DATASHEET

ASSEMBLIES
MTP12 Trunk Cable

DESCRIPTION
Engineered for high-performance data center applications, DMSI's MTP12 trunk assemblies deliver reliable, scalable connectivity to meet today's increasing bandwidth demands. Optimized for high-density environments, these assemblies are iideal for 100G+ bandwidth applications

Available in a wide range of fiber counts and custom lengths, DMSI's MTP12 trunk assemblies are manufactured to exact specifications, ensuring superior performance, precision termination, and seamless integration in mission-critical networks.

CONNECTOR COMPLIANCE
- TIA/EIA-604-5 (FOCIS 5) – MPO/MTP® Interface Standard
- IEC 61754-7 – International Standard for MPO Connectors

FEATURE
- Compact and precise
- High-Performance Cable Construction
- Precision-Polished Ferrules

APPLICATION COMPLIANCE
- TIA-568-C – Structured Cabling Systems
- IEEE 802.3 – 40G/100G Ethernet (40GBASE-SR4, 100GBASE-SR10)
- Optical Internetworking Forum (OIF) – Parallel Optics Support
- Infiniband – SDR, DDR, QDR Compliant
- 10G Fibre Channel
- SNAP12, POP4
- QSFP, CXP Transceiver Support

PRODUCT COMPLIANCE
DM-REG-COMP-001.pdf

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TECHNICAL SPECIFICATIONS

Construction	Description
Connector Type	MTP12 MTP12 APC Elite MTP12 PRO Elite MTP12 APC Multimode
Fiber Count	012 - 864
Fiber Type	Single-mode OS2 (Bend Radius: 5.0mm, 7.5mm, 10mm) Multimode OM1/OM2/OM3/OM4/OM5 (WBMMF)
Polarity	Type A, Type B, Type C
Jacket Color	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua, Lime Green
Cable Rating	Indoor, OFNP (Plenum), Indoor OFNR (Riser), Indoor LSZH

CONNECTOR PERFORMANCE SPECIFICATIONS

Connector Type	Max Insertion Loss (IL)	Return Loss (RL)
MTP® Single-mode UPC	≤ 0.35 dB	≥ 65 dB
MTP® Single-mode APC	≤ 0.35 dB	≥ 65 dB
MTP® Multimode	≤ 0.60 dB	≥ 20 dB

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FIBER CONSTRUCTION & COMPLIANCE SPECIFICATIONS

Fiber Type	Compliances	Available Fiber Types
Single-mode OS2	ICEA S-83-596 (UL 1666) TIA-492-CAAB TIA-568-C.3 TIA-568-D	G.657.A1 (10mm bend radius) G.657.A2 / B2 (7.5mm bend radius) G.657.B3 (5mm bend radius)
Multimode 62.5 µm OM1	ICEA S-83-596 (UL 1666) TIA-492-AAAA-A TIA-568-C.3 TIA-568-D ISO/IEC 11801 OM1 IEC 60793-2-10	62.5 µm core, OM1 multimode optical fiber
Multimode 50 µm OM3 / OM4 / OM5	ICEA S-83-596 (UL 1666) TIA-568-C.3 TIA-568-D IEC 60793-2-10	OM3: TIA-492-AAAC-B, A1a.2 to IEC 60793-2-10 OM4: TIA-492-AAAD, A1a.3 to IEC 60793-2-10 OM5: TIA-492-AAAE, A1-OM5 to IEC 60793-2-10

OPTICAL CHARACTERISTICS

Fiber Type	Core Size [µm]	Wavelength [nm]	Max. Attenuation [dB/km]	Link Length [m]	Bandwidth (EMB High Performance) [MHz·km]
OS2	9	1310 / 1550	0.5 @ 1310 0.4 @ 1550	10,000/5,000 (1/10Gb/s @ 1550nm)	N/A
OM1	62.5	850 / 1300	3.5 @ 850 1.5 @ 1300	300 (10Gb/s @ 850nm)	220
OM2	50	850 / 1300	3.5 @ 850 1.5 @ 1300	150 (10Gb/s @ 850nm)	550
OM3	50	850 / 1300	3.0 @ 850 1.0 @ 1300	300 (10Gb/s @ 850nm)	2000
OM4	50	850 / 1300	3.0 @ 850 1.0 @ 1300	550 (10Gb/s @ 850nm)	4700
OM5	50	850 / 1300	3.0 @ 850 1.0 @ 1300	550 (10Gb/s @ 850nm)	4700

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ORDERING INFORMATION: MTP12 TRUNK CABLE

AA	BB	xxx	C	D	E	F	xxx	M

AA & BB	Connector Type
45	MTP12 Non-pinned
46	MTP12 Pinned
E4	MTP12 APC Elite Single-mode Non-pinned
E6	MTP12 APC Elite Single-mode Pinned
40	MTP12 PRO Elite Non-pinned
41	MTP12 PRO Elite Pinned
50	MTP12 APC Multimode Non-pinned
51	MTP12 APC Multimode Pinned

xxx	Fiber Count (3 digits)
012 - 864	

CC	Fiber Type
Y	Single-mode OS2 10mm bend (standard)
L	Single-mode OS2 7.5mm bend
Z	Single-mode OS2 5.0mm bend
F	OM1
E	OM2
G	OM3
M	OM4
W	OM5 (WBMMF)

D	Polarity Type
A	Type A
B	Type B
C	Type C

E	Jacket Color
B	Blue
N	Orange
G	Green
W	Brown
T	Slate
H	White
R	Red
K	Black
Y	Yellow
V	Violet
S	Rose
A	Aqua
L	Lime Green

F	Rating
2	Indoor, OFNP (Plenum)
9	Indoor, OFNR (Riser)
Z	Indoor, LSZH

xxx	Length in Meters (M)

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