

CAN Bus Hybrid Marin, SHF1

1 pair CAN Bus 0.75 mm²

3 x 2.5 mm² power

DNV

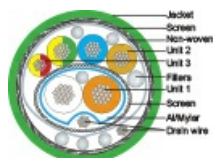
Application

CAN Bus Hybrid Marin combines the power supply with signal transfer. Designed for CAN-Bus system for ships, according to the NMEA 2000 standard for transferring signals at 250 kbit/s. The cable, with its high anti-interference ability and outstanding reliability is well suited for use in ships- and offshore installations.



Multi cable

Conductor unit 1	2 x 0.75 mm ² - (24 x 0,20 mm stranded tinned Cu)
Insulation unit 1	XL-PE Ø = 4,4 ± 0,05 [mm] White and orange
Filler unit 1	Optional
Drainwire unit 1	0.75 [mm ²]
Screen unit 1	Al/Mylar + tinned Cu braid, ≥ 85% coverage
Conductor unit 2	3 x 2.5 mm ² - (49 x 0,20 mm stranded tinned Cu)
Insulation unit 2	XL-PE Ø = 2,5 ± 0,05 [mm] Brown, blue and Yellow/green
Conductor unit 3	1 x 0.75 mm ² - (24 x 0,20 mm stranded tinned Cu)
Insulation unit 3	XL-PE Yellow/green Ø = 1,70 ± 0,05 [mm]
Assembling	Unit 1, unit 2 and unit 3 strandet together with filler (optional)
Overall tape	Non-woven
Drain wire	24 x 0,20 mm stranded tinned Cu
Overall screen	Tinned Cu braid, ≥ 85% coverage
Overall jacket	Green SHF1 Ø = 15,0 ± 0,4 [mm]



Specifications

Operating temperature normal	-40 – +90 [°C]
Temperature @ installation	-20 – +60 [°C]
Dielectric strength	DC 1,5kV for 1min.
Operating voltage	150/250 [V]
Characteristic impedance	120 ± 12 [Ω] at 1MHz of unit 1
Conductor resistance	2,5 mm ² : ≤ 8,5 [Ω/km] 0,75 mm ² : ≤ 27,5 [Ω/km]
Capacitance	50 [pF/m] at 1MHz of unit 1
Transmission speed	- 500 kbit/s - 100 m (328 ft) - 250 kbit/s - 250 m (820 ft)
Min. bending radius flexible	6 [x outer diam]
Min. bending radius installed	5 [x outer diam]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 and IEC 60754-2
Transmission performance	ISO 11898
Flame resistance	IEC 60332-3-22 Cat.A
Flame retardant	IEC 60332-1-2
Smoke emission	IEC 61034
Oil and fuel resistant	IEC 60811-2-1 IRM 902 23°C / 7 days, 70°C / 4h
Certification	DNV



Updated

Date	Rev.	Description
5.4.2019	1	DNV-GL Approval
15.4.2019	2	Additional information