

Screened 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. A corrugated aluminium screen ensures a 100% screen, enabling this cable to be installed in data and power cable ducts

Optical fiber Strength member Inner jacket water blocking yarn Conductor Insulation Filler Wrap tape Filler Polyester tape Ripcord

FEATURES / 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
- Corrugated screen provides the ultimate cable routing flexibility
- Suitable for Indoor/outdoor applications

Hybriflex Bulk cable dia. 012" ,Screened-DC wire dia 1.5mm² Unshielded, 1 DC Pair, SM fibres x 12 pairs, Flame retardant

Technical features

STRUCTURE

Cable Type	Hybrid (2 x 1.5mm² & 24 x SMF screened)
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 B2ca, S1a, d1, a1 to BS EN 13501-6:2014

DC POWER CABLE SPECIFICATIONS

Number of DC Pairs		1
Maximum DC-Resistance Power Cable	Ω/km (Ω/kft)	13.3 (4.05)
Cross Section of Power Cable	mm² (AWG)	1.5 (16)
DC Wire Information		30 x 0.26 Pure Annealed Copper (Class 5)
DC Wire Jacket Material		Blue and Grey LSZH polyolefin (colours may change in accordance with B.S. updates)
DC Wire Jacket Thickness	mm (in)	0.7 (0.028)
DC Cable Diameter	mm (in)	3 (0.118)
DC Standards (Meets or Exceeds)		IEC 60228

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Cable Weight	kg/m (lb/ft)	0.21 (0.141)
Minimum Bending Radius, Operating)	mm (in)	65 (2.559)
Minimum Bending Radius, (Installation)	mm (in)	130 (5.118)
Tensile Strength	N (lb)	400 (89.92)
Recommended / Maximum Clamp Spacing	m (ft)	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
CABLE JACKET		
UV-Protection Individual and External Jacket		UV Resistance to EN 50290 2 24
Jacket Material		LSZH - Black
Outer Diameter Nominal	mm (in)	15.6 (0.614)
ARMOR SPECIFICATIONS		
Armor Type		Corrugated aluminium tape - thickness 0.2mm (0.008in)
Maximum DC-Resistance of Armor	Ω/km (Ω/kft)	2.42 (0.74)
F/O CABLE SPECIFICATIONS		
F/O Cable Type		$2\mathrm{x}$ Dry Loose-tube fibre sub units numbered 1 and 2, in Yellow LSZH jackets with aramid yarn strength member
Number of F/O Pairs		12
Core/Clad	μm	9 /125
Secondary Protection Nominal	μm (in)	900 (0.035)
Cable Diameter mm (in)		2.5 (0.098)
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
TESTING AND ENVIRONMENTAL		
TESTING AND ENVIRONMENTAL Storage Temperature	°C (°F)	-20 to 70 (-4 to 158)
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Storage Temperature Operation Temperature		
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