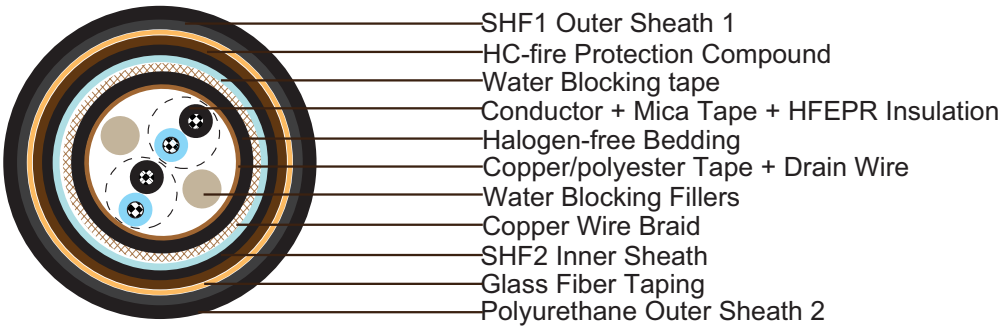
# Water Blocked S16 BFOU-HCF(c) 250 V

## Applications

These cables are partially water blocked, 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
- VG 95218 part 29




## 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 layed 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.
- **Filler:** Water blocking fillers, if required.
- **Bedding:** Halogen free compound, PETP wrapping tape will be applied over the bedding, if required.
- **Armour:** Tinned copper wire braid, PETP wrapping tape will be applied over the braiding, if required.
- **Water Blocking Elements:** Water blocking tape and strings for providing longitudinal

water tightness.

- **Inner Sheath:** Halogen free thermosetting compound, SHF2.
- **HC-fire protection:** Extruded thermoplastic fire protection compound.
- **Taping:** Lapped glass fibre tape.
- **Outer Sheath 1:** Flame retardant halogen-free thermoplastic compound, type SHF1, coloured grey (blue for intrinsically safe).
- **Outer Sheath 2**: Polyurethane for providing transversal water tightness, PE is optional,but can not meet low smoke standard.

## Electrical Characteristics

| | | |
|---|---|---|
| **Nominal Cross Section Area** | mm² | 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

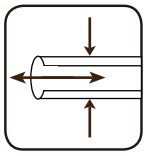
| Construction No. of elements×No. of cores in element×Cross section(mm²) | Nominal Insulation Thickness mm | Nominal Diameter Over Bedding mm | Nominal Diameter Over Inner Sheath mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|---|---|---|---|---|---|
| 2×2×1.5 | 0.7 | 13.0 | 16.4 | 46.5±2 | 2520 |
| 4×2×1.5 | 0.7 | 15.0 | 19.9 | 48.5±2 | 2783 |
| 8×2×1.5 | 0.7 | 20.5 | 25.3 | 55.0±2 | 3749 |
| 12×2×1.5 | 0.7 | 23.5 | 29.6 | 59.0±2 | 4368 |

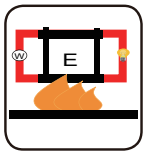
Standard

Standard

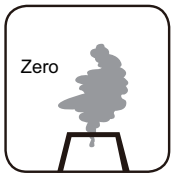
Standard

Standard


Water Tightness
VG 95218-29



Circuit Integrity
IEC 60331-21



Halogen Free
IEC60754-1


Low Corrosivity
IEC60754-2


Low Smoke Emission
IEC 61034-1&2


Flame Retardancy
IEC60332-1


Reduced Fire Propagation
IEC60332-3-22