

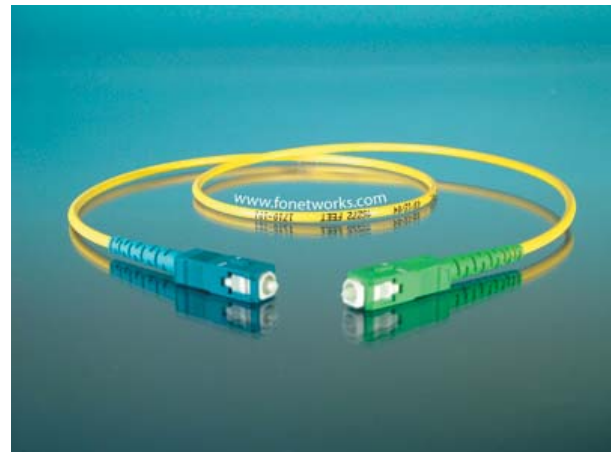
Single mode Fiber Optic Cable Assemblies

FOnetworks manufactures a full line of singlemode simplex, duplex, and multi-fiber cable assemblies. Assemblies feature standard and bend insensitive singlemode fibers. Custom lengths, fiber types, jacket colors, and connector types are available.

FOnetworks manufactures cable assemblies using only top quality components, equipment, and processes resulting in product that meets or exceeds even the most demanding specifications. Our standard 15 year limited warranty ensures years of worry free service.

Patch Cords

Simplex and duplex cable assemblies, commonly referred to as patch cords, are commonly used as interconnects between equipment and fiber patch panels, or from equipment to equipment.



Pigtails

Simplex and duplex cable assemblies terminated on only one end are commonly referred to as pig-tails. These assemblies are most often used for fusion splicing, or when terminating the second end to a device.

Multi-Fiber Assemblies

Multi-fiber cable assemblies are available in a variety of configurations and connector types. Cable types include indoor only versions and indoor/outdoor versions in UL types OFNR or OFNP, and strictly outdoor versions. For added protection, the cable can be pre-installed in an aluminum interlocked armor conduit.

Also included in multi-fiber assemblies are a full range of MTP® and MPO assemblies.



MTP® (MPO) Assemblies

Multi-fiber assemblies terminated on one or both ends with MPO style connectors are typically utilized in pre-terminated fiber systems and help ease and speed installation. These assemblies are terminated in groups of 12 with a single MPO connector on one or both ends. When terminated on both ends with an MPO style connector, it is considered a “trunk” or “backbone” cable. When terminated one end with an MPO style connector and on the other with multiple single fiber connectors, it is considered a fanout cable, or harness, and is typically used to connect to equipment, or within a cassette as part of a preterminated fiber system (as in “P3Link”). MTP® is a high quality form of an MPO connector, and is a registered trademark of USCONEC.



MPO Backbone



A P3Link cassette utilizes an MPO harness to interface between the backbone cable and the equipment.



An MPO harness offers direct connection between backbone and equipment.

Bend Insensitive Fiber

Today's trends toward higher density means fiber is being installed in smaller, more compact applications. This has led to a greater demand for bend performance in singlemode fiber applications. FOnetworks' offers a line of assemblies to meet these demands. Our Flex line of assemblies feature OFS AllWave Flex Zero Water Peak fiber. These are backwards-compatible with existing singlemode fiber installations. See FOnetworks “Flex Singlemode Cable Assembly” brochure for further details.

Connector Geometry

Controlling the endface geometry of fiber optic connectors is key to ensuring long term reliability and performance of a fiber optic cable assembly. Radius, apex offset, and fiber undercut are controlled and optimized by continually working to refine the processes, equipment, and training that are involved in manufacturing. Array connectors (MPO and MTRJ) have their own unique set of requirements, and FOnetworks is proud to have the latest equipment and the personnel to create processes to ensure quality product that will work well now and well into the future.

