

DENALI™ MPO Trunk Assemblies

DENALI MPO Trunk Assemblies provide high-performance, scalable plug-and-play connectivity ideal for high-density data center applications. Built around a reduced-diameter MicroCore® cable, these trunks offer excellent bend tolerance and airflow efficiency ideal for routing through raceways, ducts, cable trays, and conduits in space-constrained environments. DENALI trunks are available in Base-8, Base-12, Base-16 and Base-24 configurations to align with various network architectures. All connectors feature high-quality optical and mechanical properties for reliable performance.

Features

Low-Loss MPO Connectivity

- Polarity options available for various applications
- MPO interface available with male or female connectors
- Base-8, Base-12, Base-16 and Base-24 connectors available
- MPO components feature superior optical and mechanical properties
- MTP® PRO connectors include field-reversible polarity and gender (multimode only)
- Low-loss Premium MPO connectors assures low insertion losses and power penalties in tight power budget, high-speed network environments

Installation-Friendly Design

- Optional pulling eye for easier installation
- Pre-defined breakout lengths reduce design complexity
- Reduced diameter MicroCore cable with 2.0 mm subunits (up to 144 fibers)
- Integrated Outback Clip mates directly with the trunk cable management area in all DENALI Housings

Applications

- AI/ML
- Hyperscale
- Colocation
- Campus Networks
- Central Office and Office Backbone



Specifications

Connector Performance

PARAMETER	SM	MM
Insertion Loss (Max)	0.35 dB	≤ 0.25 dB
Return Loss	0.35 dB	≤ 0.60 dB

Connector Specifications

CONNECTOR	CONNECTOR ORDERING CODE	CONNECTOR HOUSING COLOR	FIBER TYPE	CABLE JACKET COLOR	IL (TYPICAL db)	IL (MAX. dB)	REFLECTANCE (TYPICAL dB)
8F MPO Low Loss (unpinned)	EEF	Yellow	Single-mode G.657.A1 (BIF)	Yellow	0.1	0.35	-60
8F MPO Low Loss (pinned)	EEM	Yellow	Single-mode G.657.A1 (BIF)	Yellow	0.1	0.35	-60
8F MTP Pro (unpinned)	PFEF	Aqua	50 μm OM3, OM4	Aqua	0.1	0.35	-20
8F MTP Pro (pinned)	PFEM	Aqua	50 μm OM3, OM4	Aqua	0.1	0.35	-20
12F MPO Low Loss (unpinned)	ETF	Yellow	Single-mode G.657.A1 (BIF)	Yellow	0.1	0.35	-60
12F MPO Low Loss (pinned)	ETM	Yellow	Single-mode G.657.A1 (BIF)	Yellow	0.1	0.35	-60
12F MTP Pro (unpinned)	PFTF	Aqua	50 μm OM3, OM4	Aqua	0.1	0.35	-20
12F MTP Pro (pinned)	PFTM	Aqua	50 μm OM3, OM4	Aqua	0.1	0.35	-20

Cable Performance

CABLED FIBER TYPE (ISO/IEC 11801)	SM (OS1/OS2)	OM3	OM4
Attenuation Coefficient (dB/km)	≤0.38 Max (1310 nm)	≤ 3.5 Max (850 nm)	≤ 3.5 Max (850 nm)
	≤0.25 Max (1550 nm)	≤ 1.5 Max (1300 nm)	≤ 1.5 Max (1300 nm)
	≤0.34 Typ (1310 nm)	≤ 2.7 Typ (850 nm)	≤ 2.7 Typ (850 nm)
	≤0.19 Typ (1550 nm)	≤ 0.9 Typ (1300 nm)	≤ 0.9 Typ (1300 nm)
Minimum Bandwidth: Overfilled Launch (MHz-km)	N/A	≥ 1500 (850 nm)	≥ 3500 (850 nm)
		≥ 500 (1300 nm)	≥ 500 (1300 nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (MHz-km)	N/A	≥ 2000 (850 nm)	≥ 4700 (850 nm)

Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
ITU	G.657.A1	Single-mode optical fiber only
Telcordia	GR-409	Cable
	GR-326/GR-1435	Connectors
EIA/TIA	568-A	Cable
RoHS	Compliant	Cable

Cable Temperature Specifications

TEMPERATURE RANGE	
Installation	0°C to +60°C (32°F to +140°F)
Operation	0°C to +60°C (32°F to +140°F)
Storage	-20°C to +70°C (-4°F to +158°F)

Ordering Information

CONNECTOR		CABLE TYPE	FIBER COUNT	FIBER TYPE	CABLE LENGTH	PULLING EYE	POLARITY	OBC	BASE SELECTION	PLATFORM
END A	END B									
ETF	ETF	PL	012	Q	0001	PA	MF	RS	12	DENALI
EEF = MPO Low Loss, SM, 8 fiber, Female		Options for Trunk & Pigtail Assemblies: PL = Plenum MicroCore® (250 µm)	008 = 8	Q = Single-mode G.657.A1 B1F	XXXX = Meters XXXXXFT = Feet	N = No Pulling Eye PA = Pulling Eye End A PB = Pulling Eye End B PC = Pulling Eye Both Ends	MF = Method F MA = Method A	HM = Hook & Loop OBC, Mixed HS = Hook & Loop OBC, Small HL = Hook & Loop OBC, Large RS = Rock & Lock*, Small NC = Spool Only Blank = Standard OBC	08 = BASE-8 12 = BASE-12	DENALI
EEM = MPO Low Loss, SM, 8 fiber, Male			012 = 12	L = Multimode OM3						
PFEF = MTP PRO-MM, 8 fiber, Female		P4 = 4.8 mm Plenum MicroCore (for 12F cables only)	024 = 24	C = Multimode OM4						
PFEM = MTP PRO-MM, 8 fiber, Male		GE = LSZH MicroCore (250 µm)	048 = 48							
ETF = MPO Low Loss, SM, 12 fiber, Female			072 = 72							
ETM = MPO Low Loss, SM, 12 fiber, Male		Options for Pigtail Assemblies Only:	096 = 96							
PFTF = MTP PRO-MM, 12 fiber, Female		GQS = 2.0 mm Plenum MicroCore (SWR)	144 = 144							
PFTM = MTP PRO-MM, 12 fiber, Male		GES = 2.0 mm LSZH MicroCore (SWR)	288 = 288							
XXX = No Connector (Pigtail)										

* NOTE – The "Rock and Lock" mounting clip is only available for trunk cable diameters up to 13 mm and will come standard on trunk cables with fiber counts up to 288. The "Hook and Loop" mounting clip is available by request only.