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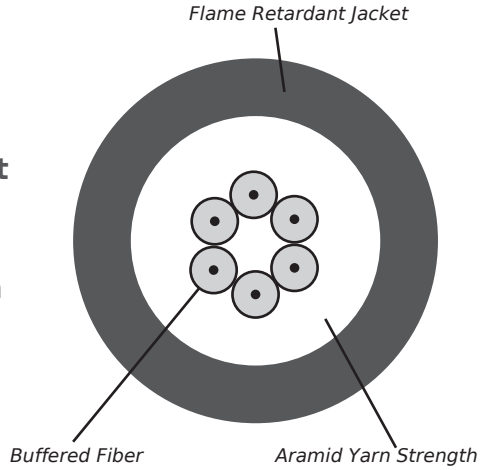
Advanced Fiber Optic Building Distribution Cable ›



Molex Advanced Fiber Optic Building Distribution Cable utilizes 900µm buffered fibers surrounded by aramid yarn strength members with a flame-retardant outer jacket. These cables are ideal for interbuilding backbone, data center and horizontal installations.

Molex Distribution Cable is available in 50µm, 62.5µm Multimode and Singlemode fibers.

FEATURES AND ADVANTAGES

- Easy strip buffers enable fast, consistent stripping for termination
- Flexible, small diameter cable with high tensile strength for cable routing and installation
- No bonding required due to all-dielectric construction
- Listed OFNR/FT4, OFNP/FT6 and also available in low smoke zero halogen
- Available with OM3 Grade Laser Optimized 10 Gigabit Ethernet fiber

SPECIFICATIONS

Reference information

Commercial Standards:

North American: ANSI/TIA-568-C.3
ANSI/ICEA S-83-596
Telecordia GR-409
European: EN 50173 2nd Edition
International: ISO/IEC 11801

Fire Propagation Tests

Non-Plenum: UL OFNR/FT4
Plenum: UL OFNP/FT6

Technical Information

Mechanical Characteristics

Operating Temperature:
Installation: 0°C to 70°C
Operation: -20°C to 70°C
Storage: -40°C to 70°C

Applications

Molex Advanced Fiber Optic Systems cable is designed to support all high speed applications including:
IEEE 802.3 10GBase-SR/SW 10Gbps
IEEE 802.3 10GBase-LX4 10Gbps
Fiber Channel 400-M5-SN-1 4Gbps
Fiber Channel 1200-M5E-SN1 10Gbps
Fiber Channel FC-PH 1Gbps
IEEE 802.3 1000Base-SX/LX 1Gbps
ATM 155 Mbps, 622 Mbps, 1.2 Gbps. 2.4 Gbps
FDDI 100Mbps
IEEE 802.3 FOIRL 10Mbps
IEEE 802.3 10Base-F 10Mbps
IEEE 802.3ba 40/100Gbps

Warranty:

Please refer to our website at www.molexces.com/About-Us/Our-Warranty for terms and conditions of any resulting warranty.

www.molexces.com/products/fiber/

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FIBER SPECIFICATION

Fiber Type	ISO Classification	Maximum Attenuation (dB/km) 850nm/1300nm	Bandwidth (MHz/km)
62.5/125µm*	OM1	3.5/1.0	200/500
50/125µm*	OM2	3.5/1.5	500/500
50/125µm**	OM3	3.5/1.5	2000/500
50/125µm**	OM4	3.0/1.0	3500/500
50/125µm**	OM5	3.0/2.3/1.0	3500/2470/500
9/125µm Singlemode	OS2	1.0/1.0	N/A

* Measured via Overfilled launch per TIA/EIA-455-204
** 850nm Effective Modal Bandwidth measured via Differential Mode Delay as specified in EIA/TIA-455-220

TECHNICAL INFORMATION - OFNR

Maximum Loading Tension

OFNR No. of Fibers	Installation		Long Term		Weight		Diameter	
	Lbs	N	Lbs	N	lbs/kft.	kg/kft.	in.	mm.
6	150	660	45	198	26	39	0.256	6.5
12	150	660	45	198	32	48	0.278	7.1
24	300	1320	90	396	41	61	0.335	8.5
48	300	1320	90	396	130	193	0.59	15.0
72	300	1320	90	396	191	285	0.732	18.6
144	300	1320	90	396	289	430	0.94	23.9

Minimum Bending Radius

OFNR No. of Fibers	Installation		Long Term		Weight		Diameter	
	in.	cm.	in.	cm.	in.	cm.	in.	cm.
6	3.8	9.8	2.6	6.5	26	39	0.256	6.5
12	4.2	10.6	2.8	7.1	32	48	0.278	7.1
24	5.3	13.5	3.5	9.0	41	61	0.335	8.5
48	8.9	22.5	5.9	15.0	130	193	0.59	15.0
72	11.0	27.9	7.3	18.6	191	285	0.732	18.6
144	14.1	35.8	9.4	23.9	289	430	0.94	23.9

