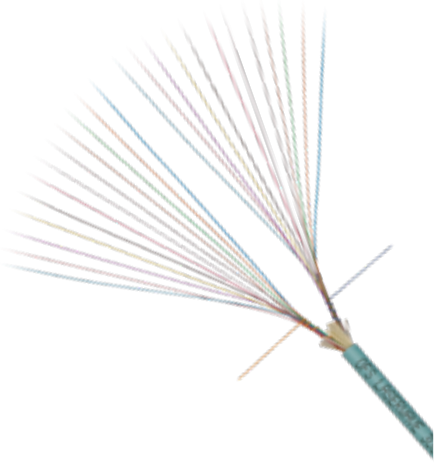
ofs
A Furukawa Company

M-Pack® Interconnect Multi-Fiber Cordage

Compact Cordage Offers Increased Energy Efficiency and Cost-Saving Opportunities



Features and Benefits

- Small diameter, lightweight cordage allows ease of deployment and termination
- Ideal for use in high-density, high-bandwidth applications and optimized for use with multi-fiber connectors
- RoHS compliant and environmentally friendly; free of heavy metals and polybrominated fire retardants
- Available in fiber counts from 2 to 48 (Plenum-Rated) and 2 to 12 (LSZH-Rated); also offered in an Indoor/Outdoor Simplex LSZH design. Ask for details.
- Plenum cordage meets requirements of NFPA 262 OFNP flame and smoke performance; LSZH cordage meets IEC 60332-3C standards
- Available with OFS' industry-leading LaserWave® Multimode Fibers and other fibers

Product Description

When you need a compact cordage solution for data centers or other high-density, high-bandwidth applications, look to the OFS M-Pack® Interconnect Cordage. Designed for use with multifiber connectors, this cordage helps save on energy costs and valuable space while offering outstanding performance.

The M-Pack Cordage Plenum-Rated Cordage features 2 to 48 color-coded 250 µm optical fibers. The Low Smoke/Zero Halogen Cordage features 2 to 24 fibers. For 2- to 12-fiber cordages, the individual fibers are identified by easily-distinguishable TIA-598 compliant colors. In cordages with fiber counts of 16 to 48, the fibers are held loosely together by polyester threads for bundle identification[1]. The fibers are surrounded by aramid yarn for reinforcement and then covered with a flame-retardant outer jacket to complete the construction.

Now available in 2.0 mm or 3.0 mm diameters!

Plenum Rated Specifications (OFNP)

Fiber Count	2	4	6	8	12	4	6	8	12	16	24	32	36	48
Cable Outer Diameter - mm. (in.)	2.0 (0.08)					3.0 (0.12)				3.8 (0.15)		4.5 (0.18)	4.8 (0.19)	
Cable Weight - lb/kft (kg/km)	2.4 (3.6)	2.6 (3.9)	2.8 (4.1)	3.0 (4.4)	3.3 (4.9)	5.5 (8.2)	5.6 (8.4)	5.8 (8.7)	6.2 (9.2)	8.5 (12.6)	9.2 (13.7)	11.6 (17.2)	13.1 (20.1)	13.7 (20.4)
Version	C	C	C	C	C	B	B	B	B	B	B	B	A	A
Fiber Bundles										2x8 Colors	2x12 Colors	4x8 Colors	3x12 Colors, 1xFillers	4x12 Colors

NOTE: Fiber bundles are bound by colored thread: blue, orange, green, brown

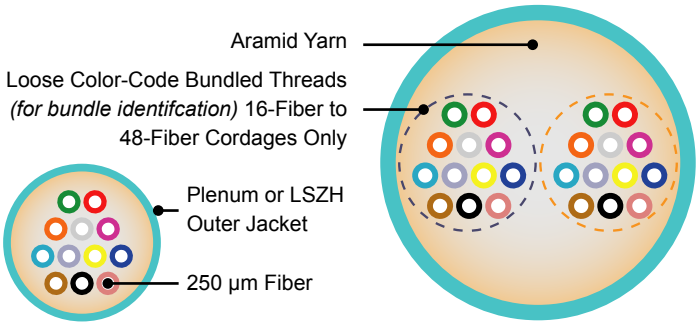
Riser Rated and LSZH Specifications

	MP20-R*	MP20-H	MP30-H				
Fiber Count	2-12	2-12	2	4	6	8	12
Cable Outer Diameter - mm. (in.)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)				
Cable Weight - lb/kft (kg/km)	2.4 (3.6) - 3.3 (4.9)	2.6 (3.9) - 3.5 (5.2)	4.7 (7.0)	4.8 (7.1)	4.9 (7.2)	5.0 (7.4)	5.1 (7.6)
Flame Rating	OFNR	LSZH 60332-3C	LSZH 60332-3C				
Version	A	A	B	B	B	B	B
CPR Rating	Dca-s2, d0, a3	Dca-s1, d0, a1	Cca-s1a, d0, a1				
DoP Lookup: www.ofs-sales.com/cpr/	**MP20-R-XXX** or **MPHW-R-XXX** (XXX = Fiber Count)	**MP20-H-XXX**	**MP30-H-XXX**				

