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Optical Fiber
Patch Cords and Pigtails ❯

Molex's Optical Fiber Patch Cords are LS0H jacketed as standard. PVC and Plenum rated cables are available on request. Molex patch cords offer factory–controlled performance in a variety of connector, ISO performance standards and lengths.
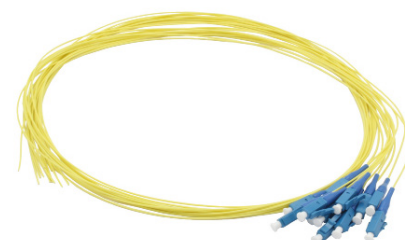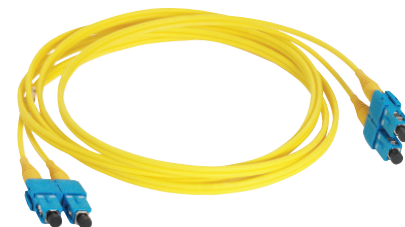
Molex has taken specific attention to the end-face geometry and fiber core alignment to ensure reliability and optimized performance.

FEATURES AND ADVANTAGES

100% Factory Tested – Guaranteed performance

LS0H Jacket Standard – Reduces toxic/corrosive gasses emitted during combustion. Plenum and PVC also available

Multiple Formats available - Available in Simplex, Duplex, Singlemode, Multimode and a variety of connector options

SPECIFICATIONS

REFERENCE INFORMATION

Commercial Standards:
ISO/IEC 11801-1:2017, ANSI/TIA-568.3-D,
IEC 60794-1, ANSI/TIA/EIA-492,
TELECORDIA GR-409,
ICEA-596, AS/CA S008:2020

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

Mechanical

Cordage O.D. :
2.0mm+/-0.1mm x 4.1mm +/- 0.2mm
Buffer Diameter: 900μm
Primary Coating : 245μm
Strength Member : Aramid Yarn
Jacket Material :
LS0H IEC 61034-1 & 2, IEC-60332-1,
IEC-60754-1 & 2, PVC: UL1685 & UL1666,
OFNR-LS: IEC-60332-3, UL1666 & UL1685
Minimum Bend Radius Install : 3.0cm.
Long Term Bend Radius : 2.0cm
Operating Temperature : -40°C to +85°C

Cable Color		
Color Matrix		
OS2	9/125	Yellow
OM1	62.5/125	Orange
OM2	50/125	Gray
OM3	50/125	Aqua
OM4	50/125	EV/Aqua
OM5	50/125	Lime Green

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SPECIFICATIONS

Multimode Fiber								
			Max. Attenuation			Min. Bandwidth		
Designation	Core OD (µm)	Cladding OD (µm)	@850nm (dB/km)	@953nm (dB/km)	@1300nm (dB/km)	@850nm (MHz-km)	@953nm (MHz-km)	@1300nm (MHz-km)
OM1	62.5	125 ± 1	3.5	NA	1.0	200	NA	500
OM2	50	125 ± 1	3.5	NA	1.5	500	NA	500
OM3	50	125 ± 1	3.0	NA	1.5	2000 - DMD 1500 - OFL	NA	500
OM4	50	125 ± 1	3.0	NA	1.5	4700 - DMD 3500 - OFL	NA	500
OM5	50	125 ± 1	3.0	2.3	1.5	4700 - DMD 3500 - OFL	2470 - DMD 1850 - OFL	500

Singlemode Fiber Performance						
Designation	Cladding OD (um)	Mode Field Dia	Max. Attenuation	Cut Off Wave Length	Max. Dispersion @ 1550nm	Zero Disp Wave
OS2/G.657A2	125±0.7	9.2µ ± 0.4µ @1310nm 10.4µ ± 0.5µ @ 550nm	0.33-0.35dB/KM @ 1310nm 0.31-0.35dB/km @1383nm 0.19-0.23dB/km @1550-1625nm	1260nm max.	18psec/km @1550nm 22psec/km @1625nm	1300-1324nm