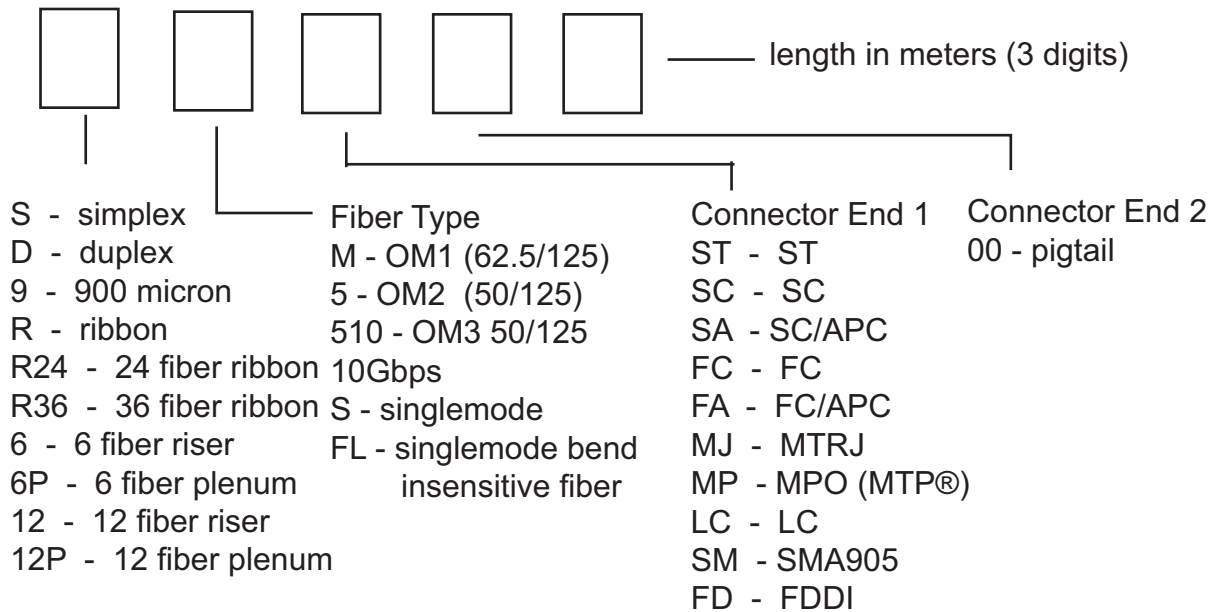
Fiber Performance

Fiber Type	Core/Clad O.D. (µm)	Max. Attenuation (dB/km) 1310nm/1550nm	Zero Dispersion Wavelength (nm)	Cutoff Wavelength	Mode Field
OS1	8.3/125	1.0/0.8	1301.5 to 1321.5	1260 +/- 70	9.2 +/-0.4
BI	8.3/125	1.0/0.8			

Connector Performance

Connector Type	Part Number Designation	Max Insertion Loss (dB)	Typical Insertion Loss (dB)	Min Return Loss (dB)
ST	ST	0.50	0.20	-55dB
SC	SC	0.50	0.20	-55dB
LC	LC	0.50	0.20	-55dB
MTRJ	MJ	0.50	0.25	-45dB
FC	FC	0.50	0.20	-55dB
MTP®(MPO)	MP	0.50	0.25	-45dB
SC/APC	SA	0.50	0.25	-65dB
FC/APC	FA	0.50	0.25	-65dB

Cable Assembly Part Numbering



Examples

DSLCS001 is a duplex OS1 (singlemode) LC to SC 1 meter patch cord

9SLC00001 is a 900 micron singlemode LC pigtail, 1 meter

R24510MPMP015 is a 24 fiber ribbon OM3 (50/125 10Gbps) MPO-MPO 15 meter backbone

Custom Assemblies

Bring us your requirements and we will work with you to customize a solution. From color coding jackets to nonstandard cable or connector types, FOnetworks has the equipment, knowledge, and experience to meet even the most demanding applications.

Documentation

Included with each patch cord is a Data Card that includes a part number, description, use and care instructions, and optical performance test results. If required, interferometer results can also be included (must be specified before ordering).

