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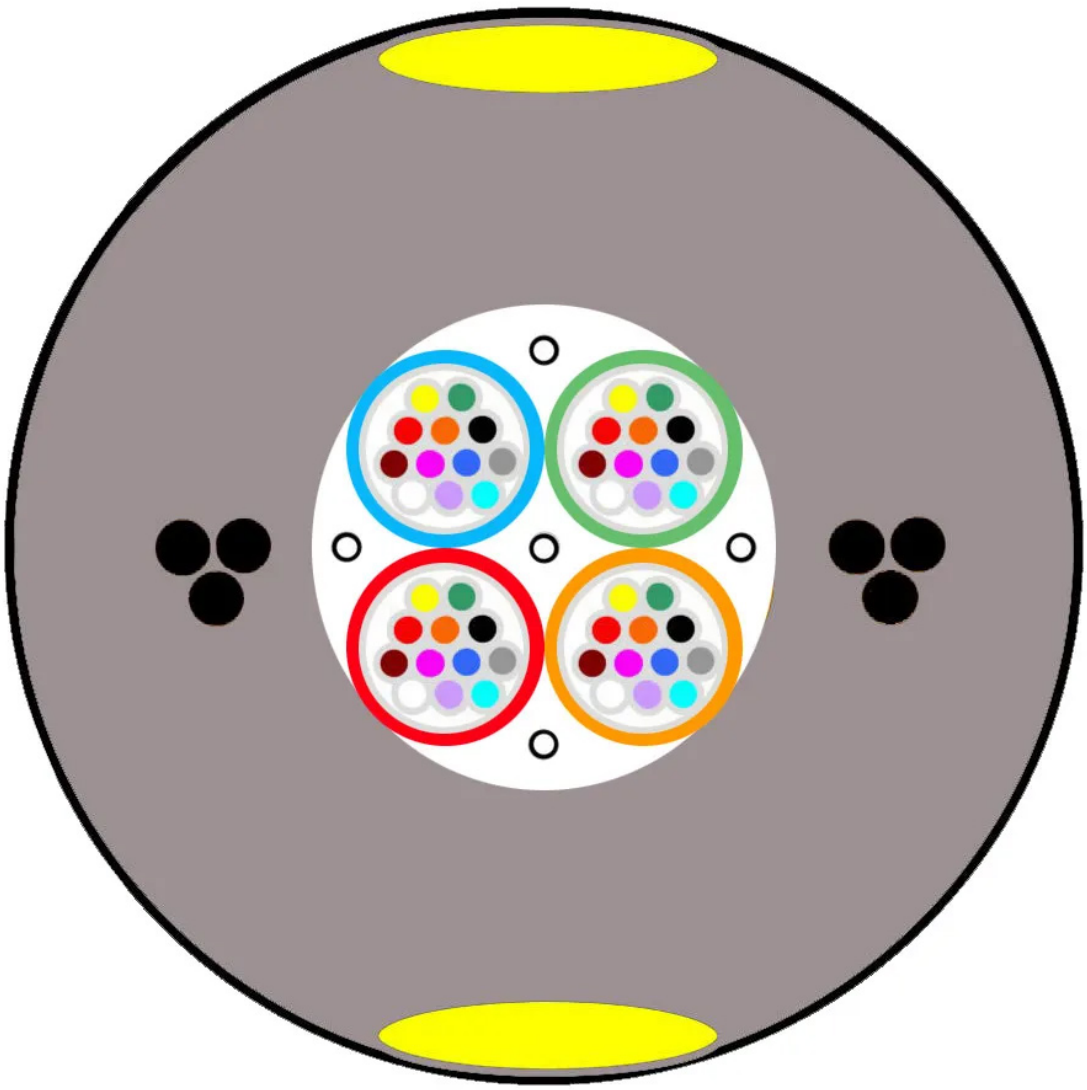
# 48F Optical Aerial Drop Cable (ULW) 4km

## Product Images

**Product Code: S83-2592**



## Short Description

This PIA approved multi-unit ultra light weight optical drop cable is designed for aerial and/or duct applications and is suitable for use alongside 11kV power cables. (A minimum of 1.8 metres should be maintained)

Optical fibre: Singlemode G.657.A1.

Layout: 4 units x 12 fibres

Embedding strength member: 3 x 0.32mm brass coated steel wires.

Moisture Barrier: Water blocking yarn and water swellable tape

Outer sheath thickness: 1.6mm (nominal) HDPE UV Black

Strip marking width: 1.25mm (nominal) HDPE Yellow

Cable diameter: 7.0mm (± 0.3 mm)

Cable Weight: 40.0Kg / km (nominal)

Supplied on a wooden reel.

**Mechanical Characteristics**

Tensile Break Load 1900 N

Tensile Strength 1250 N IEC 60794-2-E1

Crush Resistance 2000 N IEC 60794 -1-E3

Minimum Bending Radius
84 mm –Short Term IEC 60794 -1 E4
140 mm – Long Term IEC 60794 -1 E4

Voltage Test - 11 Kv If installed along power lines. A 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 Characteristics**

Installation - 10 °C to +60°C (IEC 60794-1-22-F1)

Operation - 30 °C to +70°C (IEC 60794-1-22-F1)
Storage - 40 °C to +70°C (IEC 60794-1-22-F1)

**Fibre Characteristics**

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

Fibre Cut-off Wavelength ≤ 1260 nm

Zero Dispersion Wavelength 1302 – 1324 nm

Zero Dispersion Slope ≤ 0.092 ps/nm2 x
km

Polarization mode dispersion

Fibre ≤ 0.1 ps / km
Link Design Value ≤ 0.04 ps / km

100 turns φ 50 mm
1310 nm ≤ 0.05 dB / 1550 nm ≤ 0.05 dB
100 turns φ 60 mm 1625 nm ≤ 0.05 dB

Proof Stress Level 1.0 % (100 kpsi)

Mode Field Diameter
1310 nm 9.2 ± 0.4 µm
1550 nm 10.4 ± 0.5 µm

Core – Cladding Concentricity Error ≤ 0.5 µm

Cladding Diameter 125 ± 0.7 µm

Cladding Non – Circularity ≤ 1 %

Coating – Cladding Concentricity Error ≤ 12 µm

Primary Coating Diameter 242 ± 5 µm

Primary Coating Material (Coloured) UV Cured Acrylate

Fibre Curl Radius ≥ 4 m

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