*** NOTE:** MPHW is an FTTx Version of MP20 OFNR.

[1] The fiber bundles consist of two groups of 8 fibers for the 16-fiber cordage; two groups of 12 fibers for the 24-fiber cordage; four groups of 8 fibers for the 32-fiber cordage; three groups of 12 fibers for the 36-fiber cordage; and four groups of 12 fibers for the 48-fiber cordage.

M-Pack® Interconnect Cordage Cross Section



12-Fiber Cordage 24-Fiber Cordage

Mechanical and Environmental Performance	
Tested per Applicable Requirements of ICEA S-85-596, NEC 770, NEC type-DP, ANSI FDDI, IEEE 802(s), ISO/IEC 11801, TIA 568 and 598, ANSI-X3(s), ATM, Fiber Channel and HIPPI	
Temperature Range	
Installation	-20 ºC to 60 ºC (-4 ºF to 140 ºF)
Operation (SM)	-20 ºC to 70 ºC (-4 ºF to 158 ºF)
Operation (MM)	0 ºC to 70 ºC (0 ºF to 158 ºF)
Storage and Shipping	-40 ºC to 70 ºC (-40 ºF to 158 ºF)
Maximum Tensile Rating	
100 N (22 lb)	

Fiber Type					
Code	Single-Mode Descriptor	Grade	1310 nm	1550 nm	MCA (Z)
W	AllWave® *FLEX*+ ZWP Bend-Optimized Single-Mode Optical Fiber	G.657.A2	0.4 (dB/km)	0.3	4
9	AllWave *FLEX* Max Bend-Optimized Single-Mode Optical Fiber	G.657.B3 & G.652.D	0.4	0.3	4
Code	Multimode Descriptor	Grade	850 nm	1300 nm	MCA (Z)
K	LaserWave® *FLEX* G+ Multimode Optical Fiber	OM2	3.5	1.5	G
3	LaserWave *FLEX* 300 Multimode Optical Fiber	OM3	3.5	1.5	G
5	LaserWave *FLEX* 550 Multimode Optical Fiber	OM4	3.5	1.5	G
4	LaserWave WideBand Multimode Optical Fiber	OM5	3.5	1.5	G

M-Pack Interconnect Cordage Ordering Information

Example: MP38–024B–5PA[1]

Part Number: **MP***NN*–*NNN***C**–*W X Y*–*Z*

MP = M-Pack
NN = Cordage Size
- **20** = 2.0 mm M-Pack Cordage (2 Fibers)
- **30** = 3.0 mm M-Pack Cordage (4-12 Fibers)
- **38** = 3.8 mm M-Pack Cordage (16 & 24 Fibers)
- **45** = 4.5 mm M-Pack Cordage (32 Fibers)
- **48** = 4.8 mm M-Pack Cordage (36 & 48 Fibers)

NNN = Fiber Count: 002-012, 016, 024, 032, 036 or 048
C = Version *(see chart)*
W = Fiber Type (see chart)
X = Jacket Material (flame retardant)
- **P** = Plenum
- **H** = Low Smoke/Zero Halogen (CPR Rated)

Y = Jacket Color
- **Y** = Yellow (Single-mode Optical Fiber)
- **O** = Orange (62.5/125 µm Multimode Optical Fiber)
- **A** = Aqua (LaserWave FLEX Optical Fiber)

Z = Maximum Cable Attenuation *(see chart)*

*** NOTE:** Other colors available upon customer request.

[1] Part number shown is for a 3.8 mm LaserWave FLEX 550 OM4 Laser-Optimized Multimode Fiber Plenum-Rated (OFNP) Cordage with aqua jacket, 24 250 micron fibers and standard cable print: `OFS M–PACK® LASERWAVE FLEX 550 OM4 BIF OPTICAL CABLE –C– MP38–024B–5PA–G 50/125 C (UL) US TYPE OFNP [CSA OFN FT4 FT6] [MM/YY] {LOT NUMBER} {LENGTH IN FEET}`

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.

OFS Marketing Communications
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