

AFC MPO Pre-terminated Cables & Fan Outs

AFC Group offer a comprehensive range of high quality MPO style pre-terminated cables and fan outs. MPO multifibre connectors offer a quick and easy connect and disconnect system particularly in the data centre and Storage Area Networks (SAN) environment. Pre-terminated MPO cables can be manufactured to any length using either riser or ribbon style cable. MPO Hybrid LC or SC fan outs are non cassette based cable assemblies and are manufactured to suit the AFC range of FRE-MOD-WB wingback rack enclosures and FWE wall mount enclosures. AFC recommend the use of 12 fibre MPO technology, although 6 fibre and 24 fibre solutions are also available.



Benefits of using AFC MPO pre-terminated cables

- Pre-terminated MPO cables offer the advantage of reduced time and cost associated with on-site connector terminations and testing. This is of particular interest in the data centre environment where narrow installation windows can be applicable.
- Machine polished and thoroughly inspected and tested factory terminations offer greater consistency with regard to connector termination quality and performance.
- Non cassette based MPO Hybrid fan outs provide accessibility for cleaning and repair of connectors which makes maintenance possible and significantly reduces the cost and need to replace the whole cassette.
- Better cable management and higher quality of installed cable infrastructure can be achieved due to the flexibility of AFC's manufacturing options. A special range of AFC enclosures is available to accommodate high fibre count pre-terminated MPO cable installations.

MANUFACTURING OPTIONS

Cable:

Multimode	OM1 62.5/125 – 12 fibre count riser or ribbon construction orange PVC or LSZH sheath OM3 50/125 – 12 fibre count riser or ribbon construction orange / aqua PVC or LSZH sheath
Single Mode	OS1 9/125 – 12 fibre count riser or ribbon construction yellow PVC or LSZH sheath, LWP available

Assembly Style:

MPO – MPO pre-terminated cable
MPO Hybrid Fan Out (non cassette based)

Connectors:

MPO	MPO Female PC Polish (for Multimode) MPO Male PC Polish (for Multimode)	MPO Female APC Polish (for Single Mode) MPO Male APC Polish (for Single Mode)
Hybrid options	SC LC	

Additional Options:

Cable glands
Protective hauling conduit
Custom numbering and labelling
Loaded into enclosures

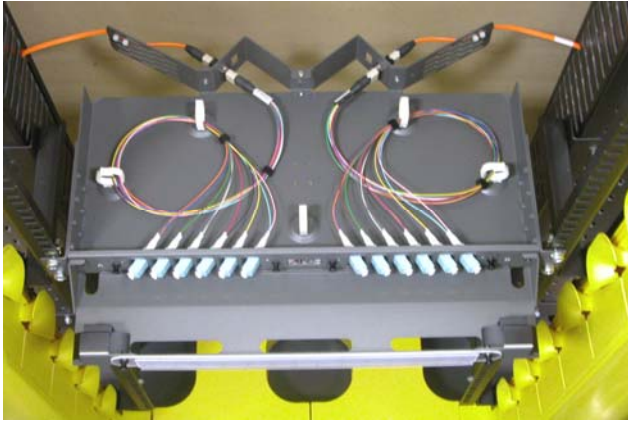
Samples



RB3MPOF10M-12
MPO female / MPO female
OM3 multimode 12F
Ribbon cable 10m



R3MPOMLC0.7M-12
MPO male / LC OM3
multimode 12F Fan out
cable 0.7m



FRE-1RU-MOD-WB loaded enclosure pictured (without lid) in AFC high density fibre cross connect rack. Options included:

- 2 x MPO male / LC OM3 12F Fan outs
- OM3 aqua LC adapters
- Angled left and right coupler panels
- 1RU front mount cable tray

TECHNICAL INFORMATION

Crossover:

AFC's MPO cabling solution includes pair crossover (pair flipping), i.e. A→B and B→A, and complies with the pair crossover requirements of EIA / TIA 568 B.3

MPO Connector Optical Performance:

	Multimode (PC Polish)	Single Mode (APC Polish)
Guaranteed Insertion Loss (dB)	0.50 dB	0.70 dB
Guaranteed Return Loss (dB)	-20 dB	-55 dB

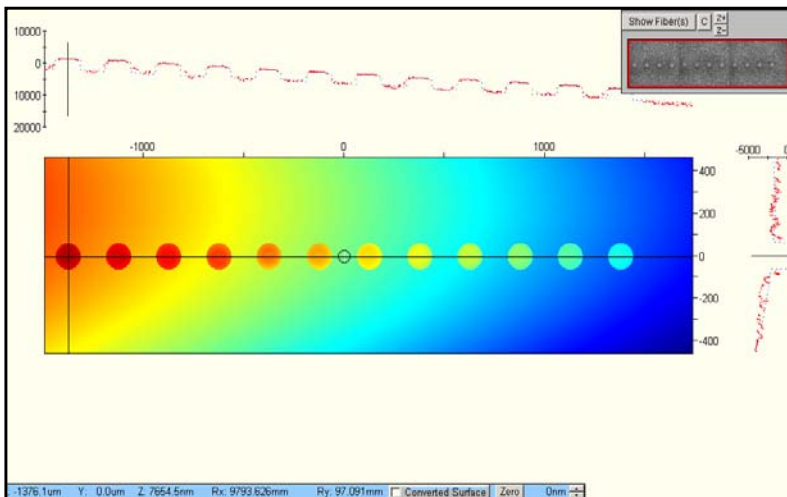
To maintain low insertion loss performance, AFC recommend the use of Cletop cleaning products for all MPO connectors

Male / Female MPO Connector Configuration:

MPO – MPO pre-terminated cables are recommended to be female both ends
 MPO Hybrid Fan Outs are recommended to be male

Compliance and Testing:

All AFC MPO pre-terminated cables and fan outs are interferometer tested and compliant with Telcordia GR1435 - Core Specification (relating to geometry standards for array connectors)



Interferometer view of MPO connector end face

PART NUMBERS

Cable Type	Fibre Type	MPO	Fan Out Connector Type	Length in m	Fibre Count
R – Riser cable	1 – 10/125um SM OS1	MPOF – Female	SC		
RB – Ribbon cable	3 – 50/125um MM OM3	MPOM – Male	LC		
	6 – 62.5/125um MM OM1	MPOFA – Female Angled			
		MPOMA – Male Angled			

R 3 MPOM LC 0.7 M – 12