

Fibre Optic Cabling

Multimode OM3 Tight Buffered Fibre Optic Cable

Cca-s1a-d0-a1

Connectix OM3 50/125 multimode tight buffered distribution cable can be used for many indoor and outdoor applications. Typical cable applications include: LAN and WAN backbones, tray pathways, backbones in data centres, and rodent resistant within ducts.

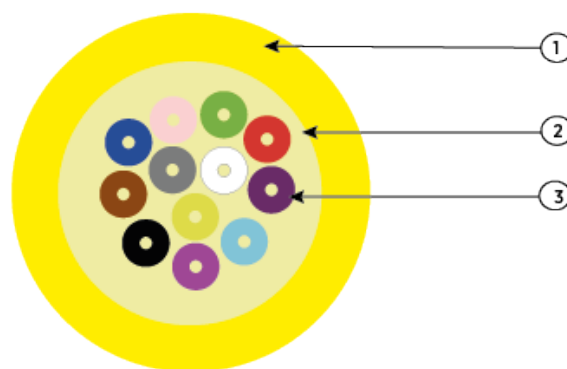
The outer sheath features an UV stabilised, water and moisture resistant LSZH jacket making the cable is well suited for shorter outdoor runs. This cable features high flame retardance with a CPR EuroClass rating of Cca-s1a-d0-a1 and exceeds BS6701:A1 minimum requirements.

When installed as part of an end-to-end Connectix Cabling System, a 25-year system warranty is available for projects completed by Connectix Approved Installers.

Features and Benefits

- Excellent reaction to fire with CPR EuroClass rating of Cca-s1a-d0-a1
- Exceeds requirements of BS6701:A1
- Installer friendly, flexible construction
- Free cut to length service
- Rodent resistant duct grade
- ITU-T G.652.D Multimode OM3 low water peak grade
- 4, 8, 12, 24-fibre options from stock

Diagram



1. LSZH Jacket
2. Glass Yarn Strength Member

3. Tight-buffered fibre

Materials

Fibre	ITU-T G.652.D (from stock), also available G.657.A1 and G.657.A2
Strength member	Glass yarn
Buffer	LSZH
Jacket	LSZH

Fire Performance Test

Test	Result
Euroclassification to CPR	Cca-s1a-d0-a1

Ordering Information

Part Number	Description
002-005-111-04	Connectix 4f OM3 Multimode G.652.D Internal/External Tight buffered LSZH Cca-s1a-d0-a1
002-005-111-08	Connectix 8f OM3 Multimode G.652.D Internal/External Tight buffered LSZH Cca-s1a-d0-a1
002-005-111-12	Connectix 12f OM3 Multimode G.652.D Internal/External Tight buffered LSZH Cca-s1a-d0-a1
002-005-111-24	Connectix 24f OM3 Multimode G.652.D Internal/External Tight buffered LSZH Cca-s1a-d0-a1

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Cable and Fibre Specifications

Multimode Fibre		OM3
Attenuation (dB/km)	@850nm	≤3.5
	@953nm	/
	@1300nm	≤1.5
BW (MHz.km)	@850nm	≤1500
	@953nm	/
	@1300nm	≤500
Dimension	Core Diameter	50±2.5
	Cladding Diameter	125 ± 2µm
	Non-circularity	≤ 1.5%
	Conc	≤2µm
	Buffer Diameter	0.9±0.05mm
	Cable Diameter	Nominal value
Stripping	Coating Stripping	1.3~8.9N
	Buffer Stripping	≤13.3N

Mechanical Characteristics

Multimode Fibre									
Mechanical Characteristics	Tension	Cores	2	4	6	8	12	16	24
		Long Term	200N	200N	200N	200N	200N	400N	400N
		Short Term	660N	660N	660N	660N	660N	1320N	1320N
	Crush	Long Term	200N						
		Short Term	1000N						
	Impact		1N.m, fibre not damaged, no cracks to sheathing						
	Repeated Bending		40N, 100cycles, fibre not damaged, no cracks to sheathing						
	Torsion		20 N, 10cycles, ±180° fibre not damaged, no cracks to sheathing						
Bending Radius		Load	20D (cable diameter)						
		Unload	10D (cable diameter)						
Additional att (-20°C ~ 60°C)			≤0.6dB/km						
Flame resistance			IEC 60332-1, IEC 60332-3-24 CPR Cca-s1a-d0-a1						
Temperature Range	Storage		-20°C~70°C						
	Installation		-5°C~50°C						
	Operating		-20°C~60°C						

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Mechanical Characteristics (Cont'd)

Primary coating non-circularity	≤6%
Primary coating – cladding concentricity error	≤10µm
Group index of refraction	1.482@850nm 1.477@1300nm
Proof stress level	100kpsi
Typical average strip force	1.5N
Strip force peak	min 1.3N,max 8.9N
Numerical aperture	0.200±0.015
Fibre bending loss R-7.5mm	≤0.2dB@850nm ≤0.5dB@1300nm
Fibre bending loss R-15.0mm	≤0.1dB@850nm ≤0.3dB@1300nm

Physical Properties

Cores	2	4	6	8	12	16	24
Outer Diameter (mm)	5.5 ± 0.2	6.5 ± 0.2	6.6 ± 0.2	7.0 ± 0.2	7.0 ± 0.2	8.0 ± 0.2	8.5 ± 0.2
Thickness (mm)	1.1 ± 0.1	1.1 ± 0.1	1.1 ± 0.1	1.1 ± 0.1	1.1 ± 0.1	1.1 ± 0.1	1.1 ± 0.1
Approx weight (kg/km)	30	37	40	44	47	60	71