

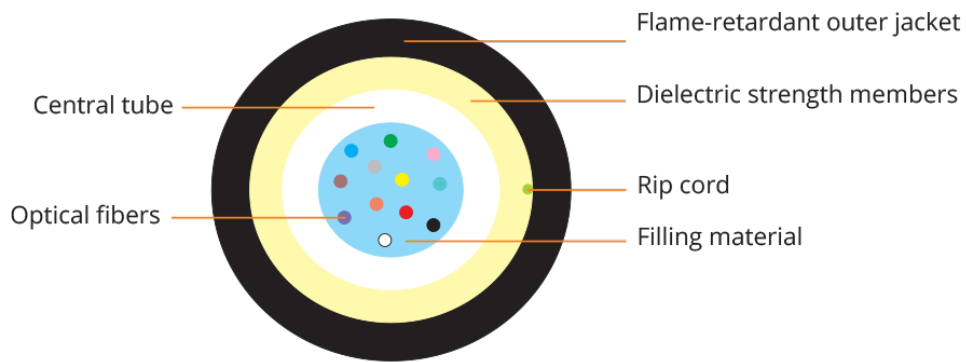


INDOOR/OUTDOOR CENTRAL TUBE OPTICAL CABLE - OPTIC-LAN

Construction	RoHS Compliant Dielectric Loose Tube	
Description	Optical cable constituted by a single central tube with 12 optical fibers maximum capacity.	
Installation Environment	Instalation Environment	Outdoor (PE) Indoor/Outdoor (OFNG and LSZH)
	Operation Environment	Underground Duct Conduits and underground passage boxes
Standard	- ITU-T G-651 - Characteristics of a 50/125 µm multimode graded index optical fibre cable for the optical access network; - ITU-T G-652 - Characteristics of a single-mode optical fibre and cable; - ITU-T G-657 - Characteristics of a bending-loss insensitive single-mode optical fibre and cable for the access network.	
Optical Fiber	SM (Singlemode), BLI (Bending Loss Insensitive), MM (Multimode) OM1, OM2, OM3 and OM4.	
Optical Characteristics	Fiber	Characteristics
	Single mode	According to technical specification 2000 (Annex A)
	Multi mode (OM1, OM2, OM3 and OM4)	According to technical specification 1999 (Annex B)
Fiber Coating	Optical fiber with an acrylate coating.	
Fiber Identification	Fiber	Color
	01	Blue
	02	Orange
	03	Green
	04	Brown
	05	Slate
	06	White
	07	Red
	08	Black
	09	Yellow
	10	Violet
	11	Pink
	12	Acqua

Buffer Tube	The loose tubes are filled with a repellent compound that prevents the entrance and migration of humidity. These tubes must protect the fibers from mechanic efforts.	
Strength member	Dielectric fibers	
Rip Cord	One rip cord shall be included under the jackets.	
Outer Jacket	Black thermoplastic material, resistant to UV rays and weathering.	
Cable Flammability Rating	Cable Protection Grade	Marking
	Not Flame Retardant	NR
	Flame Retardant	RC
	Optical Fiber Nonconductive General-Purpose (OFNG)	COG
	Optical Cable with Low Smoke Zero Halogen Jacket (LSZH-3)	LSZH

Cross Section



OPTIC-LAN 12 FIBERS

Physical Characteristics	Test	Requirement	Unity	Singlemode Fibers	Multimode Fibers
Mechanical	Deformation caused by traction		Load: 1 x Weight of the cable (N)	Maximum: 0.2% Pulled 0.05% At rest	
	Compression		Minimum 100 N/cm	≤ 0.1 dB	≤ 0.2 dB
	Alternated Flexion		50 cycles	≤ 0.1 dB	≤ 0.2 dB
	Torsion		10 cycles	≤ 0.1 dB	≤ 0.2 dB
	Bending		25 cycles x 2 kgf	≤ 0.1 dB	≤ 0.2 dB
	Impact		20 cycles x 1,5 kgf	Must not present fiber rupture	
	Environmental				
Environmental	Thermal cycle		-20 °C to +85 °C	≤ 0.1 dB/km	≤ 0.2 dB/km
	Water penetration		Water column 1 m x 1 h	Must not leak	

Dimension	CHARACTERISTIC	UNIT	TYPICAL VALUE
	Optical Fiber Count	Fibers	2 to 12
	Maximum Outer diameter	mm	5.7
	Nominal Weight	kg/km	37
Mechanical and Environmental Characteristics			
	Radio Mínimo de Curvatura Durante la Instalación	mm	124
	Radio Mínimo de Curvatura Después de Instalado	mm	62
	Temperatura durante la operación	°C	-20 a +65
	Carga durante la Instalación (máx.)	kgf	60
Marking	"FURUKAWA OPTIC-LAN x wF z k MONTH/YEAR LOTE nL (**)" Where: X = Type of optical fiber SM For singlemode fibers BLI For bending loss insensitive fibers MM For multimode fibers W = Fiber count Z = Denomination for special fiber G-652D For SM ITU-T G.652.D fibers G-657A-1 For SM BLI G.657.A1 fibers (62.5) For Multimode 62.5µm (50) For Mutimode 50µm (50) OM3 For Multimode 50µm OM3 EIA/TIA 492AAAC fibers (50) OM4 For Multimode 50µm OM4 EIA/TIA 492AAD fibers K = Cable protection grade Cable with normal polyethylene jacket - No marking Cable with flame retardant jacket - RC OFNG Cable - COG LSZH Cable - LSZH MONTH/YEAR = Fabrication Date (MM/YYYY) nL = Batch number (**) = Length marking (xxxx m)		
Package Type	Wooden reel		

Standard Length	2100m
	Tolerance $\pm 5\%$.

[Part Numbers](#)