FO Connector maximum allowable values (all values in dB)							
Parameters	MM(1300nm)			SM(1310nm&1550nm)			
	ALL*	E-2000	MTRJ	ALL*	MTRJ	ALL*APC	E-2000 APC
IL values	0.30	0.30	0.50	0.30	0.50	0.30	0.30
Back Reflection	NA	NA	NA	-50.0	-30.0	-60.0	-65.0
Note *: All connector types except E-2000 and MTRJ							

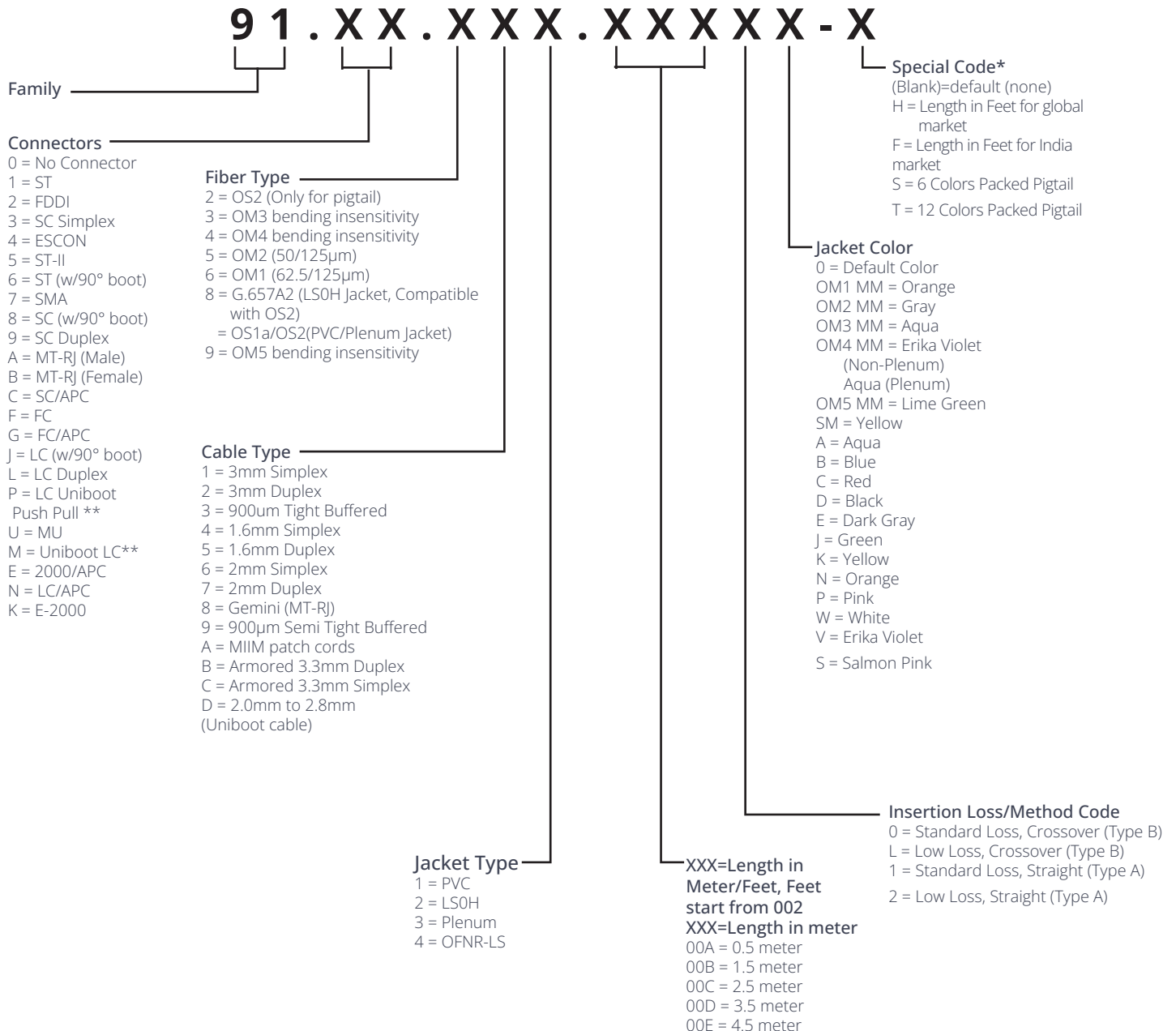| FO Connector low loss parameter			
Fiber Spec	Connector	Max Insertion loss (dB)	Max Return Loss (dB)
Singlemode	SC/LC/FC/APC	0.15	65
	SC/LC/FC/ST	0.15	55
Multimode	SC/LC/FC/ST	0.15	N/A

