Harsh Environment Connectivities
IP68 MTP Assemblies

Optec's harsh environment fiber optic connector is designed with rugged and robust housing which fulfills IP68 environmental sealing requirement, which support virtually any extreme environments. This robust IP68 MTP cabling is suitable for deploying in FTTA, base stations, transportation, railway systems, and any industrial networks.

Sealed to IP68 rating, the highest ingress protection level for all of its kinds, our ruggedized IP connector delivers distinguished performance in robustness and reliability to deal with those typical challenges like extreme temperature, humidity, vibration, as well as chemicals corrosive gasses.

Features and Applications

Available for standard or low loss MTP interface
Remarkable optical performance for harsh environment applications

Different flange styles for receptacle
High flexibility to satisfy installation needs

Stringent production and quality controls processes
Conforms and exceeds industry standards (Telcordia GR-326-CORE) and TIA/EIA standard

Bayonet locking design with IP68 sealing
Ease of installation in extreme environments with high protection

Highly customizable configurations
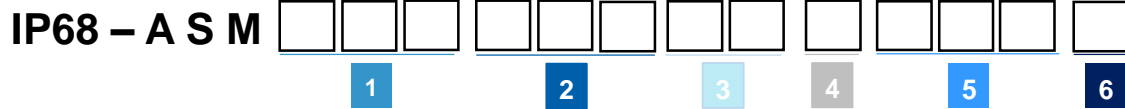With choices of different cable types, specified length and fiber mode

Specifications

Specifications of Connector	
Mating Mechanism	Bayonet
Ingress Protection	IP-68
Operating Temperature	-40°C ~ +70°C
Mechanical Performance	Straight pulling force 25 Kgs *
Mating Durability	500 mating cycles

Specifications of Assemblies		
Performance / Connector	Insertion Loss (IL) **	Return Loss (RL) **
MTP	SM ≦ 0.75dB (Typical 0.25dB) MM ≦ 0.60dB (Typical 0.20dB)	SM ≧ 60dB MM ≧ 20dB
Elite-MTP	≦ 0.35 dB (Typical 0.1dB)	SM ≧ 60dB MM ≧ 20dB

* Pulling strength may varies depending on choice of cable, guarantee straight pulling force of 25kgs if using Optec's pre-terminated solution

** Optec's assemblies are provided in multi-tier performance to cater for different needs, please contact our sales team for more details

Ordering Information − IP68 MTP Assemblies

IP68 – A S M ☐☐☐ ☐☐☐☐ ☐ ☐☐☐ ☐

1 2 3 4 5 6

1 Connector Interface
M2M = 12-Fiber MTP Male
M2F = 12-Fiber MTP Female
E2M = 12-Fiber Elite MTP Male
E2F = 12-Fiber Elite MTP Female
M4M = 24-Fiber MTP Male
M4F = 24-Fiber MTP Female
E4M = 24-Fiber Elite MTP Male
E4F = 24-Fiber Elite MTP Female

2 2nd Connector
DLC = Duplex LC
M2M = 12-Fiber MTP Male
M2F = 12-Fiber MTP Female
E2M = 12-Fiber Elite MTP Male
E2F = 12-Fiber Elite MTP Female
M4M = 24-Fiber MTP Male
M4F = 24-Fiber MTP Female
E4M = 24-Fiber Elite MTP Male
E4F = 24-Fiber Elite MTP Female

3 Fiber Mode
SM = OS1/OS2 Singlemode 9/125µm
M1 = OM1 Multimode 62.5/125µm
M2 = OM2 Multimode 50/125µm
M3 = OM3 Multimode 50/125µm – 10Gig 300
M4 = OM4 Multimode 50/125µm – 10Gig 550

