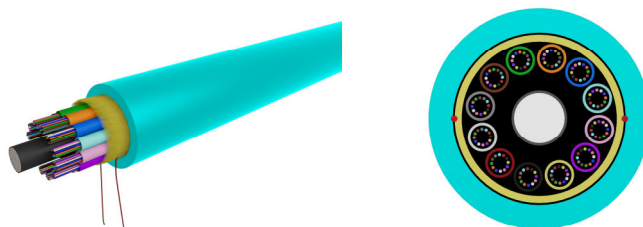


Technical Specification
nnx50/125μ OM4 BI MM SJ MLT Indoor LS0H-3 FO Cable
Part Number: Q57-xxx15-xxT
Revision 09/24 Date: 03/09/2024



Color coded OM4 Bend-Insensitive multimode optical fibers buffered in gel-filled loose tubes, 6 or 12 fibers per tube. Cabled around a dielectric strength member and jacketed with halogen-free, flame-retardant compound for indoor use. The cable meets IEC 60332-3-24 flame test.

Loose Tube Construction

Basic optical fibers	50/125 μm Multimode Bend-Insensitive conforming to ISO/IEC-11801 OM4, TIA-568-C.3, OM4 - EIA/TIA 492AAAD & A1a.3 IEC 60793-2-10
Core diameter	50 ± 1.0 μm nom.
Clad diameter	125 ± 1.0 μm
Primary coating diameter	245 ± 10 μm
Cladding non-circularity	0.7% max.
Core/Cladding concentricity error	1.0 μm max.
Proof test level	100 kpsi or 0.7 GPa min.
Number of optical fibers per tube	6 or 12
Fibers color code	Blue, Orange, Green, Brown, Grey, White, Red, Black, Yellow, Violet, Pink, Turquoise
Buffer coating	PBT Loose tube filled with Thixotropic gel
Loose tube ID/OD	1.7/2.4 mm nom.

Cable Construction

Central strength element	All dielectric FRP
Core construction	Loose tubes and fillers (where needed) are cabled around the central strength member
Tubes color code	Blue, Orange, Green, Brown, Grey, White, Red, Black, Yellow, Violet, Pink, Turquoise
Core filling	Water swellable yarns
Strength members	Aramid yarn
Rip-cord	Stranded Nylon, 14 kgf min. laid in parallel for easy jacket removal
Tape wrap	Water blocking tape
Outer jacket	LS0H compound for indoor use
Jacket thickness	1.2±0.2 mm
Color	Turquoise, RAL 5018
Surface marking	HCS Q57- nnn 15 MLT nnx50/125μ OM4 LS0H IEC 60332-3-24 CE 2011/65/EU (RoHS-2) INDOOR FO CABLE [Batch Number] [Week, Year] [Meter Mark] METER

Cable P/N	Fiber count	Fiber per tube	Number of tubes	Number of fillers	Cable nom. diameter (mm)	Cable nom. weight (kg/km)
Q57-00615-xxT	06	6	1	5	10.2 ± 0.5	93
Q57-01215-xxT	12	6	2	4	10.2 ± 0.5	94
Q57-02415-xxT	24	6	4	2	10.2 ± 0.5	95
Q57-04815-xxT	48	12	4	2	10.2 ± 0.5	97
Q57-09615-xxT	96	12	8	0	11.3 ± 0.5	126
Q57-14415-xxT	144	12	12	0	14.6 ± 0.5	197

Mechanical and Environmental Properties

Physical tests	Conditions	Requirement	Standard
Tensile Strength - Short term (during Installation)	1500N	Maximum loss:0.2 dB	IEC 60794-1-E1
Tensile Strength - Long term (during Operation)	900N	Maximum loss:0.2 dB	IEC 60794-1-E1
Impact Resistance	5Nm, 3 impacts	No fiber break	IEC 60794-1-2 E4
Crush Resistance	1500 N/100mm	No fiber break	IEC 60794-1-2 E3
Temperature Cycling	-40 to +70°C	Maximum loss:0.2 dB	IEC 60794-1-2 F1
Bend Radius (during installation)	20xcable diameter	Maximum loss:0.2 dB	IEC 60794-1-2 E11
Bend Radius (during Service)	10xcable diameter	Maximum loss:0.2 dB	IEC 60794-1-2 E11
Repeating Bending	20x cable diameter between	Maximum loss:0.2 dB	IEC 60794-1-2 E6
Halogen content and gas acidity	IEC 60754-2	IEC 60754-2	IEC 60754-2
Smoke density	IEC 61034-2	IEC 61034-2	IEC 61034-2
Flame test	IEC 60332-3-24	IEC 60332-3-24	IEC 60332-3-24
Operation Temperature	-40 to +70°C		
Storage and Transportation Temperature	-40 to +80°C		
Installation Temperature	-30 to +60°C		

Optical Transmission Properties

Fiber Type	Multimode Fiber Grade & Standard	Attenuation (dB/km)				Min. Bandwidth (MHz km)				Numerical Aperture
		850nm		1300nm		850nm		1300nm		
		Nom	Max	Nom	Max	OFL	EMB	OFL	EMB	
50/125µm Graded Index Multimode Optical Fiber	10G Bend-Insensitive EIA/TIA 492AAAD OM4 ISO/IEC 11801 OM4 A1a.3 - IEC 60793-2-10	2.3	3.0	0.6	1.0	3500	4700	500	500	0.200±0.015

This cable fully conforms to EU Directive 2011/65/EU (RoHS-2)