Hybrid cable, electrical/optical
Type 3644/K

Construction characteristics
Fibre optic element
4 multimode optical fibres 50/125 µm and 4 singlemode optical fibres 9/125 µm in jelly filled stainless steel tube with Polyolefin jacket. 3 mm diameter
SM fibre colour: white, yellow, green and blue
MM fibre colour: red, orange, brown and grey

Conductor
1.0 mm² stranded tinned copper conductor insulated with polyolefin
3 mm nominal diameter, (6 each).
Conductor colour: brown, red, orange yellow, green and blue

Filler
Hot melt filler + binder tape

Inner jacket
Polyurethane jacket. Nominal diameter 10.9 mm. Colour: Glossy green

Strength member
High strength textile braid

Outer jacket
Polyurethane jacket. Colour: Glossy green

Environment lights
Used in sea water, exposed to air, snow, rain and sun

Halogen free
Halogen acid gas emission ≤0,5% when tested in accordance to IEC 60754-1 – CEI 20-37

Mechanical characteristics
Diameter
16.40 ±0.40 mm

Weight in air
278 kg/km nom.

Weight in seawater
67 kg/km nom.

Min. bending radius, static
164 mm

Min. bending radius, dynamic
246 mm

Safe working load
5 kN

Min. breaking strength
25 kN

Qualified pressure test
6,000 m (600 bar)

Operating temperature
-20°C - +80°C

Electrical and fibre optical characteristics
Operating voltage
1,000 V Va.c.

Test voltage
3,000 V Va.c. at 1 minute

Electrical resistance at 20°C
≤ 20.4 Ω/km

Insulation resistance at 20°C
≥ 1,000 MΩ x km

Fibre attenuation
2.80 dB/km at 850 nm for multimode fibre
0.80 dB/km at 1300 nm for multimode fibre
0.38 dB/km at 1310 nm for singlemode fibre
0.25 dB/km at 1550 nm for singlemode fibre