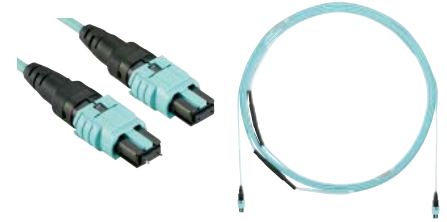# QuickNet™ PanMPO™ Small Diameter Trunk Cable Assemblies

technical information

PanMPO™ Trunk Assemblies are pre-terminated 12-fiber and 24-fiber cable assemblies. The unique design of the PanMPO™ Connector allows for rapid gender and polarity change in the field, in support of standards-compliant cable plant migration from 10G cassette-based systems to 40G MPO connector-based parallel optics cable plant. These trunk cable assemblies optimize cable routing requirements to ensure efficient use of pathway space and significantly reduce installation time and cost. All small diameter trunk cable assemblies are factory terminated and tested to deliver verified optical performance and reliability for improved network integrity. 10Gig versions provide 10 Gb/s network performance up to 300 meters for OM3 and up to 550 meters for OM4 per IEEE 802.3ae 10 GbE standard while maintaining compatibility with legacy systems.

application

10G fiber backbone or permanent link when mated to QuickNet™ Cassettes or fiber adapter panels paired with MPO to LC breakout harnesses. Method A and Method B TIA-568-C compliant for 40G parallel optics multimode 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 ratings:	Optical Fiber Nonconductive Plenum (OFNP) Low Smoke Zero Halogen (LSZH)
Fiber types:	Multimode: OM3 50/125µm OM4 50/125µm
Connector types end 'A' and end 'B':	PanMPO™ Female or PanMPO™ Male
Fiber count:	12 and 24
Jacket color:	OM3: Aqua OM4: Aqua

physical properties

Cable outside diameter (OD):	12-fiber:	4.5mm
	24-fiber:	5.4mm
Minimum bend radius:	30mm	
Cable tensile strength:	12-fiber:	440N
	24-fiber:	660N
Cable compressive load:	10 N/mm	
Flex:	100 cycles at 4.9N	
Connector cable retention:	50N	
Connector durability:	500 mating cycles*	
Breakout outside diameter:	3.0mm	
Transition outside diameter:	12-fiber:	10mm
	24-fiber:	10mm
Pulling eye diameter:	12-fiber:	19mm
	24-fiber:	23mm
Twist:	10 cycles at 15N	
Breakout length:	1m	
Gender reversal durability:	50 cycles	
Polarity reversal durability:	50 cycles	

optical properties

Maximum cable attenuation:	Multimode:	3.5dB/km at 850nm 1.5dB/km at 1300nm
Maximum connector insertion loss (per mated pair):	Standard IL: Optimized IL:	0.50dB 0.35dB
Minimum connector return loss:	Multimode:	OM3 30dB minimum OM4 30dB minimum

environmental properties

Operating temperature:	0°C to +70°C
Storage and shipping temperature:	-40°C to +70°C
Installation temperature:	-0°C to +60°C

standards

Meets or exceeds:	ISO/IEC 11801, TIA/EIA-568-C.3, TIA-604-5 (FOCIS-5), TIA/EIA-568-C.1, GR-409-CORE, ICEA S-83-596 RoHS Complaint

*With proper cleaning and inspection

QuickNet™ PanMPO™ Small Diameter Trunk Cable Assemblies

part number

Example: FXUYL7E7EAAM030 = OM3, 24-fiber, indoor small diameter trunk cable, LSZH, PanMPO™ Female to PanMPO™ Female, polarity A, pulling eye, 30 meters.

CHARACTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
EXAMPLE	F	X	U	Y	L	7	E	7	E	A	A	M	0	3	0

1 – Fiber
F = Fiber

2 – Fiber Type
X = OM3 50/125μm
Z = OM4 50/125μm

3 – Fiber Count
T = 12 fiber
U = 24 fibers

4 – Cable Type
Y = Indoor small diameter
trunk cable

5 – Jacket Type
L = Low Smoke Zero
Halogen (LSZH)
P = Plenum (OFNP)

6 – Connector Type (End 'A')
7 = PanMPO™ Female
8 = PanMPO™ Male

7 – Connector Variant (End 'A')
E = 1m breakout

8 – Connector Type (End 'B')
7 = PanMPO™ Female
8 = PanMPO™ Male

9 – Connector Variant (End 'B')
E = 1m breakout

10 – Construction/Performance
A = Polarity A – standard IL
B = Polarity B – standard IL
X = Polarity A – optimized IL
Y = Polarity B – optimized IL