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ORDERING INFORMATION

Part No. Matrix - Substitute the correct code number or letter to determine the assembly instruction

9 1 . X X . X X X . X X X X X X - X

Family

Connectors
0 = No Connector
1 = ST
2 = FDDI
3 = SC Simplex
4 = ESCON
5 = ST-II
6 = ST (w/90° boot)
7 = SMA
8 = SC (w/90° boot)
9 = SC Duplex
A = MT-RJ (Male)
B = MT-RJ (Female)
C = SC/APC
F = FC
G = FC/APC
J = LC (w/90° boot)
L = LC Duplex
P = LC Uniboot
 Push Pull **
U = MU
M = Uniboot LC**
E = 2000/APC
N = LC/APC
K = E-2000

Fiber Type
2 = OS2 (Only for pigtail)
3 = OM3 bending insensitivity
4 = OM4 bending insensitivity
5 = OM2 (50/125µm)
6 = OM1 (62.5/125µm)
8 = G.657A2 (LS0H Jacket, Compatible with OS2)
 = OS1a/OS2(PVC/Plenum Jacket)
9 = OM5 bending insensitivity

Cable Type
1 = 3mm Simplex
2 = 3mm Duplex
3 = 900um Tight Buffered
4 = 1.6mm Simplex
5 = 1.6mm Duplex
6 = 2mm Simplex
7 = 2mm Duplex
8 = Gemini (MT-RJ)
9 = 900µm Semi Tight Buffered
A = MIIM patch cords
B = Armored 3.3mm Duplex
C = Armored 3.3mm Simplex
D = 2.0mm to 2.8mm
(Uniboot cable)

Jacket Type
1 = PVC
2 = LS0H
3 = Plenum
4 = OFNR-LS

XXX=Length in Meter/Feet, Feet start from 002
XXX=Length in meter
00A = 0.5 meter
00B = 1.5 meter
00C = 2.5 meter
00D = 3.5 meter
00E = 4.5 meter

Insertion Loss/Method Code
0 = Standard Loss, Crossover (Type B)
L = Low Loss, Crossover (Type B)
1 = Standard Loss, Straight (Type A)
2 = Low Loss, Straight (Type A)

Jacket Color
0 = Default Color
OM1 MM = Orange
OM2 MM = Gray
OM3 MM = Aqua
OM4 MM = Erika Violet (Non-Plenum) Aqua (Plenum)
OM5 MM = Lime Green
SM = Yellow
A = Aqua
B = Blue
C = Red
D = Black
E = Dark Gray
J = Green
K = Yellow
N = Orange
P = Pink
W = White
V = Erika Violet
S = Salmon Pink

Special Code*
(Blank)=default (none)
H = Length in Feet for global market
F = Length in Feet for India market
S = 6 Colors Packed Pigtail
T = 12 Colors Packed Pigtail

Note *: Special code is not necessary when set to blank
 **: LC Uniboot only can use 2.0mm to 2.8mm Uniboot cable with LC Uniboot connector on both ends

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