

Fibre hybrid cable

Type 3780KCC



Construction characteristics

1 x Fibre optic cable	8 x 9/125µm OS2 single mode fibres RD, GN, YW, BU, WH, VT, OR, BK Inside gel-filled stainless steel tube 1.48 mm ID 1.88 mm OD LDPE jacketed, 0.60 mm nom RTI OD: 3.10 mm Colour: NAT
7 x Conductors	1.00 mm ² (32/0.20 mm) Tinned Copper FEP insulated, 0.25 mm nom RTI OD: 1.80 mm Colour: RD, OR, YW, GN, BU, VT, BN
Lay Up	Conductors and filler cable twisted around the fibre optic cable with fillers in interstices Overall water-swellable tape, minimum overlap 50% OD: 7.50 mm
Bedding	Polyether Polyurethane, 85 Shore A, Halogen Free, 1.50 mm nom RTI Colour: RD OD: 10.50
Strength member	Vectran® fibre braid, 370,000 dTex OD: 12.90 mm
Jacket	Polyether Polyurethane, 85 Shore A, Halogen Free, 1.50 mm nom RTI OD: 15.90 mm +/-0.40 Colour: RD

Mechanical characteristics

Max. operating temp	
Static	+90°C
Dynamic	+80°C
Cold flex temp	-40°C
Depth rating	6,000 m
Min. break load	50 kN

Mechanical characteristics

Recommended safe workload	10 kN
Min. recommended bend radius	
Static	160 mm
Dynamic	240 mm
Nominal weight	
In air	273 kg/km
In seawater	70 kg/km at SG 1.025

Electrical characteristics

1.00 mm² conductors	
Max. conductor resistance	19.20 Ω /km at 20°C
Min. insulation resistance	
Core – Core	> 1.00 G Ω /km
Voltage rating	3 kV
Test voltage	6 kV AC

Optical characteristics

9/125 μm single mode fibres	
Attenuation at	
1310 nm	< 0.40 dB/km
1550 nm	< 0.40 dB/km
Mandrel radius 15 mm at 1,550 nm 10 turns	\leq 0.03 dB
Mandrel radius 15 mm at 1,626 nm 10 turns	\leq 0.10 dB
Mandrel radius 10 mm at 1,550 nm 1 turn	\leq 0.10 dB
Mandrel radius 10 mm at 1,625 nm 1 turn	\leq 0.20 dB
Mandrel radius 7.5 mm at 1,550 nm 1 turn	\leq 0.50 dB
Mandrel radius 7.5 mm at 1,625 nm 1 turn	\leq 1.00 dB

In compliance with	CE, UK CA, UK NI, RoHS, LVD
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