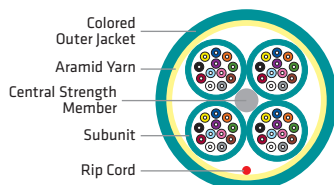


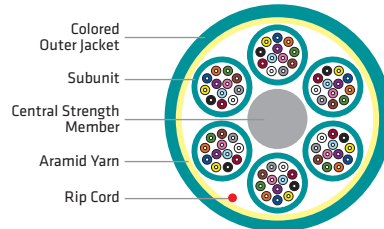


Micro Fiber MFC | 2 mm Units

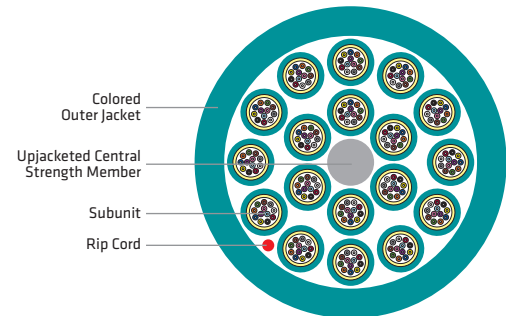
Micro Fiber Cable (MFC)



48 Fiber



72 Fiber



216 Fiber

A highly compact, high performance flame rated cable designed for data center, co-location, and central office applications where space is a premium.

Overview

Prysmian's MFC is the ideal cable for data center, co-location and central office facilities where a small diameter, highly flexible cable is desired. Prysmian offers 8 and 12, 250 micron color coded fibers in 2.0 mm diameter subunits to deliver high performance and high density. Subunits can be directly terminated to MPO style connectors.

Product Snapshot

Applications	Routing and patching for indoor communication network locations
Subunit Size	2.0 mm diameter subunits
Fiber	250 μm fibers, 8 and 12 fibers per subunit
Flame Ratings	Plenum (OFNP/FT6)
Fiber Count	8 to 216
Fiber Types	Single-mode and multimode
Standards	ANSI / ICEA S-83-596, Telcordia GR-409, CE RoHS Compliant
Registered Supplier	ISO 9001, ISO 14001, TL 9000, and OHSAS 18001
Optional	Interlock Armor



Features and Benefits

Flexible Routing & Termination

- Very flexible with no preferential bend
- Subunits can be directly terminated to MPO connections
- Compatible with routing in trays, racks and under raised floors in network communication centers
- Enables installation around tight corners and in confined spaces
- Fully compatible with commercially available multi-fiber connectors, such as MPO

Flame-Retardant Safety

- NFPA-262/CSA FT6 OFNP Plenum

Reliable Performance

- Available option for incorporating bend-insensitive single-mode or multimode fibers to address the most challenging placement conditions
- Rugged thermoplastic jacket for crush resistance
- Designed and tested to standards-based performance criteria

Micro Fiber MFC | 2 mm Units

Micro Fiber Cable (MFC)

MFC20 - Base 12 Nominal Design Parameters

Fiber Count	Fibers Per Subunit	Diameter inches (mm)	Cable Weight lb/kft (kg/km)	Bend Radius Load inches (cm)	Bend Radius No Load inches (cm)	Max Installation Load (Pull Strength) lbs (newtons)	Max Operation Load lbs (newtons)
2-12	single-unit	0.08 (2.0)	3 (5)	1.6 (4)	0.8 (2)	9 (40)	2.7 (12)
12-48*	12	0.30 (7.5)	45 (66)	6 (15)	3 (7.5)	100 (444)	32 (142)
12-72*	12	0.35 (8.8)	59 (88)	7 (18)	3.5 (9)	150 (667)	45 (200)
96-108	12	0.43 (10.8)	90 (134)	9 (22)	4.5 (11)	150 (667)	45 (200)
144	12	0.52 (13.1)	128 (191)	11 (27)	5.5 (13.5)	150 (667)	45 (200)
216	12	0.53 (13.3)	114 (170)	11 (27)	5.5 (13.5)	150 (667)	45 (200)

MFC20 - Link8™ (Base 8) Nominal Design Parameters

Fiber Count	Fibers Per Subunit	Diameter inches (mm)	Cable Weight lb/kft (kg/km)	Bend Radius Load inches (cm)	Bend Radius No Load inches (cm)	Max Installation Load (Pull Strength) lbs (newtons)	Max Operation Load lbs (newtons)
8	single-unit	0.08 (2.0)	3 (5)	1.6 (4)	0.8 (2)	9 (40)	2.7 (12)
8-32*	8	0.30 (7.5)	45 (66)	6 (15)	3 (7.5)	100 (444)	32 (142)
8-48*	8	0.35 (8.8)	59 (88)	7 (18)	3.5 (9)	150 (667)	45 (200)
72	8	0.43 (10.8)	90 (134)	9 (22)	4.5 (11)	150 (667)	45 (200)
96	8	0.52 (13.1)	128 (191)	11 (27)	5.5 (13.5)	150 (667)	45 (200)
144	8	0.53 (13.3)	114 (170)	11 (27)	5.5 (13.5)	150 (667)	30 (133)

