

NEK606 Caledonian Offshore & Marine Cables

Fire Resistant Instrumentation Cables



www.caledonian-cables.co.uk

S16 BFOU-HCF(c) 250 V

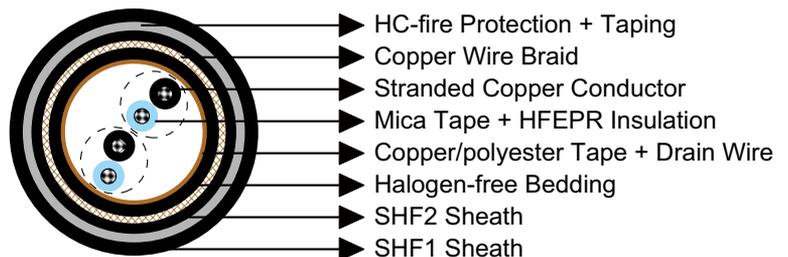
Applications

These cables are fire resistant, flame retardant, low smoke and halogen free, used for emergency instrumentation, communication, control and alarm systems that need to be operational during a 1100°C hydrocarbon fire.



Standards

- IEC 60092-376
- IEC 60092-351
- IEC 60092-359
- IEC 60331-21
- IEC 60332-1
- IEC 60332-3-22
- IEC 60754-1,2
- IEC 61034-1,2
- NEK 606:2004



Construction

- **Conductors:** Circular tinned stranded copper wire to IEC 60228 class 2.
- **Insulation:** Mica tape + Halogen free EPR compound.
- **Twinning:** Colour coded cores twisted together.
- **Collective Shielding:** Pairs/triples are laid up and collectively screened by copper backed polyester tape in contact with a stranded tinned copper drain wire. Pairs/triples are numbered with numbered tape or by numbers printed directly on the insulated conductors.
- **Bedding:** Halogen free compound.
- **Armour:** Tinned copper wire braid.
- **Outer Sheath1:** Halogen free thermosetting compound, SHF2.
- **HC-fire protection:** Extruded thermoplastic fire protection compound.
- **Taping:** Lapped glass fibre tape.





- **Outer Sheath2:** Flame retardant halogen-free thermoplastic compound, type SHF1, coloured grey (blue for intrinsically safe).

Electrical Characteristics

| | | |
|----------------------------|-----------------|-------|
| Nominal Cross Section Area | mm ² | 1.5 |
| Nominal Conductor Diameter | mm | 1.6 |
| Maximum Resistant@20°C | Ω/km | 12.9 |
| Mutual Capacitance | nF/km | 85 |
| Nominal Inductance@1KHz | MH/km | 0.667 |
| Operating Voltage | V | 250 |

Mechanical and Thermal Properties

- Bending Radius: 20×OD (during installation); 12×OD (fixed installed)
- Temperature Range: -20°C ~ +90°C

Dimensions and Weight

| Construction No. of elements×No. of cores in element×Cross section(mm ²) | Nominal Insulation Thickness mm | Nominal Diameter Over Bedding mm | Nominal Diameter Over Sheath1 mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|--|--|---|---|-----------------------------------|-------------------------|
| 2×2×1.5 | 0.7 | 13.0 | 16.4 | 44.5 | 2400 |
| 4×2×1.5 | 0.7 | 15.0 | 19.9 | 46.5 | 2650 |
| 8×2×1.5 | 0.7 | 20.5 | 25.3 | 53.0 | 3570 |
| 12×2×1.5 | 0.7 | 23.5 | 29.6 | 57.0 | 4160 |

