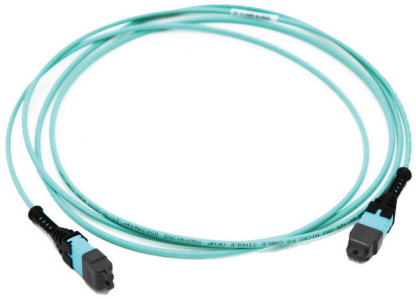
DATASHEET

MTP PRO-MTP PRO Pre-Terminated Multicore Cable Assemblies ›

Molex Pre-Terminated Multicore Fiber Optic Cable Assemblies offer premium factory-controlled optical performance on a variety of connectors that enable fast, economical installation.

Pre-Terminated Cable Assemblies are ideal for mission-critical backbone applications such as Data Center tie cables and low optical loss backbone riser cables.



FEATURES AND ADVANTAGES

- Available in Low Loss OS1a/2, OM3, OM4 and OM5
- 8 to 144 core fibers available
- Polarity and pin reconfiguration in the field
- Customized Tail Length and Configuration options available
- LS0H, OFNR and OFNP cable jacket
- ROHS Compliant
- Ideal for: Internal short optical links Front panel/equipment connections, Data center infrastructure, Storage Area Network (SAN)

Part number generator is available on Molex Customer Support Portal: csp.molex.com

SPECIFICATIONS

Commercial Standards

TIA/EIA-568.3-D and ISO/IEC 11801
IEC-61754-7 & EIA/TIA-604-5
NFPA 262 (OFNP),IEC 60332 (LS0H), UL1666(OFNR)
Compliant to Directive 2002/95/EC (RoHS) & REACH SvHC EC-60793 EN50399

Mechanical

Fiber Type: OS1a/OS2,G.657A2, OM3, OM4, OM5
Cable: Microcable - 8-144
Jacket Material: LS0H, OFNR, OFNP, EN50399
Durability: 200 Cycles
Guide Pin Retention: 3 lbs

Default Jacket Colors:
Multimode OM3: Aqua
Multimode OM4: Erika Violet/Aqua
Multimode OM5: Lime Green
Singlemode: Yellow

Connectors
MTP Pro® US Conec (IEC-61754-7 & EIA/TIA-604-5) 8F/12F
Packaging Length:
PE bag: < 50m

LENGTH
Total length means the farthest distance between two ends
Tail Length means the farthest distance between fanout point and connectors

POLISHING
Singlemode: APC
Multimode: PC

For supply to EU market
Flame resistance:
LSHF-FR(FRNC): EN 50399 Class Dca;Class Eca

Sheath: Halogen Free, flame resistant thermoplastic sheathing compound acc. to EN 50290-2-27, UV stabilized.

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ELECTRICAL/OPTICAL CHARACTERISTICS

Connector Performance

Connector Mating	IL Average	IL Maximum	Return Loss
MTP Pro Low Loss (MM)	0.10dB	0.35dB	N/A
MTP Pro Low Loss (SM)	0.10dB	0.35dB	>60dB

Multimode:

Cable performance.

Designation	Core OD (µm)	Cladding OD (µm)	Attenuation @850nm (dB/km)	Attenuation @953nm (dB/km)	Attenuation @1300nm (dB/km)	Over filled launch		Laser effective Modal Bandwidth
						Min.Band @850nm (MHz/km)	Min.Band @1300nm (MHz/km)	Min.Band @850nm (MHz/km)
OM3	50	125 +/-1	≤3.5 max	NA	≤1.5 max	≥ 500	≥ 500	≥ 2000
OM4	50	125 +/-1	≤3.5 max	NA	≤1.5 max	≥ 3500	≥ 500	≥ 4700
OM5	50	125 +/-1	≤3 max	≤2.3 max	≤1.0 max	≥ 3500	≥ 500	≥ 4700

Singlemode:

(Fiber shall conform to requirements of ITU-T G.652D.)
Cable performance.

Designation	Core OD (µm)	Cladding OD (µm)	Maximum Attenuation Coefficient (dB/km)
OS1a/2&G.657A2	9	125 +/-1	≤ 0.38 max (1300nm) ≤ 0.22 typ (1550nm)

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9 M A A B C C D E E F F G H I I I J

Family

Fiber Count
8-99
AX=100-109
BX=110-119
CX=120-129
DX=130-139
EX=140-144*
e.g. 144F=E4

Polarity
A=Method A
B=Method B
C=Method C*
* Only For 12 MTP Pro Connector

Connector Type for End A & End B
P = 12 Fiber Low Loss Male
Q = 12 Fiber Low Loss Female
W = 8 Fiber Low Loss Male
X = 8 Fiber Low Loss Female

Fiber Type
3 = OM3
4 = OM4
5 = OM5
8 = OS1/2
9 = G.657A2

Tail Length for End A & End B
0 = 0m*
1 = 1m
2 = 2m
3 = 3m
A = 4.5m
B = 0.5m
*0 only for single MTP Pro Connector end

Tail Configuration, End A & End B
A = 3mm Ruggedized Even
B = 3mm Ruggedized Fan Staggered 30mm
C = 3mm Ruggedized Fan Staggered 50mm
D = 3mm Ruggedized Fan Staggered 100mm
E = 3mm Ruggedized Fan Staggered 150mm

Glands and Pulling Eye
U= No gland, pulling eye at MTP Pro end
V= No gland, pulling eye at X end
Z= No gland, no pulling eye
Y= Gland and pulling eye at MTP Pro end
T= Gland at MTP Pro end,pulling eye at X end
S= Gland at MTP Pro end, no pulling eye
X= Gland at X end, pulling eye at MTP Pro end
G= Gland and pulling eye at X end
F= Gland at X end, no pulling eye
W= Gland at both ends, pulling eye at MTP Pro end
B= Gland at both ends, pulling eye at X end
C= Gland at both ends, no pulling eye
A= Gland at both ends, pulling eye at both ends
*Gland = M20 default, Gland O.D dependent upon cable O.D

Sheath Color
0=Default
OM3=Aqua
OM4=Erika Violet (LS0H)
OM4=Aqua(Plenum&PVC)
OM5=Lime Green
OS1/2=Yellow
A= Aqua
B= Blue
C= Red
D= Black
E= Dark gray
J= Green
K= Yellow
N= Orange
P= Pink
S= Salmon Pink
U= Purple
V= Erika Violet
W= White

Length
001= 1m
00A=0.5m
00B=1.5m
00C=2.5m
00D=3.5m
00E=4.5m

Sheath Type
A=LS0H
B=Bca LS0H
C=Cca LS0H
D=Dca LS0H
E=Eca LS0H
F=Fca LS0H
R=OFNR
P=OFNP

For Example: To order a 48 Core 4x12 MTP Pro Loss Loss Male to Male Connector in OM3 Aqua LS0H Cable with 1m Tails in 3mm Fan Unstaggered, 10 Meter Length, Polarity A , no pulling eye and gland on both end the part number would be 9M48AQQ311AAZ0010A

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