4 Fiber Count/ Boot Type
1 = 2-Fiber / Standard Boot
2 = 2-Fiber / Short Boot
3 = 12-Fiber / Standard Boot
4 = 12-Fiber / Short Boot
5 = 24-Fiber / Standard Boot
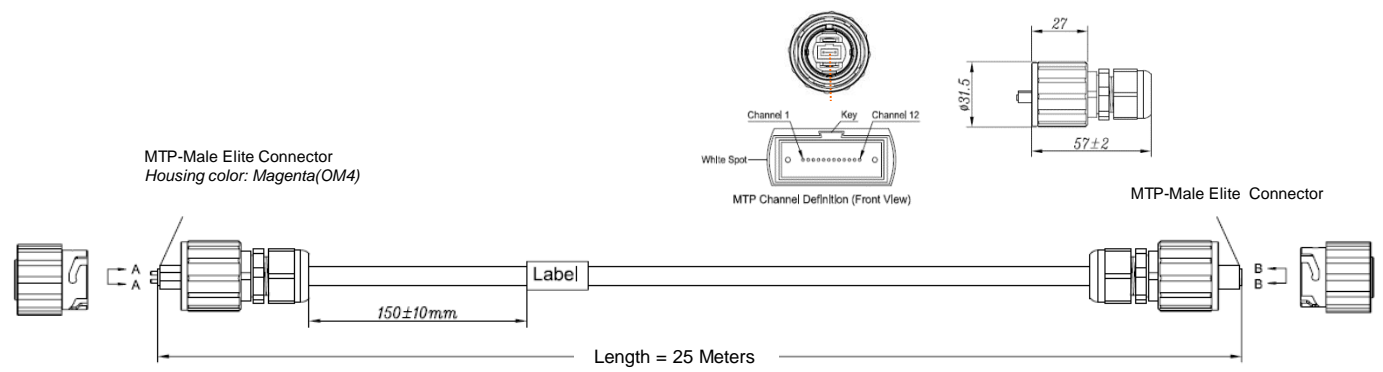6 = 24-Fiber / Short Boot

5 Cable Length
XXX = 001 to 999
.
.
1p5 = 1.5 ("p" refer to decimal place)
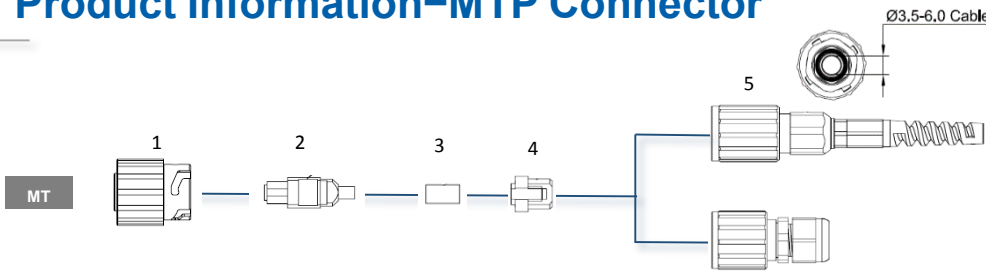
6 Unit of Measure
F = Feet
N = Inch
M = Meter
C = Centimeter

Remark:

Housing Color \ Connector Type	Duplex LC	MTP	Elite-MTP
Singlemode APC	Green	Green	Yellow
Singlemode UPC	Blue	N/A	N/A
Multimode OM1/OM2	Beige	Beige	N/A
Multimode OM3	Beige	Aqua	Aqua
Multimode OM4	Beige	Magenta	Magenta

Example:
Ordering code : IP68-ASM-E2M-E2F-M4-4-025-M
Item Description: IP68 Assemblies, MTP-Male Elite to MTP-Female Elite, OM4 Multimode, 12-Fiber, Short Boot, 25 meters

MTP-Male Elite Connector
Housing color: Magenta(OM4)

Channel 1   Key   Channel 12
White Spot
MTP Channel Definition (Front View)

