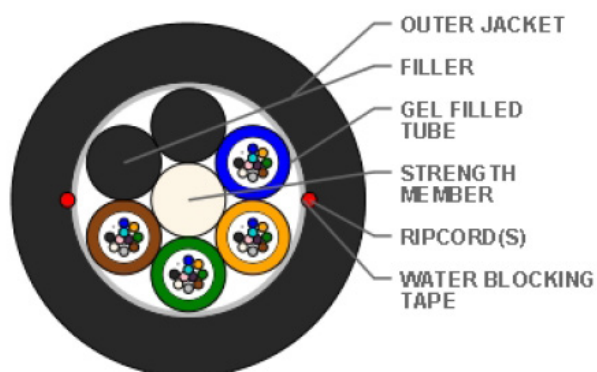


# Fibre Optic Cabling

## Connectix MLT 48-Fibre (4x12) External PE Singlemode G.657.A1

Connectix Multitube Single Jacket Fibre Optic Cables are suitable for duct applications. This cable is a stranded loose tube cable with optical fibres placed inside robust buffer tubes stranded around a fibre reinforced plastic (FRP) central strength member. In addition to optical fibres, the buffer tubes contain water blocking gel and the cable core is surrounded with water-swellaable tape to prevent water ingress in the interstices of cable core.



### Features & Benefits

- Multitube design with ripcords for easy and quick mid span access
- Easily removable rugged thermoplastic jacket
- Waterblocking technology for gel free core helps in quicker end preparation
- Flexible, light weight, easy to handle & install
- Tensile and crush resistant
- UV protected

### Physical Characteristics

<b>Fibre Count</b>	48
<b>Single Mode Optical Fibre</b>	ITU.T - G.657 A1
<b>Maximum Cabled Fibre Attenuation dB/Km</b>	1310nm: 0.35; 1550nm: 0.23,
<b>Link Design PMD</b>	</=0.1 ps/√km
<b>Fibre Per Tube</b>	12
<b>Fibre Colour Sequence</b>	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua
<b>Tube Size (mm)</b>	2
<b>Central Strength Member</b>	FRP (Fibre Reinforced Plastic)
<b>No of Tubes in Layer 1</b>	4
<b>Tube Colour Sequence</b>	Blue, Orange, Green, Brown, Filler. Filler
<b>No of Fillers</b>	2
<b>Filler Colour</b>	Black
<b>Outer Sheath Material</b>	UV Proof Black HDPE
<b>Nominal Sheath Thickness (mm)</b>	1.6
<b>No of Ripcords Below Outer Sheath</b>	2
<b>Nominal Cable Dimensions (mm)</b>	9.5 ± 0.5
<b>Nominal Cable Weight (kg/km)</b>	68±10%

# Fibre Optic Cabling

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Mechanical & Environmental Characteristics		
Cable Characteristics	Testing Standards	Cable Performance
Tensile Strength (N)	IEC-60794-1-21-E1	2000
Crush Resistance (N/100mm)	IEC-60794-1-21-E3	2000
Impact Strength (Nm)	IEC-60794-1-21-E4	5
Torsion	IEC-60794-1-21-E7	±180°
Min. Bend Radius (during installation)	IEC-60794-1-21-E11	20D
Min. Bend Radius (After Installation)	IEC-60794-1-21-E11	15D
Water Penetration Test	IEC-60794-1-22-F5	1m waterhead, 3m samples, 24h
Drip Test	IEC-60794-1-21-E14	30cm, 70°C, 24h
Temperature Performance	IEC-60794-1-21-F1	Max. change in attenuation shall be <math>\leq 0.15\text{dB/km}</math>
Installation		-10°C to + 70°C
Operation		-40°C to + 70°C
Storage		-40°C to + 70°C

**Note:** All tests shall be carried out as per IEC standards. Change in attenuation after and before testing shall be <math>\leq 0.05\text{ dB/km}</math> for Single Mode fibre and <math>\leq 0.3\text{ dB/km}</math> for Multimode fibre.

### Cable Performance Standards

Cable complies to the following standards IEC 60793, IEC 60794, Telecordia GR-20, ITU-T, RoHS, REACH.

### Packing and Lengths

Drum Type : Wooden Drums

Length Multiple (km) :  $4 \pm 5\%$

Order Tolerance :  $\pm 5\%$

Short Lengths : Max 5%, Customer Approval

Printing Details	
Cable Printing details	CONNECTIX SM 48F G657A1 DUCT LASER SYMBOL TELEPHONE SYMBOL YEAR OF MANUFACTURE LENGTH CODE METER MARKING
The accuracy of marking shall be + 0.5%. Occasional loss of printing & remarking shall be as per Bell core GR 20 and this supercedes the earlier markings.	

Ordering Information	
Product Description	Part Number
Connectix MLT 48-Fibre (4x12) External PE Singlemode G.657.A	002-043-043-48