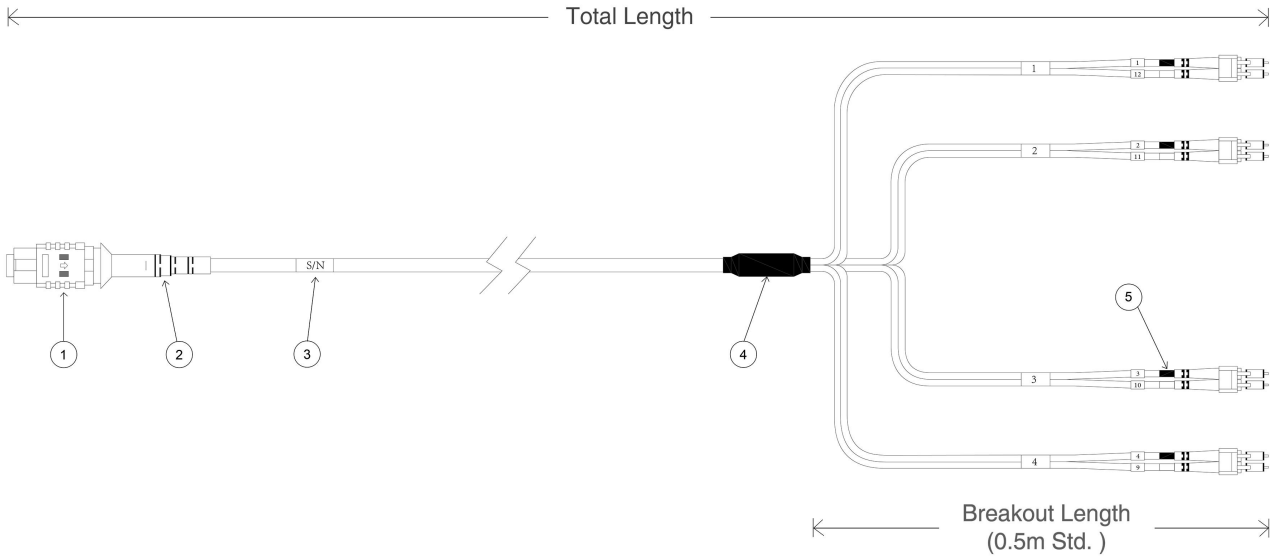
Physical Properties	Description
<b>Cable Diameter</b>	3.0mm
<b>Breakout Leg</b>	Duplex: 2.0mm Simplex: 0.9/2.0mm
<b>Breakout Length</b>	0.3/0.5m Stagger 1/2/3/4
<b>Minimum Bend Radius</b>	Single Mode: 10.0mm Multimode: 7.5mm
<b>Operating Temperature</b>	-10°C to 70°C
<b>Storage Temperature</b>	-40°C to 85°C

## Technical Specification

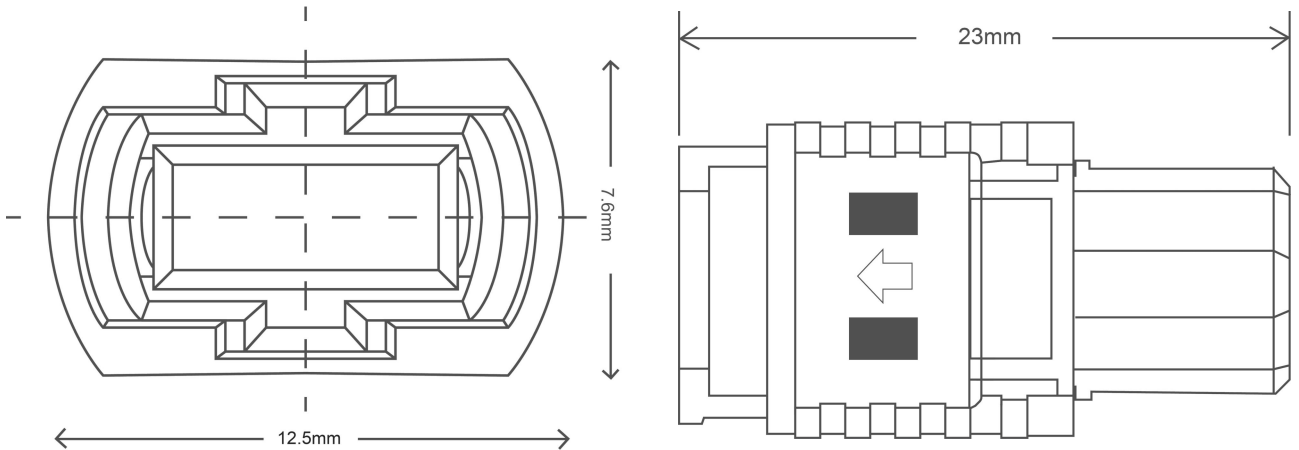
Construction	Description	
<b>Wavelength (nm)</b>	Single Mode: 1310/1550 Multimode: 850/1300	
<b>Transmission Distance</b>	OM4: 150m at 40/100G, 400m at 10G OM3: 100m at 40/100G, 300m at 10G	
Connector	MPO	
<b>Fiber Mode</b>	Single Mode	Multimode
<b>Attenuation (dB/km)</b>	≤ 0.32 at 1310 nm ≤ 0.18 at 1550 nm	≤ 2.3 at 850 nm ≤ 0.6 at 1300 nm
<b>Insertion Loss (dB)</b>	≤ 0.35	≤ 0.35
<b>Return Loss (dB)</b>	UPC: ≥ 50, APC: ≥ 60	UPC: ≥ 20
Connector	LC/SC/FC/ST	
<b>Fiber Mode</b>	Single Mode	Multimode
<b>Insertion Loss (dB)</b>	UPC: ≤ 0.2, APC: ≤ 0.3	UPC: ≤ 0.2
<b>Return Loss (dB)</b>	UPC: ≥ 50, APC: ≥ 60	UPC: ≥ 30

