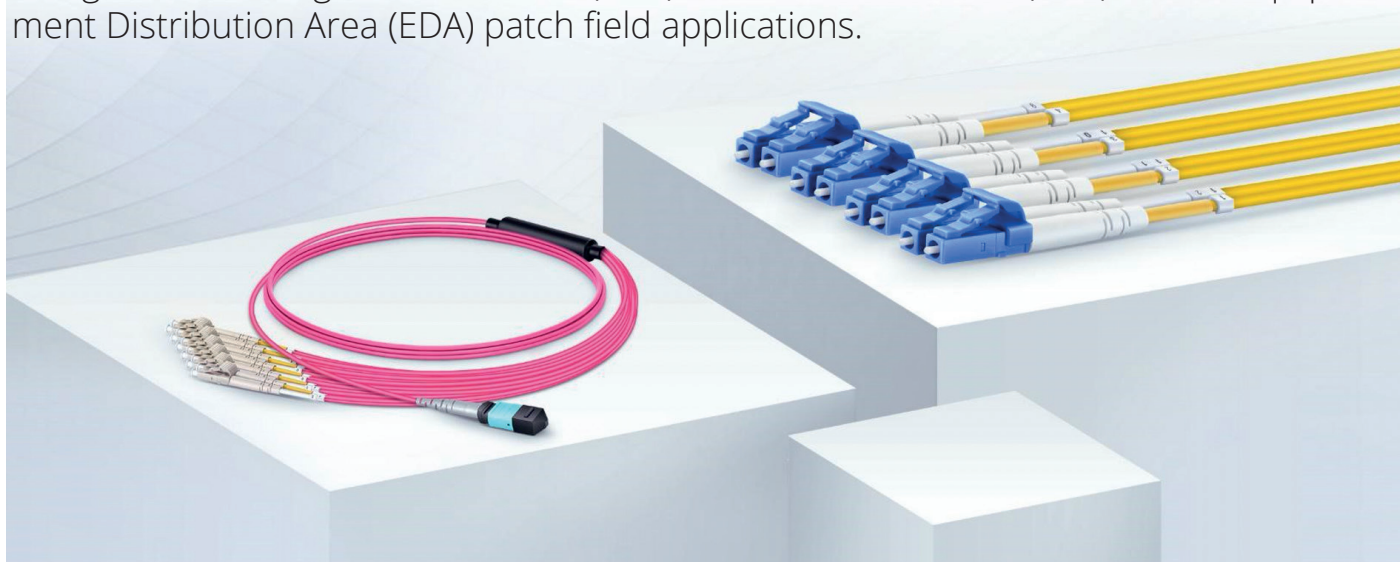# MTP®/MPO Breakout Cable Datasheet

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.

MTP®/MPO Breakout Cable

Fiber optic patch cables are ideal for supporting high speed telecommunication network fiber applications. They are manufactured and tested in compliance with TIA 604 (FOCIS), IEC 61754 and YD/T industry standards. OM1, OM2, OM3, OM4, OM5 or OS2 fiber types are available to meet the demand of Gigabit Ethernet, 10 Gigabit Ethernet and high speed Fiber Channel. Every termination is through rigorous parameter test to ensure the highest network performance.

Standards Compliance

• RoHS, CE (EN 50575 CPR), ISO9001 and WEEE Compliant • EIA/TIA, Telecocordia GR-326-CORE Standards

• IEC61754-7

• TIA 605-4 (FOCIS 5)

• YD/T1272.5

Features

• US Conec MTP® connector, Senko MPO Plus® premium connector

• Corning Clearcurve® multimode fiber, SMF-28® Ultra optical fiber

• LC, SC, FC, ST connectors available

• OS2, OM4, OM3 available

• 0.35dB elite low loss connector

• Custom staggering options available on tails

• Factory terminated and tested

• Pulling eyes are provided as an option to protect the fiber ends during installation

MTP®/MPO BREAKOUT CABLE DATASHEET

Construction	Description
Fiber Count	8-144 Fibers
Fiber Mode	Single mode: OS2 9/125µm Multimode: OM3/OM4/OM5 50/125µm
Fiber Brand	Corning ClearCurve® multimode fiber and SMF-28® Ultra optical fiber
Connector A	MTP® Female, Male; MPO Female, Male
Connector Brand	US Conec MTP®, Senko MPO Plus®
Connector B	LC, SC, FC, ST
Polarity	Type A, Type B, Type C
Cable Jacket Ratings	Plenum (OFNP) Low Smoke Zero Halogen (LSZH) Riser (PVC)

Color Codes	MTP®	MPO	LC
Cable Jackets	OS2: Yellow OM4: Magenta OM3: Aqua	OS2: Yellow OM4: Magenta OM3: Aqua	OS2: Yellow OM4: Magenta OM3: Aqua
Connectors	OS2: Green OM4/OM3: Aqua	OS2: Green OM4/OM3: Aqua	Single Mode: UPC Blue, APC Green Multimode: Beige
Boots	8 Fibers: Grey 12 Fibers: Black 24 Fibers: Red	8/12/24 Fibers: Black	Single Mode: UPC Blue, APC Green Multimode: Beige

