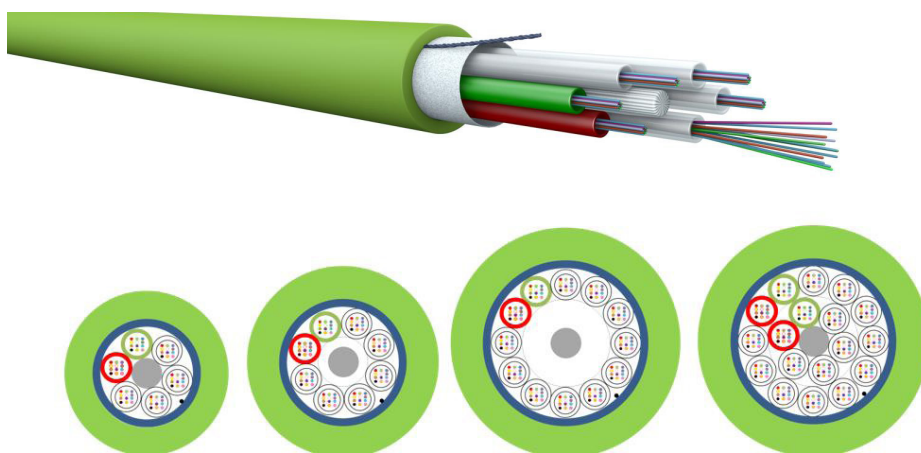


# Fibre Optic Cabling

## Connectix Singlemode G.657.A1 Indoor/Outdoor loose tube, B2ca-s1-d1-a1

Universal indoor/outdoor cable for LAN, MAN and WAN backbones. With its FireRes® LSHF-FR sheathing this cable is ideal for mixed indoor and limited outdoor installation. It is equally suited for installation in ducts and on trays.

This innovative cable is Class-B2ca approved, highly flame retardant with gel-filled tubes and water-blocked characteristics.



### Fire Performance Test

Test	Result
Euroclassification to CPR	B2ca-s1-d1-a1

### Mechanical Characteristics

Test	Value
Central strength member	ø2.5 mm FRP rod
Loose tube	For ≤ 144 fibres, ø2.3 mm gel-filled loose tubes, with 12 fibres each For > 144 fibres, ø2.8 mm gel-filled loose tubes, with 24 fibres each
Water blocking	The core is water blocked using swellable tape and tread
Ripcord	Polyester ripcord for easy slitting of the sheath
Sheath	1.5 mm FireRes sheath, halogen free, flame retardant, UV stabilised, IEC 50290-2-27
Cable Sheath colours	Singlemode - Yellow
Sheath Marking	[customer name] LSHF-FR B2ca-s1-d1-a1 1.8 kN <Fibre count><Fibre type><Fibre brand> <Item No><Factory No><Batch Number><Meter mark> U-DQH <Number of Elements> x <Fibre count per element> <Fibre family> <Mode field diameter> /125 <Transmission Class>

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Physical Properties					
Attribute	IEC 60794-1-21/22 Method	Limits			
Fibre count	-	96	144	288	432
Fibre Distribution	-	8x12f	12x12f	12x24f	18x24f
Nominal diameter [mm]	-	11.8	15.0	18.0	18.2
Nominal weight [kg/km]	-	145	240	330	300
Short term tensile strength [N]	E1	1800 (fibre strain $\leq$ 0.6%)			
Permanent tensile strength [N]	E1	600 (fibre strain $\leq$ 0.2%)			
Crush (compressive strength) [N/100 mm]	E3	2000			
Impact [J]	E4	20			
Torsion	E7	5 cycles $\pm$ 1 turn			
Kink	E10	The cables do not form a kink when a loop is drawn together to a diameter 12 times the cable nominal diameter			
Minimum Installation bending radius (loaded) [mm]	-	236	300	360	362
Minimum Permanent bending radius (unloaded) [mm]	E11	118	150	180	182
Temperature range	F1	Installation -40°C to 70°C Operation *) -40°C to 70°C Storage -40°C to 70°C			
Water penetration	F5	No water on free end			

\*) The cables will operate without any attenuation variation ( $\leq$ 0.05 dB) in the temperature interval -30°C to +60°C.  
The cables will operate with a maximum attenuation variation of 0.1dB/km in the temperature interval -40°C to +70°C.

Ordering Information	
Product Description	Part Number
Connectix 48-fibre Singlemode G.657.A1 Indoor/Outdoor loose tube, B2ca-s1-d1-a1	002-005-063-48
Connectix 96-fibre Singlemode G.657.A1 Indoor/Outdoor loose tube, B2ca-s1-d1-a1	002-005-063-96
Connectix 144-fibre Singlemode G.657.A1 Indoor/Outdoor loose tube, B2ca-s1-d1-a1	002-005-063-144
Connectix 288-fibre Singlemode G.657.A1 Indoor/Outdoor loose tube, B2ca-s1-d1-a1	002-005-063-288
Connectix 432-fibre Singlemode G.657.A1 Indoor/Outdoor loose tube B2ca-s1-d1-a1	002-005-063-432