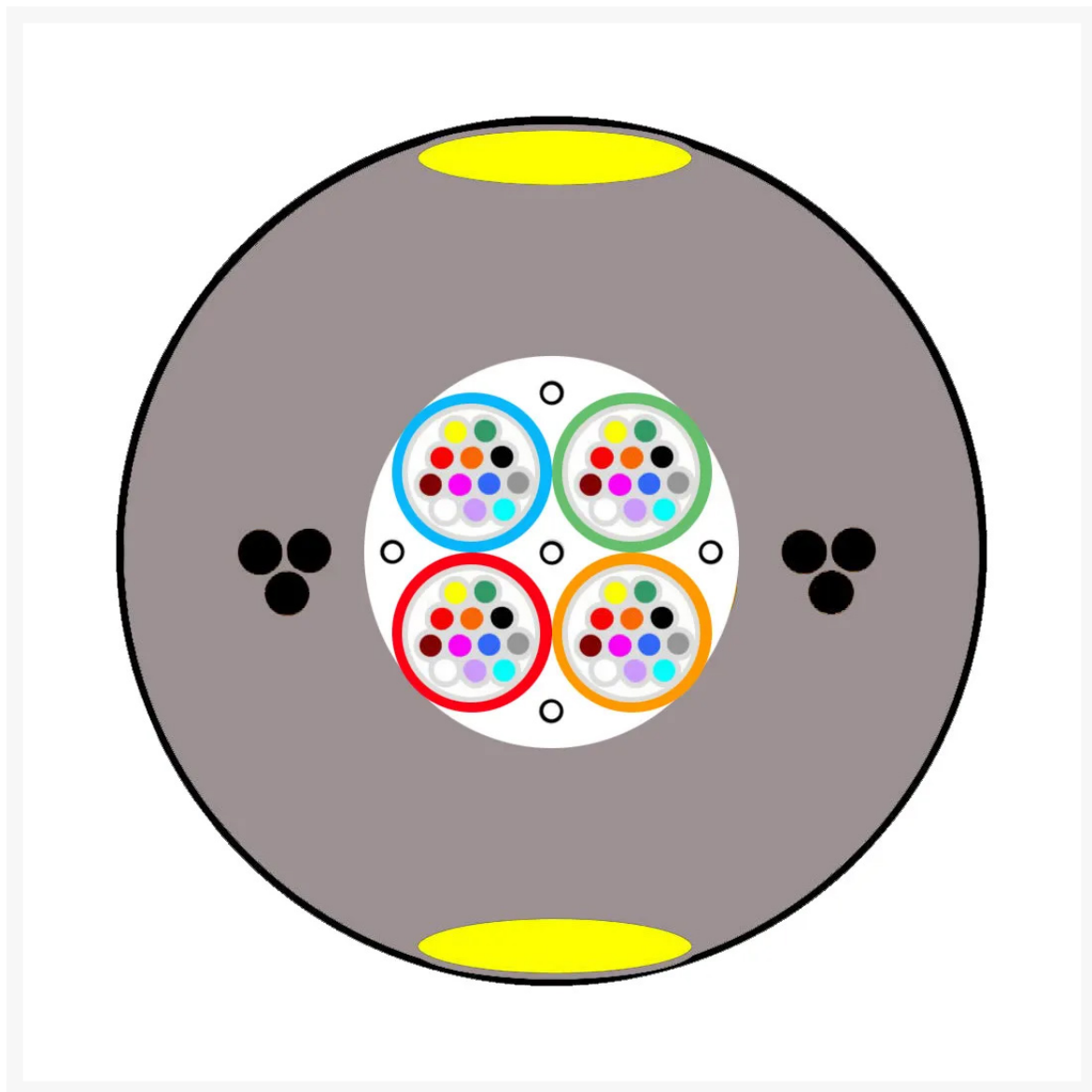


Mills 48F Optical Aerial Drop Cable (ULW) 4km

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 $\leq$ 0.23 dB/km

Chromatic Dispersion

1285 – 1330 nm $\leq$ 3.5 ps/nm.km

1550 nm $\leq$ 18.0 ps/nm.km

1565 – 1625 nm $\leq$ 22.0 ps/nm.km

Fibre Cut-off Wavelength $\leq$ 1260 nm

Zero Dispersion Wavelength 1302 – 1324 nm

Zero Dispersion Slope $\leq$ 0.092 ps/nm² x
km

Polarization mode dispersion

Fibre $\leq$ 0.1 ps / km

Link Design Value $\leq$ 0.04 ps / km

100 turns $\varnothing$ 50 mm

1310 nm $\leq$ 0.05 dB / 1550 nm $\leq$ 0.05 dB

100 turns $\varnothing$ 60 mm 1625 nm $\leq$ 0.05 dB

Proof Stress Level 1.0 % (100 kpsi)

Mode Field Diameter

1310 nm $9.2 \pm 0.4 \mu\text{m}$

1550 nm $10.4 \pm 0.5 \mu\text{m}$

Core – Cladding Concentricity Error $\leq$ 0.5 μm

Cladding Diameter $125 \pm 0.7 \mu\text{m}$

Cladding Non – Circularity $\leq$ 1 %

Coating – Cladding Concentricity Error $\leq$ 12 μm

Primary Coating Diameter $242 \pm 5 \mu\text{m}$

Primary Coating Material (Coloured) UV Cured Acrylate

Fibre Curl Radius $\geq$ 4 m

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100 turns $\varnothing$ 60 mm 1625 nm ≤ 0.05 dB

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Mode Field Diameter

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1550 nm 10.4 ± 0.5 μ m

Core – Cladding Concentricity Error ≤ 0.5 μ m

Cladding Diameter 125 ± 0.7 μ m

Cladding Non – Circularity ≤ 1 %

Coating – Cladding Concentricity Error ≤ 12 μ m

Primary Coating Diameter 242 ± 5 μ m

Primary Coating Material (Coloured) UV Cured Acrylate

Fibre Curl Radius ≥ 4 m