MTP®/MPO BREAKOUT CABLE DATASHEET

Technical Specification

Physical Properties	Description
Cable Diameter	3.0mm
Breakout Leg	Duplex: 2.0mm, Simplex: 0.9/2.0mm
Breakout Length	0.3/0.5m
Minimum Bend Radius	Single Mode: 10.0mm, Multimode: 7.5mm
Operating Temperature	-10°C to +70°C
Storage Temperature	-40°C to +85°C

* PPlease kindly note that the cable diameter of standard single MTP®/MPO cable is 3.0mm, and as for cables with different bundles, the trunk diameter is different, as shown below

Bundle Count	MTP®/MPO-12	MTP®/MPO-24	Trunk Diameter
2 Bundles	24 Fibers	48 Fibers	7.2mm
3 Bundles	36 Fibers	72 Fibers	9.3mm
4 Bundles	48 Fibers	96 Fibers	9.5mm
6 Bundles	72 Fibers	144 Fibers	11.7mm
8 Bundles	96 Fibers	/	12.01mm
12 Bundles	144 Fibers	/	17.3mm

* The "bundle" means a combination of several fibers. For example, as for MTP®/MPO-12 cables, 2 bundles mean 24 Fibers(2x 12F) ; for MTP®/MPO-24 cables, 2 bundles mean 48 Fibers(2x 24F).

MTP®/MPO BREAKOUT CABLE DATASHEET

Technical Specification

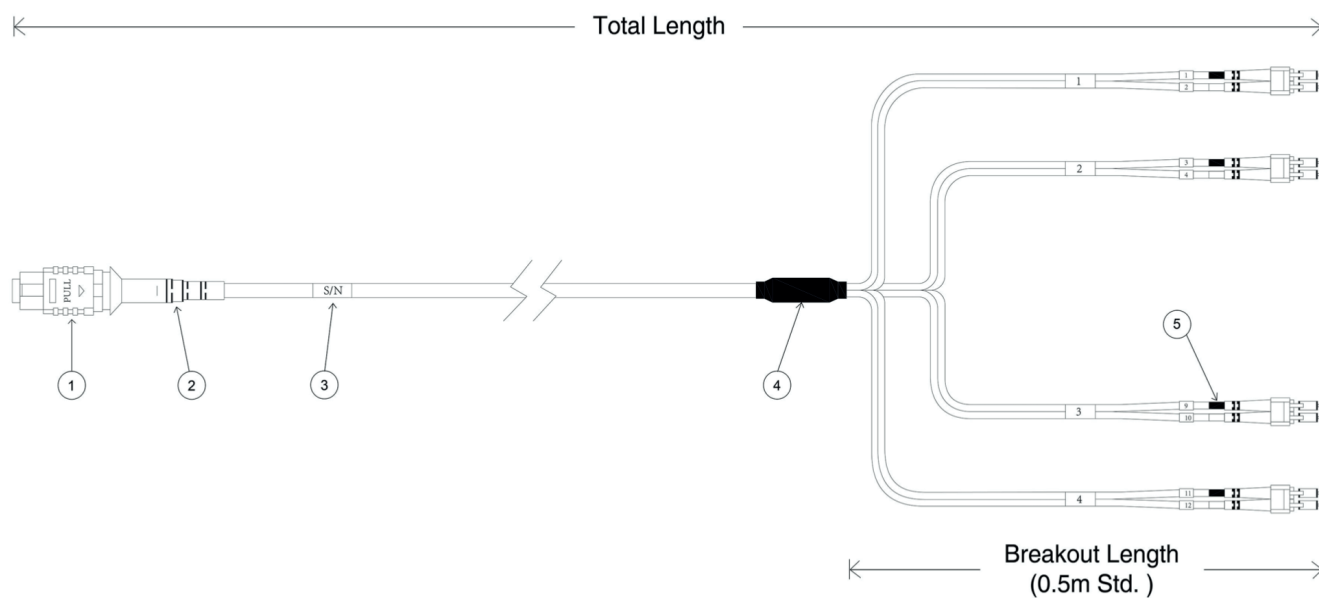| Construction	Description
Wavelength (nm)	Single Mode: 1310/1550 Multimode: 850/1300
Transmission Distance	OM4: 150m at 40/100G, 400m at 10G OM3: 100m at 40/100G, 300m at 10G

Connector	MTP®/MPO	
Fiber Mode	Single Mode	Multimode
Attenuation (dB/km)	≤0.32 at 1310nm ≤0.18 at 1550nm	≤2.3 at 850nm ≤0.6 at 1300nm
Insertion Loss (dB)	≤0.35	≤0.35
Return Loss (dB)	APC: ≥60, UPC: ≥50	UPC: ≥20

Connector	LC/SC/FC/ST	
Fiber Mode	Single Mode	Multimode
Insertion Loss (dB)	APC: ≤0.3, UPC: ≤0.2	UPC: ≤0.2
Return Loss (dB)	APC: ≥60, UPC: ≥50	UPC: ≥30

MTP®/MPO BREAKOUT CABLE DATASHEET

Technical Drawing

Total Length

Breakout Length
(0.5m Std.)

1. MTP®/MPO Connector   2. Connector Boot   3. Serial Number Label   4. Fan Out Kit   5. LC Connector

7.6mm

12.5mm

23mm

PULL