## Technical Drawing

The MPO breakout cable consists of MPO ultra low IL connector and LC connectors. The flat clip design of LC connectors allows the cable is suitable to be used in high-density fiber patching in data centers which need space saving and reduce cable management troubles. Reverse-polarity design allows for quick and easy polarity conversion without exposing the fibers or needing any tools.

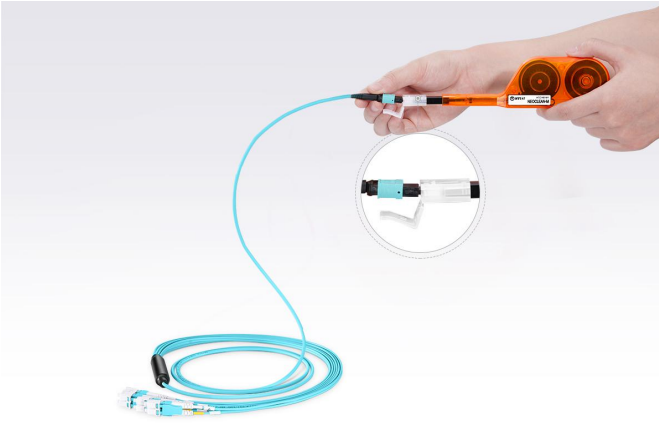


- ① MPO Connector
- ② Connector Boot
- ③ Serial Number Label
- ④ Fan Out Kit
- ⑤ LC Connector



## Fiber Optic Cleaning

### NEOCLEAN-M One-Push Cleaner



#### Characteristics

- For cleaning ferrules pinned or non-pinned.
- Designed for cleaning the ferrule end-faces of the MPO connectors.
- Narrow design reaches tightly spaced MPO adapters.
- Cost effective tool for cleaning fiber end-faces without the use of alcohol.

### CLE-BOX Fiber Optic Cassette Cleaner



#### Characteristics

- Made of non-alcohol superfine fiber ideal for fiber optic cleaning.
- Widely used in optical network maintenance, engineering or equipment.
- Cassette tapes are available for replacement after 500+ cleaning operations to ensure low cleaning cost.

ID	Description
#39697	NEOCLEAN-M One-Push Cleaner for MPO/MTP Connector (600 cleans)

## Test Center

Comprehensive performance testing system ensures more secure operation and keeps more stable and reliable data connection. 3D interferometer provides verification of MPO polishing process and making all parameters of the polished MT ferrule complies and exceeds industry standards. Clean optical connectors are paramount in providing a reliable, high-performance fiber optic infrastructure.

## Professional Test Equipment



## Test Assured Program



3D Interferometer Test



End-Face Inspection

MPO L-C Harness Cable									
Part No.	MPO L-C HARNESS TYPE B								
Lot No.	XXXXXXXXXXXX								
Rev.	1.0								
Manufacturer	FS								
Connector	Color	AJ20	WJ20	AJ25	WJ25	AJ30	WJ30	AJ35	WJ35
1	Blue	0.10	0.14	0.00	0.00	0.00	0.00	0.00	0.00
2	Orange	0.10	0.13	0.00	0.00	0.00	0.00	0.00	0.00
3	Green	0.10	0.13	0.00	0.00	0.00	0.00	0.00	0.00
4	Brown	0.10	0.13	0.00	0.00	0.00	0.00	0.00	0.00
5	Black	NA	NA	NA	NA	NA	NA	NA	NA
6	White	NA	NA	NA	NA	NA	NA	NA	NA
7	Red	NA	NA	NA	NA	NA	NA	NA	NA
8	Black	NA	NA	NA	NA	NA	NA	NA	NA
9	Yellow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Violet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Pink	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Gray	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Test Report of IL & RL

## Hot Products

ID	Description
#80244	1m (3ft) MPO Female to LC, 8 Fibers OM3, Type B, Elite, LSZH
#80245	2m (7ft) MPO Female to LC, 8 Fibers OM3, Type B, Elite, LSZH
#80240	1m (3ft) MPO Female to LC, 8 Fibers OS2, Type B, Elite, LSZH
#80241	2m (7ft) MPO Female to LC, 8 Fibers OS2, Type B, Elite, LSZH



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