11 – Other
A = Pulling eye end A
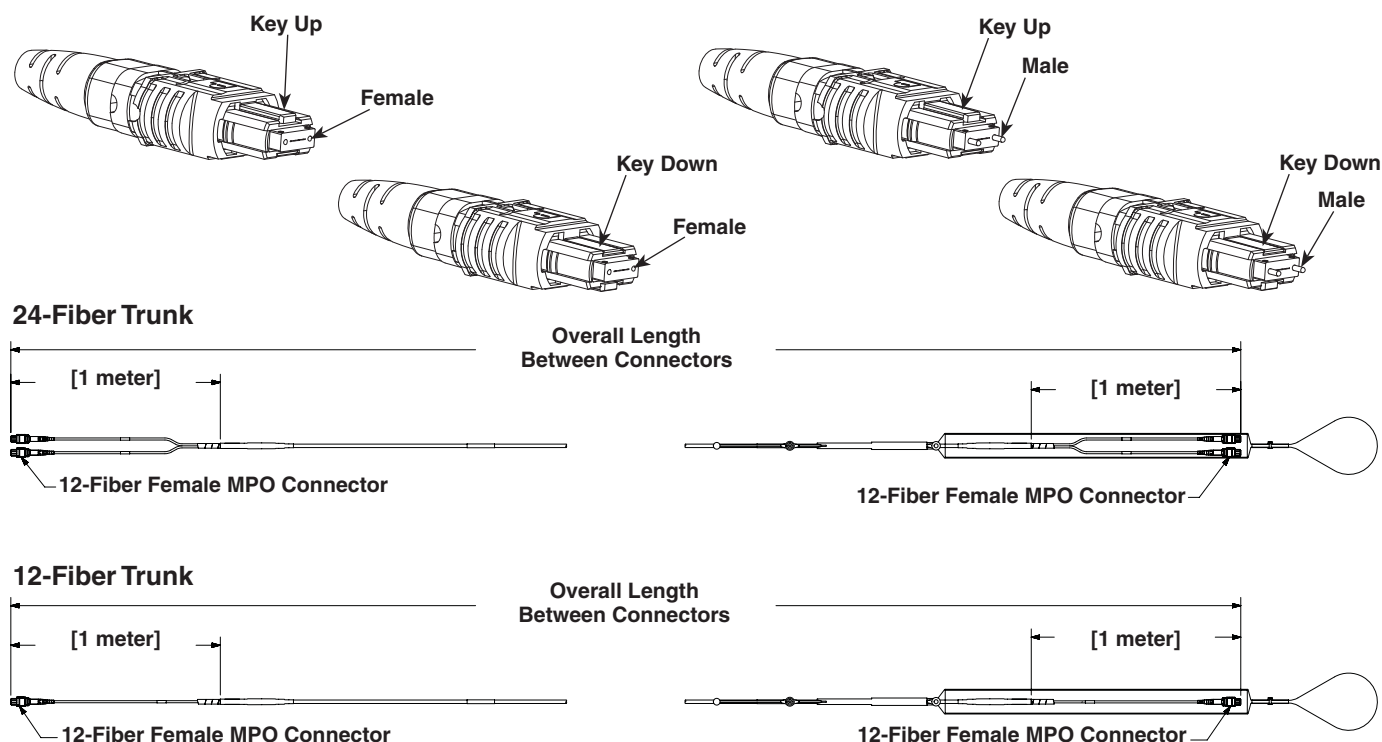N = No pulling eye

12 – Unit of Length
M = Meters
F = Feet

13, 14, 15 – Cable Assembly Length
005 – 100M
016 – 300 feet

Small diameter trunk cable assembly detail

Key Up
Female
Key Down
Female

Key Up
Male
Key Down
Male

24-Fiber Trunk

[1 meter]
Overall Length Between Connectors
[1 meter]
12-Fiber Female MPO Connector
12-Fiber Female MPO Connector

12-Fiber Trunk

[1 meter]
Overall Length Between Connectors
[1 meter]
12-Fiber Female MPO Connector
12-Fiber Female MPO Connector

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

For more information

Visit us at www.panduit.com

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

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