

INLEX-FLEX – FLEXIBLE SHIPBOARD POWER CABLE

PART NUMBER: HDC 2.5mm² 2C+E

DESCRIPTION

INLEX-FLEX HDC 2.5mm² 2C+E is a flexible two-core plus earth cable designed for single-phase power and lighting circuits on ships and offshore installations. The cable comprises finely stranded, tinned-copper conductors (IEC 60228 Class 5) insulated with EPR to IEC 60092-360. Cores are colour-coded brown, blue, and yellow/green, then enclosed in a tough extruded neoprene bedding. A galvanised steel wire braid provides full-coverage screening and mechanical armour. Layers of tape are placed between each layer to aid cable stripping. The assembly is finished with a black, flame-retardant neoprene (PCP) outer sheath to IEC 60092-360 that is resistant to mud, oil, Skydrol, petrol, acids, seawater, ozone, and UV.

STANDARDS

- IEC 60092-350/353 Design & construction
- IEC 60228 Conductors (Class 5)
- IEC 60092-360 EPR insulation & PCP sheath
- IEC 60092-350 Galvanised wire braid
- IEC 60332-1-2 / IEC 60332-3-22 Flame-retardant
- IEC 60331-1, 2, 21 Fire-resistance
- IEC 60811-404 Oil & fuel resistance

KEY FEATURES

Rated voltage: 0.6/1 kV
 Max. permissible operating voltage AC: 1.2 kV
 Current Carrying Capacity: The definitions in IEC 60092-201 apply*
 Operating temperature: -10°C to +90°C
 Max. short circuit temperature (conductor): +250°C
 Ambient temperature for fix installation: min. -10°C
 Laying temperature min.: -20°C
 Max. tensile load on the conductor: 50 N/mm²
 Min. bending radius: 8 x D
 Suitable for hazardous area installations**

*Current-carrying capacity shall be determined by the installer in accordance with IEC 60092-352, taking into account actual installation conditions.

** Hazardous-area use (IEC 60079-14): Cable is suitable for Ex d and Ex e installations when terminated with IECEx-certified glands of the appropriate type (barrier or tested compression) and installed in accordance with 60079-14.

TECHNICAL DATA

Conductor material	99.9% Pure tinned copper wire
Conductor shape	Flexible Class 5 stranded tinned copper
Conductor size	2.5 mm ²
Conductor construction	49*0.245 mm strands
Conductor diameter	2.2 mm
Conductor insulation material	90°C EPR
Conductor insulation colouring	Brown, Blue, Yellow (70%) / Green (30%)
Conductor insulation nominal thickness	0.9 mm
Conductor diameter after insulation	4.0 mm
Filler material	LSZH mineral filler ropes (non-hygroscopic)
Conductor bundle wrapping	1 x 0.2 mm LSZH glass-fibre tape (non-hygroscopic)
Inner sheath/bedding material	Flame retardant neoprene (PCP)
Nominal inner sheath thickness	1.0 mm
Inner sheath wrapping	1 x 0.1 mm non-woven tape
Armour material	Galvanized steel wire armour braid (GSWBA)
Armour wire diameter	0.2 mm
Armour density braid	> 82%
Armor wrapping	1 x 0.2 mm flame retardant tape
Outer sheath material	Flame retardant neoprene (PCP)
Outer sheath nominal thickness	1.8 mm
Cable outer diameter (OD)	13.5 mm ± 0.5 mm
Weight	320 kg/km
D.C resistance at 20°C	≤8.21
Dielectric test (IEC 60092-353)	3.5 kV AC for 5 min