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TECHNICAL INFORMATION OFNP

Maximum Loading Tension

OFNP No. of Fibers	Installation		Long Term		Weight		Diameter	
	Lbs	N	Lbs	N	lbs/kft.	kg/kft.	in.	mm.
6	100	440	30	132	13	19	0.17	4.3
12	100	440	30	132	17	25	0.206	5.2
24	150	660	45	198	35	53	0.454x0.285	11.5x7.2
48	150	660	45	198	132	196	0.565	14.4
72	150	660	45	198	216	322	0.695	17.7
144	150	660	45	198	328	489	0.92	23.4

Minimum Bending Radius

OFNP No. of Fibers	Installation		Long Term		Weight		Diameter	
	in.	cm.	in.	cm.	in.	cm.	in.	cm.
6	2.5	6.5	1.7	4.3	13	19	0.17	4.3
12	3.1	7.8	2.1	5.2	17	25	0.206	5.2
24	4.3	10.8	2.9	7.2	35	53	0.454X0.285	11.5X7.2
48	8.5	21.5	5.7	14.4	132	196	0.565	14.4
72	10.5	26.6	7.0	17.7	216	322	0.695	17.7
144	13.8	35.1	9.2	23.4	328	489	0.92	23.4

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ORDERING INFORMATION - AFOBR

Part Number Key:

AFO	X	X	XXX	XXX
	1	2	3	4

1 Cable Type: B=Building Indoor
2 Flame Rating: R=OFNR, P=OFNP
3 Fiber Count
4 Fiber Type: OM1=62.5µm (200/500), OM2=50µm (500/500), OM3=50µm (2000/500), OM4=50µm (4700/500), OM5=50µm (4700/2470/500), OS2=Singlemode

Order No.	SAP No.	Description
AFOBR006OM1	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OM1, Non Plenum - Orange
AFOBR012OM1	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OM1, Non Plenum - Orange
AFOBR024OM1	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OM1, Non Plenum - Orange
AFOBR048OM1	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 48 fiber, OM1, Non Plenum - Orange
AFOBR072OM1	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 72 fiber, OM1, Non Plenum - Orange
AFOBR006OM2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OM2, Non Plenum - Orange
AFOBR012OM2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OM2, Non Plenum - Orange
AFOBR024OM2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OM2, Non Plenum - Orange
AFOBR048OM2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 48 fiber, OM2, Non Plenum - Orange
AFOBR072OM2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 72 fiber, OM2, Non Plenum - Orange
AFOBR006OM3	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OM3, Non Plenum - Aqua
AFOBR012OM3	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OM3, Non Plenum - Aqua
AFOBR024OM3	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OM3, Non Plenum - Aqua
AFOBR048OM3	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 48 fiber, OM3, Non Plenum - Aqua
AFOBR072OM3	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 72 fiber, OM3, Non Plenum - Aqua
AFOBR006OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OM4, Non Plenum - Aqua
AFOBR012OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OM4, Non Plenum - Aqua
AFOBR024OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OM4, Non Plenum - Aqua
AFOBR048OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 48 fiber, OM4, Non Plenum - Aqua
AFOBR072OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 72 fiber, OM4, Non Plenum - Aqua
AFOBR006OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OM5, Non Plenum - Lime Green
AFOBR012OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OM5, Non Plenum - Lime Green
AFOBR024OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OM5, Non Plenum - Lime Green
AFOBR048OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 48 fiber, OM5, Non Plenum - Lime Green
AFOBR072OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 72 fiber, OM5, Non Plenum - Lime Green

Continued over

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ORDERING INFORMATION - AFOBP

Order No.	SAP No.	Description
AFOBR006OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OS2 Non Plenum - Yellow
AFOBR012OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OS2, Non Plenum - Yellow
AFOBR024OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OS2, Non Plenum - Yellow
AFOBR048OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 48 fiber, OS2, Non Plenum - Yellow
AFOBR072OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 72 fiber, OS2, Non Plenum - Yellow
AFOBP006OM1	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OM1, Plenum - Orange
AFOBP012OM1	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OM1, Plenum - Orange
AFOBP024OM1	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OM1, Plenum - Orange
AFOBP006OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OM4, Plenum - Aqua
AFOBP012OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OM4, Plenum - Aqua
AFOBP024OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OM4, Plenum - Aqua
AFOBP048OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 48 fiber, OM4, Plenum - Aqua
AFOBP072OM4	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 72 fiber, OM4, Plenum - Aqua
AFOBP006OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OM5, Plenum - Lime Green
AFOBP012OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OM5, Plenum - Lime Green
AFOBP024OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OM5, Plenum - Lime Green
AFOBP048OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 48 fiber, OM5, Plenum - Lime Green
AFOBP072OM5	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 72 fiber, OM5, Plenum - Lime Green
AFOBP006OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 6 fiber, OS2 Plenum - Yellow
AFOBP012OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 12 fiber, OS2, Plenum - Yellow
AFOBP024OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 24 fiber, OS2, Plenum - Yellow
AFOBP048OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 48 fiber, OS2, Plenum - Yellow
AFOBP072OS2	Consult Molex	Advanced Fiber Optic Building Distribution Cable, 72 fiber, OS2, Plenum - Yellow

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