Plenum Trunk Cable Assemblies

specifications

Trunk Cable Assemblies shall allow for rapid deployment of high-density permanent links in a single assembly for data center applications requiring quick infrastructure deployment, such as main, horizontal, and zone distribution areas. These trunk cable assemblies shall optimize cable routing requirements to ensure efficient use of pathway space and significantly reduce installation time and cost. QuickNet™ Trunk Cable Assemblies are built with modular MPO connectivity and provide compatibility, flexibility and system performance in all permanent link applications. All trunk cable assemblies are factory terminated and tested to deliver verified optical performance and reliability for improved network integrity at speeds of 10/25/40/50/100G and beyond.

applications

Allows system designers to tailor configuration, reach and breakout construction to application requirements; to minimize waste, optimize cable management, speed deployment, improve flexibility and manageability for lower installation costs. Small diameter trunk cable assemblies use 30 – 40% less space which is ideal for high cable density applications.

construction

Cable type:	Indoor Small Diameter Trunk
Cable jacket rating:	Optical Fiber Non-conductive Plenum (OFNP)
Fiber types:	Singlemode: OS2 9/125µm
	Multimode: OM3 50/125µm
	OM4 50/125µm
	OM5 50/125um
Connector types end 'A':	12-fiber – MPO Female or Male, 12-fiber – PanMPO™ Female or Male
Connector types end 'B':	12-fiber – MPO Female or Male, 12-fiber – PanMPO™ Female or Male, Pigtail
Fiber count:	12, 24, 48, 72, 96, and 144
Jacket color:	OS2 — Yellow
	OM3 — Aqua
	OM4 — Aqua
	OM5 — Lime

physical properties

Cable outside diameter (OD):	12-fiber: 4.5mm	72-fiber: 6.6mm
	24-fiber: 5.4mm	96-fiber: 8.1mm
	48-fiber: 5.6mm	144-fiber: 9.4mm
Cable Construction:	250µm Distribution Cable	
Minimum bend radius:	Under load:	20 x Cable OD
	Static:	10 x Cable OD
Cable tensile strength:	440N (100 lbs.)	
Cable compressive load:	100 N/mm	
Connector durability:	500 mating cycles*	
Breakout outside diameter:	2.0mm	
Breakout length:	1m	

*With proper cleaning and inspecting.

optical properties

Maximum cable attenuation:	Singlemode:	0.4dB/km at 1310nm
		0.3dB/km at 1550nm
	Multimode:	3.0dB/km at 850nm
		1.0dB/km at 1300nm
Maximum connector insertion loss:	Standard Singlemode MPO:	0.75dB
	Standard Multimode MPO:	0.50dB
	Optimized Multimode MPO:	0.35dB
	Ultra Multimode MPO:	0.25dB
Maximum connector return loss:	Singlemode:	55dB
	Multimode:	MPO 30dB
		LC 26dB

environmental properties

Operating temperature:	-20°C to + 70°C (-4°F to 158°F)
Storage and shipping temperature:	-40°C to +70°C (-40°F to 158°F)
Installation temperature:	-10°C to + 60°C (14°F to 140°F)

standards

Meets or exceeds:	ISO/IEC 1180, TIA/EIA-568-C.3, TIA-604-5 (FOCIS-5), TIC/EIA-568-C.1, GR-409-CORE, ICEA S-83-596 RoHS Compliant

Plenum Trunk Cable Assemblies

part number configurator

Example: FYXTP77Y001F030 = OM3 12-Fiber HD Flex™ Indoor Small Diameter Trunk, Plenum, 1x12F PanMPO Female with 1m breakout to 1x12F PanMPO Female with 1m breakout, Polarity B, Optimized IL, Pulling Eye End A, 30 feet.

CHARACTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
EXAMPLE	F	Y	X	T	P	7	7	Y	0	0	1	F	0	3	0

1 – Fiber
   F = Fiber

2 – Cable Type
   Y = Indoor small diameter trunk cable

3 – Fiber Type
   9 = OS2 Singlemode 9/125µm
   X = OM3 50/125µm
   Z = OM4 50/125µm
   W = OM5 50/125µm

4 – Fiber Count
   T = 12 fibers
   U = 24 fibers
   W = 48 fibers
   X = 72 fibers
   Y = 96 fibers
   A = 144 fibers

5 – Jacket Type
   P = Plenum

6 – Connector Type (End A)
   5 = 12-fiber MPO Female
   6 = 12-fiber MPO Male
   7 = 12-fiber PanMPO Female
   8 = 12-fiber PanMPO Male

7 – Connector Type (End B)
   5 = 12-fiber MPO Female
   6 = 12-fiber MPO Male
   7 = 12-fiber PanMPO Female
   8 = 12-fiber PanMPO Male
   U = Pigtail

8 – Construction/Performance
   A = Method A, Standard IL (singlemode)
   B = Method B, Standard IL (singlemode)
   X = Method A, Optimized IL
   Y = Method B, Optimized IL
   K = Method A, Ultra IL (12 – 48 fibers)
   L = Method B, Ultra IL (12 – 48 fibers)
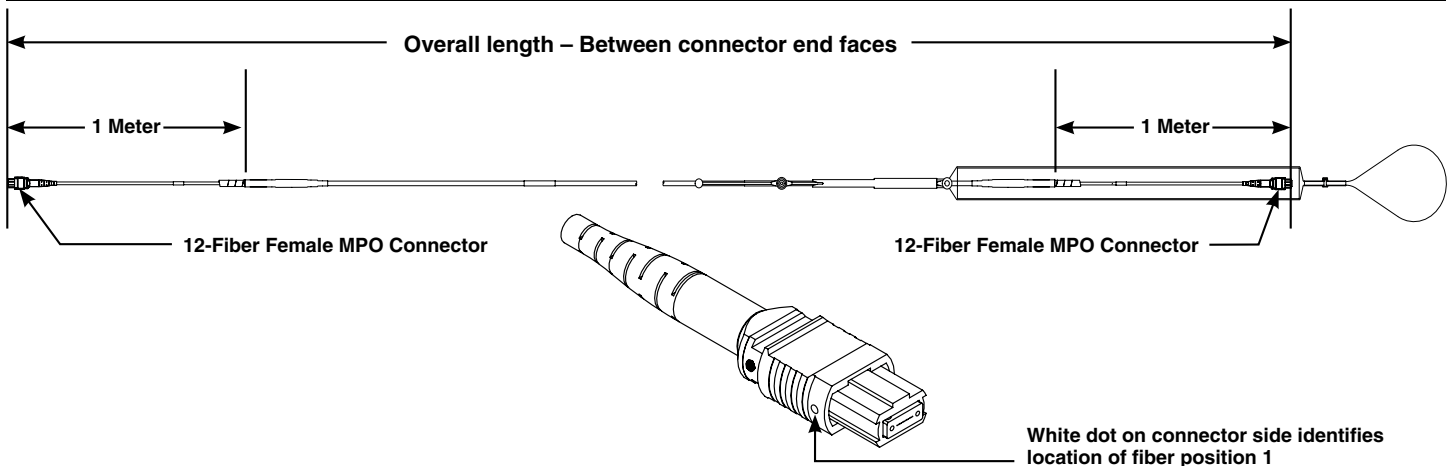
9 – 11 – Serial

12 – Unit of Measure
   F = Feet
   M = Meters

13, 14, 15 – Cable Assembly Length
   015 – 999 Feet
   005 – 300 Meters

Serial	Transition	Pulling Eye
001	HD Flex™	Yes
002	HD Flex™	No
003	HD Flex™ to pigtail	Yes
005	Standard	Yes
006	Standard	No
007	Standard to pigtail	Yes

small diameter trunk cable assembly detail

Overall length – Between connector end faces

1 Meter

1 Meter

12-Fiber Female MPO Connector

12-Fiber Female MPO Connector

White dot on connector side identifies location of fiber position 1

Please contact Panduit customer service for information on additional part number options.

For a copy of Panduit product warranties, log on to www.panduit.com/warranty

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Contact Customer Service by email: cs@panduit.com
or by phone: 800.777.3300

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