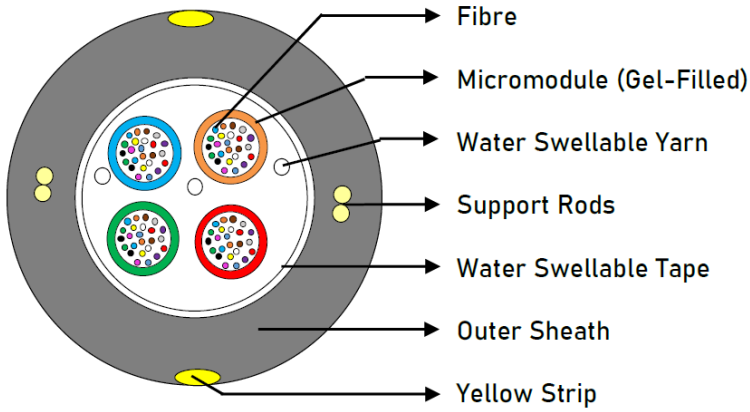


# Fibre Optic Cabling

## 96F Ultralightweight PIA Cable



Product Details	Optical Fibre containing elements laid up freely
	Gel filled micromodules
	Water blocked core interstices
	Embedded RP rod strength members
	HDPE sheath

Cable Construction	
Parameter	Structure/Layout
Fibre Count	96F
Number of Fibres per Micromodule	24
Number of Module	4
Embedding Strength Member	Braided Steel Wire
Moisture Barrier	Water swellable yarn & Water Swellable Tape
Strip Marking Width -HDPE-Yellow	1.25 mm (Nominal)
Outer Sheath- HDPE- Black UV	1.3 mm (Nominal)
Cable Diameter	7.0 ± 0.2mm
Nominal Cable Weight	35.0 Kg/km (Nominal)

Colour Coding													
Fibre Colour	Bl	Or	Gr	Rd	Sl	Yl	Br	Vl	Bk	Wh	Pk	Aq	
	*Bl	*Or	*Gr	*Rd	*Sl	*Yl	*Br	*Vl	*Nt	*Wh	*Pk	*Aq	

\* Single ring marking (Black), fibres 13 to 24th fibre, natural ring marked fibre instead of black fibre.

SI No	1	2	3	4
Micro Module Colour	Bl	Or	Gr	Rd

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Mechanical Characteristics		
Breaking Load	<2000 N	IEC 60794-1-21-E1
Maximum Environmental Load	950 N @< 0.6% fibre strain	IEC 60794-1-21-E1
Water Penetration Test	1 m water head, 3m sample, 24 hours	IEC-60794-1-22-F5
Crush Resistance	2000 N	IEC 60794-1-21-E3
Minimum Bending Radius	70mm	IEC 60794-1-21-E11
Voltage Test	11Kv	If installed along power line minimum vertical distance of 1.8 M should be maintained
Resistance to wind/ice	Cable shall withstand 97 kph wind, no ice. 80 kph wind + 5mm ice. 0 kph wind, + 10mm ice. without appreciable sag	

Environmental Performance		
Installation	-10°C to +60°C	IEC 60794-1-22-F1
Operation	-20°C to +85°C	
Storage	-20°C to +85°C	

Fibre Characteristics		G.657.A1
Optical		
Attenuation	1310 nm	≤ 0.35 dB/km
	1550 nm	≤ 0.21 dB/km
	1625 nm	≤ 0.23 dB/km
Chromatic Dispersion	1285 - 1330 nm	≤ 3.5 ps/nm.km
	1550 nm	≤ 18.0 ps/nm.km
	1565 - 1625 nm	≤ 22.0 ps/nm.km
Zero Dispersion Wavelength		1300 - 1324 nm
Zero Dispersion Slope		≤ 0.090 ps/nm <sup>2</sup> x km
Polarisation mode dispersion	Fibre	≤ 0.1 ps/km
	Link Design Value	≤ 0.06 ps/km
Proof Stress Level		≥ (100 kpsi) 1.0% strain
Geometrical		
Cable Cut Wavelength		≤1250 nm
Mode Field Diameter	1310 nm	8.8 ± 0.4 μm
	1550 nm	10.3 ± 0.5 μm
Core - Cladding Concentricity Error		≤ 0.5 μm
Cladding Diameter		125 ± 0.7μm
Cladding Non-Circularity		≤ 0.7%
Primary Coating Diameter		190 ± 10μm (uncoloured) 200 ± 10 μm (coloured)
Fibre Curl	Radius	≥ 4m

# Fibre Optic Cabling

## 96F Ultralightweight PIA Cable

### Printing Details

Cable printing details	Connectix ULW Singlemode G.657.A1 XX fibre Aerial Cable Black , MTR MARKING
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Outer Sheath Colour: Black

Cable drums 4km or free cut to length service available.

IEC 60793, ANSI/ICEA S-87-640, Telecordia GR-20, ITU-T, RoHS, REACH

### Ordering Information

Product Description	Part Number
Connectix 96F ULW PIA Cable	ULW-001-001-96