MFC20AJ - Base 12 Nominal Design Parameters

Fiber Count	Fibers Per Subunit	Diameter inches (mm)	Cable Weight lb/kft (kg/km)	Bend Radius Load inches (cm)	Bend Radius No Load inches (cm)	Max Installation Load (Pull Strength) lbs (newtons)	Max Operation Load lbs (newtons)
12-48*	12	0.59 (14.9)	139 (206)	12 (30)	6 (15)	100 (444)	32 (142)
12-72*	12	0.63 (16.1)	161 (239)	13 (33)	6.5 (16)	150 (667)	45 (200)
96-108	12	0.71 (18.1)	221 (328)	14 (37)	7 (18)	150 (667)	45 (200)
144	12	0.83 (21.1)	318 (473)	17 (43)	8.5 (21)	150 (667)	45 (200)

MFC20AJ - Link8™ (Base 8) Nominal Design Parameters

Fiber Count	Fibers Per Subunit	Diameter inches (mm)	Cable Weight lb/kft (kg/km)	Bend Radius Load inches (cm)	Bend Radius No Load inches (cm)	Max Installation Load (Pull Strength) lbs (newtons)	Max Operation Load lbs (newtons)
8-32*	8	0.59 (14.9)	139 (206)	12 (30)	6 (15)	100 (444)	32 (142)
8-48*	8	0.63 (16.1)	161 (239)	13 (33)	6.5 (16)	150 (667)	45 (200)
72	8	0.71 (18.1)	221 (328)	14 (37)	7 (18)	150 (667)	45 (200)
96	8	0.83 (21.1)	318 (473)	17 (43)	8.5 (21)	150 (667)	45 (200)

* installation temperature range of 5°C to +60°C

Temperature Range:

Shipping and Storage: -40° F to +176° F (-40° C to +70° C)
 Installation: +32° F to +140° F (0° C to +60° C)
 Operation: +32° F to +176° F (0° C to +70° C)

Outer Jacket Color Identification

Orange Multimode OM1 and OM2+
 Aqua Multimode OM3 and OM4
 Yellow Single-mode
 Black Hybrid

Ordering Guide

The Prysmian Group part number incorporates several significant attributes involving cable design and optical performance. The appropriate part number can be configured using the process described below

Example: 144 fiber micro fiber MFC cable, 2.0 mm subunits, with bend-insensitive single mode fibers (printed in feet)

1 LENGTH MARKINGS	2 PRODUCT FAMILY	3 CONSTRUCTION	4 FIBER GROUPING	5 FIBER TYPE	6 FIBER COUNT	7 FIBER GRADE
F	MFC20	BLANK	12	BI	144	E1

CABLE INFORMATION	
1 LENGTH MARKINGS	F = Feet or M = Meters
2 PRODUCT FAMILY	DATA CENTER CABLE MFC20 = 8 to 216f Plenum (216f SM only) MFC20 (12-1) = Base 12 144f Plenum MFC20AJ = 8 to 144f Plenum with Interlock Armor
3 CONSTRUCTION	(blank) = none
4 FIBER GROUPING	00 = Single Unit (2 to 12f) 08 = 8f per unit 12 = 12f per unit

FIBER INFORMATION				
5 FIBER TYPE	SINGLE-MODE B1 = Bend-Insensitive Single-Mode (ITU G.657.A1 & G.652.D) B2 = Bend-Insensitive Single-Mode (ITU G.657.A2 & B2 & G.652.D)			
	MULTIMODE	Wavelength (nm)	Bandwidth (MHz)	1 GbE Dist (m)
	G6 = OM1 (62.5µm)	850/1300	200/500	300/550
	G5 = OM2+ (50µm)	850/1300	700/500	800
	G3 = OM3 (50µm)	850/1300	1500/500	1000
	G4 = OM4 (50µm)	850/1300	3500/500	1100
	GW = OM5 (50µm)	850/1300	3500/500	1200
6 FIBER COUNT	008 to 216 fibers			

7 FIBER GRADE				
SINGLE-MODE Attenuation (dB/km)	Wavelength (nm)	Fiber Type	MULTIMODE Attenuation (dB/km)	Wavelength (nm)
E1 = 0.40/0.40/0.30	1310/1383/1550	B1 or B2	M2 = 3.5/1.0	850/1300
			M3 = 3.0/1.0	850/1300

Other cable constructions and fiber performance grades available on request.

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