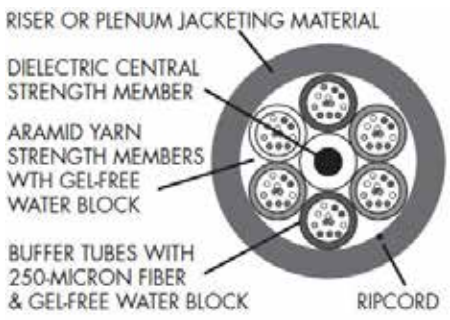
DATASHEET

Advanced Fiber Optic Indoor/ Outdoor Loose Tube Cable ›

Molex Advanced Fiber Optic Loose Tube Indoor/Outdoor cables utilizes dry water blocking technology with super absorbent polymers rather than traditional petroleum based gels both inside the fiber tubes and the core of the cable. Molex offers designs for both plenum (OFNP) flame rated and non-plenum (riser/OFNR) flame rated applications while meeting the demanding requirements for outside plant installations. The versatile design allows users to install a single cable for both their indoor and outdoor environments without mechanical or optical compromise. Molex Loose Tube Indoor/Outdoor cables are available in 50µm, 62.5µm multimode and singlemode fibers.



Loose Tube Fiber Optic Cable

FEATURES AND ADVANTAGES

All dielectric cable construction requires no grounding or bonding

Totally dry watered blocked cable requires no cleaning of gels while fully meeting water blocking requirements of gel filled cables

No transition required from outside plant cable to tight buffered flame rated indoor cable

No transition means material cost savings, labor savings and optical loss budget savings

SPECIFICATIONS

Reference information

Commercial Standards:

International: ISO/IEC 11801
European: EN 50173 2nd Edition
North American: Telecordia GR-409 & GR-20
ANSI/TIA-568-C.3
ICEA S-104-696 & ANSI/ICEA S-87-640

Fire Propagation Tests:

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

Applications

Molex Advanced Fiber Optic Systems Loose Tube, Riser Rated, or Plenum Rated fiber optic cable is intended to support all high speed data 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

Mechanical

Temperature Rating

Storage: -40°C to +85°C
Installation: -20°C to +60°C*
Operation: -40°C to +75°C
* 6 strand Plenum (OFNP) installation temp range: 0°C to +60°C*

Warranty:

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

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SPECIFICATIONS

Fiber Type	ISO Classification	Max 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
9/125µm Singlemode	OS2	0.7/0.7	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

OFNR No. of Fibers	Maximum Loading Tension				Weight		Diameter		Minimum Bending Radius			
	Installation		Long Term						Installation		Long Term	
	Lbs	N	Lbs	N	Lbs/kft.	Kg/kft.	in.	mm.	in.	cm.	in.	cm.
6	300	1335	90	400	32	48	0.26	6.6	3.9	9.9	2.6	6.6
12	300	1335	90	400	32	48	0.26	6.6	3.9	9.9	2.6	6.6
24	600	2670	200	890	77	113	0.411	10.4	6.1	15.6	4.1	10.4
36	600	2670	200	890	77	113	0.411	10.4	6.1	15.6	4.1	10.4
48	600	2670	200	890	74	110	0.451	11.5	6.8	17.3	4.5	11.5
60	600	2670	200	890	74	110	0.451	11.5	6.8	17.3	4.5	11.5
72	600	2670	200	890	105	156	0.487	12.4	7.3	18.6	4.9	12.4
96	600	2670	200	890	138	206	0.561	14.3	8.4	21.3	5.6	14.2
144	600	2670	200	890	226	337	0.717	18.2	10.7	27.3	7.2	18.2

OFNP No. of Fibers	Maximum Loading Tension				Weight		Diameter		Minimum Bending Radius			
	Installation		Long Term						Installation		Long Term	
	Lbs	N	Lbs	N	Lbs/kft.	Kg/kft.	in.	mm.	in.	cm.	in.	cm.
6	300	1335	90	400	32	48	0.26	6.6	3.9	9.9	2.6	6.6
12	300	1335	90	400	32	48	0.26	6.6	3.9	9.9	2.6	6.6
24	600	2670	200	890	87	130	0.46	11.7	6.9	17.5	4.6	11.7
36	600	2670	200	890	87	130	0.46	11.7	6.9	17.5	4.6	11.7
48	600	2670	200	890	87	130	0.46	11.7	6.9	17.5	4.6	11.7
60	600	2670	200	890	87	130	0.46	11.7	6.9	17.5	4.6	11.7
72	600	2670	200	890	87	130	0.46	11.7	6.9	17.5	4.6	11.7
96	600	2670	200	890	110	163	0.537	13.6	8.1	20.4	5.4	13.6
144	600	2670	200	890	197	294	0.695	17.6	10.4	26.6	7.0	17.7

