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 mm² (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 GΩ/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	≤ 0.03 dB
	Mandrel radius 15 mm at 1,626 nm 10 turns	≤ 0.10 dB
	Mandrel radius 10 mm at 1,550 nm 1 turn	≤ 0.10 dB
	Mandrel radius 10 mm at 1,625 nm 1 turn	≤ 0.20 dB
	Mandrel radius 7.5 mm at 1,550 nm 1 turn	≤ 0.50 dB
	Mandrel radius 7.5 mm at 1,625 nm 1 turn	≤ 1.00 dB
In compliance with	CE, UK CA, UK NI, RoHS, REACH, LVD	