27
Ø31.5
57±2

MTP-Male Elite Connector

150±10mm

Label

Length = 25 Meters

Product Information−MTP Connector

Ø3.5-6.0 Cable

	IP Connector for LC
1	IP Dust Cap
2	MTP Connector Body
3	MTP Crimp Ring
4	MTP Holder
5	IP Plug Body and Boot (options of Regular Boot or Short Boot) (See remark for regular or short boot information)

Remark:

Regular Boot
1. *Overall length after assembled of connector plug is 108mm*
2. *Strain-relief boot design provides extra protection on cable bending*
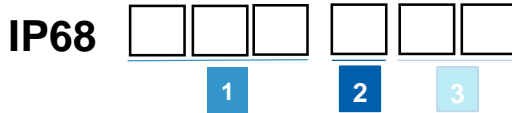3. *Suitable for installation where no space constrains*

108mm

Short Boot
1. *Overall length after assembled of connector plug is 57mm*
2. *Suitable for installation where limited space applied*
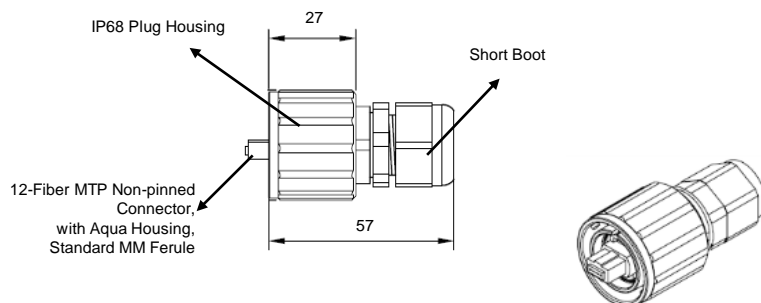
57mm

Ordering Information

IP68 ☐☐☐ ☐☐☐

1   2   3

1 Connector Interface
M2M = 12-Fiber MTP Male
M2F = 12-Fiber MTP Female
E2M = 12-Fiber Elite MTP Male
E2F = 12-Fiber Elite MTP Female

M4M = 24-Fiber MTP Male
M4F = 24-Fiber MTP Female
E4M = 24-Fiber Elite MTP Male
E4F = 24-Fiber Elite MTP Female

2 MTP Housing Color / Ferrule
For MTP
4 = Green / Standard SM (for OS1/2)
5 = Beige / Standard MM (for OM1/2)
6 = Aqua / Standard MM (for OM3)
7 = Magenta / Standard MM (for OM4)

For Elite-MTP
7 = Yellow / Low Loss SM (for OS1/2)
8 = Aqua / Low Loss MM (for OM3)
9 = Magenta / Low Loss MM (for OM4)

3 Boot Type
1 = Regular Boot
2 = Short Boot

Product Illustration

Example: **Ordering code :** IP68-M2F-6-2
Item Description: IP68 12-Fiber MTP-Female, Aqua MTP Housing with Standard MM Ferrule, Short Boot

IP68 Plug Housing

27

Short Boot

12-Fiber MTP Non-pinned Connector, with Aqua Housing, Standard MM Ferule

57

Product Information − MTP/ MPO Receptacles

Features / Installation Method
- Insert from panel's rear, then fit the hexagon flange from panel's front
- No extra tools required during installation
- Delivers excellent waterproof performance as no screw holes exist

| Side View | Front View (LC Duplex) | Front View (MTP) | Overall Diameter | Mounting Hole |

Features / Installation Method
- 4-point screws fixed type
- Mount from panel's front by fixing 4x screws
- Easily installable or dismantle from front end of the panel
- Screwdriver is required during installation

| Side View | Front View (LC Duplex) | Front View (MTP) | Mounting Hole |

Ordering Information

IP68-R C ☐ ☐
 1 **2**

1 Receptacle Type
1 = MTP

2 Connector Housing / Ferrule
H = Hexagon Flange
S = Square Shape

Product Illustration

Example: **Ordering code :**   IP68-RC-1-H
Item Description: IP68 Receptacle for MTP, Hexagon Flange

Rubber Ring

Ref. No.: OP-MK-B016-17