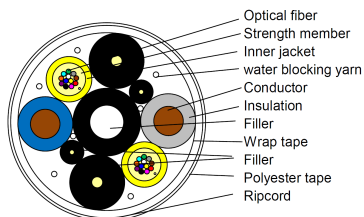


**HB012-B-01U1-S12F**Unshielded Hybrid Cable, 1 x 1.5mm² pair power cable and 24 x singlemode optical fibers

A hybrid cable designed to transmit both electrical power and optical signals in a single cable. Two electrical power conductors and two fibre optic sub units, each containing twelve bend insensitive singlemode fibers surround a non metallic strain member. Incorporation of water blocking tapes and a UV stable jacket ensure long term operation in both internal and outdoor applications. The inclusion of fillers ensures the fully circular construction can be efficiently installed in ceiling or floor voids as well as conventional ducting systems

Feature / Benefits

- Circular construction prevents snagging during installation
- Bend insensitive optical fiber simplifies installation and termination
- Singlemode fiber provides the ultimate future proof support for high bandwidth services
- Suitable for Indoor/outdoor applications

Technical features**STRUCTURE**

Cable Type	Hybrid (2 x 1.5mm ² & 24 x SMF unscreened)
Size	1/2"
Fire Performance	meets or exceeds: IEC 60754-1/-2 smoke emission, halogen free, non corrosive IEC 61034 , low smoke IEC 60332-1 flame retardant , IEC 60332-3-24 fire retardant , CPR: class Cca, S1b, d0, a1 to BS EN 13501-6:2014
Number of Fiber	24 (2 X 12F sub units)

MECHANICAL SPECIFICATIONS

Outer Diameter Nominal	13.8mm (0.543in)
Cable Weight	0.21kg/m (0.141lb/ft)
Minimum Bending Radius	55mm (2.165in)
Minimum Bending Radius	110mm (4.331in)
Recommended / Maximum Clamp Spacing	0.6 / 1 (2 / 3.2)
Tensile Strength (Operating)	1000 (220) IEC60794-1-2 E3
Tensile Strength (Installation)	1800 (397) IEC60794-1-2 E3
Crush Resistance (Operating)	2000 IEC 60794-1-2 E3

DC POWER CABLE SPECIFICATIONS

Number of DC Pairs	1
Maximum DC-Resistance Power Cable	13.3ohm/1000 m (4.05ohm/1000 ft)
Cross Section of Power Cable	1.5 mm ² (16 AWG)
DC Wire Information	30 x 0.26 Pure Annealed Copper (Class 5)
DC Wire Jacket Material	Blue and Grey LSZH polyolefin
DC Wire Jacket Thickness	0.7mm (0.028in)
DC Cable Diameter	3mm (0.118in)
DC Standards (Meets or Exceeds)	IEC 60228

**HB012-B-01U1-S12F**Unshielded Hybrid Cable, 1 x 1.5mm² pair power cable and 24 x singlemode optical fibers**CABLE JACKET**

UV-Protection Individual and External Jacket	UV Resistance EN 50290-2-24,
Jacket Material	Flame Retardant IEC60332-1/-3-24, UV Resistance EN 50290-2-24, Halogen Free compliance to IEC60754-1/-2 , Low smoke emission to IEC61034-2

F/O CABLE SPECIFICATIONS

F/O Cable Type	2 x Dry Loose-tube fibre sub units numbered 1 and 2, fibres in Yellow LSZH jackets with aramid yarn as strength member
Number of F/O Pairs	12
Core/Clad	9 /125
Cable Diameter mm (in)	2.5mm (0.098in)
F/O Cable Jacket	Yellow LSZH numbered 1 and 2
F/O Standards (Meets or Exceeds)	ITU G 657.A2, Fibre sub unit: Water penetration (no leakage)> 1m/24h optical core
Fiber Attenuation	< 0.4 dB/km @ 1310nm, < 0.3 dB/km @1550nm dB/km

TESTING AND ENVIRONMENTAL

Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Operation Temperature	-20°C to 70°C (-4°F to 158°F)
Installation Temperature	-20°C to 70°C (-4°F to 158°F)
Jacket Specifications	Flame Retardant IEC60332-1/-3-24, UV Resistance EN 50290-2-24, Halogen Free compliance to IEC60754-1/-2 , Low smoke emission to IEC61034-2
LSZH Specification	Halogen Free compliance to IEC60754-1/-2 , Low smoke emission to IEC61034-2

Related Documents**Power and Fiber: Our Unique Advantages**
Value Propositions