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ORDERING INFORMATION

Order No.	SAP No.	Description
AFOIR006OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 6 fiber, OM1, Non Plenum - Black
AFOIR012OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 12 fiber, OM1, Non Plenum - Black
AFOIR024OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 24 fiber, OM1, Non Plenum - Black
AFOIR036OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 36 fiber, OM1, Non Plenum - Black
AFOIR048OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 48 fiber, OM1, Non Plenum - Black
AFOIR060OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 60 fiber, OM1, Non Plenum - Black
AFOIR072OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 72 fiber, OM1, Non Plenum - Black
AFOIR096OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 96 fiber, OM1, Non Plenum - Black
AFOIR144OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 144 fiber, OM1, Non Plenum - Black
AFOIR006OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 6 fiber, OM2, Non Plenum - Black
AFOIR012OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 12 fiber, OM2, Non Plenum - Black
AFOIR024OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 24 fiber, OM2, Non Plenum - Black
AFOIR036OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 36 fiber, OM2, Non Plenum - Black
AFOIR048OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 48 fiber, OM2, Non Plenum - Black
AFOIR060OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 60 fiber, OM2, Non Plenum - Black
AFOIR072OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 72 fiber, OM2, Non Plenum - Black
AFOIR096OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 96 fiber, OM2, Non Plenum - Black
AFOIR144OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 144 fiber, OM2, Non Plenum - Black
AFOIR006OM3	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 6 fiber, OM3, Non Plenum - Aqua
AFOIR012OM3	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 12 fiber, OM3, Non Plenum - Aqua
AFOIR024OM3	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 24 fiber, OM3, Non Plenum - Aqua
AFOIR036OM3	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 36 fiber, OM3, Non Plenum - Aqua
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AFOIR096OM3	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 96 fiber, OM3, Non Plenum - Aqua
AFOIR144OM3	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 144 fiber, OM3, Non Plenum - Aqua
AFOIR006OM4	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 6 fiber, OM4, Non Plenum - Aqua
AFOIR012OM4	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 12 fiber, OM4, Non Plenum - Aqua
AFOIR024OM4	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 24 fiber, OM4, Non Plenum - Aqua
AFOIR048OM4	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 48 fiber, OM4, Non Plenum - Aqua
AFOIR072OM4	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 72 fiber, OM4, Non Plenum - Aqua
AFOIR096OM4	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 96 fiber, OM4, Non Plenum - Aqua
AFOIR144OM4	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 144 fiber, OM4, Non Plenum - Aqua
AFOIR006OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 6 fiber, OS2, Non Plenum - Yellow

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AFOIR012OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 12 fiber, OS2, Non Plenum - Yellow
AFOIR024OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 24 fiber, OS2, Non Plenum - Yellow
AFOIR036OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 36 fiber, OS2, Non Plenum - Yellow
AFOIR048OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 48 fiber, OS2, Non Plenum - Yellow
AFOIR060OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 60 fiber, OS2, Non Plenum - Yellow
AFOIR072OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 72 fiber, OS2, Non Plenum - Yellow
AFOIR096OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 96 fiber, OS2, Non Plenum - Yellow
AFOIR144OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 144 fiber, OS2, Non Plenum - Yellow
AFOIP006OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 6 fiber, OM1, Plenum - Black
AFOIP012OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 12 fiber, OM1, Plenum - Black
AFOIP024OM1	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 24 fiber, OM1, Plenum - Black
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AFOIP006OM2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 6 fiber, OM2, Plenum - Black
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AFOIP012OM4	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 12 fiber, OM4, Plenum - Aqua
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AFOIP006OS2	Consult Molex	Advanced Fiber Optic Indoor/Outdoor Loose Tube Cable, 6 fiber, OS2, Plenum - Yellow
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