RS 485 Industrial BUS SHF1

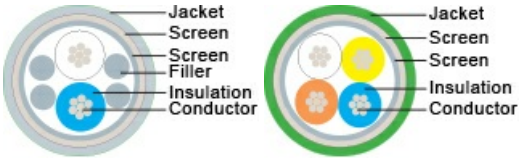
1, 2 or 4-pair quad, 22/7
Tinned conductors
120 Ω
DNV

Application

120 Ω BUS cable designed for industrial field bus systems of automation and communication, designed for ship and offshore use, designed for fixed applications, such as process control and automation.
22AWG/7 TC conductor, Foamed PE insulation, Filler, AL/Mylar and tinned copper braiding overall screen, SHF1 jacket.

Construction

Conductor	0.35 [mm²] Stranded tinned Cu AWG 22/7 (7 x 0.254 mm)
Insulation	Foam PE Ø = 1.75 [mm]
Filler	1 pair, yes: PP 2 pairs, none
Colour code	1 Pair: White and blue 2 Pairs: White, yellow, blue and orange
Screen	Al/Mylar
Screen 2	Tinned Cu braid ≥85 [% optical coverage]
Jacket	Green, other if reqeusted SHF1
Jacket marking	1Pair: NEK Kabel – RS485 – Marine – Cable –1x2xAWG22/7 – SHF1 – DNV – IEC60332-3-22 – ****m – DD/MM/YY 2 Pairs: NEK Kabel – RS485 – Marine – Cable – 4xAWG22/7 – SHF1 – DNV – IEC60332-3-22 – ****m – DD/MM/YY



Specifications

Operating temperature normal	-40 - +80 [°C]
Temperature @ installation	-20 - +60 [°C]
Dielectric strength	DC 2kV for 1min.
Characteristic impedance	120±15 [Ω @ 1MHz]
Conductor resistance	≤55 [Ω/km]
Resistance unbalance	≤5 [%]
Insulation resistance	≥1 [GΩ x km]
Attenuation	≤20,0 [dB/km @ 1MHz]
Min. bending radius installed	8 [x outer diam]
Min. bending radius @ installation	15 [x outer diam]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Material properties, insulation and sheath	IEC 60092-360
Design and testing standards	IEC 61158-2
Flame resistance	IEC 60332-3-22 Cat.A
Flame retardant	IEC 60332-1-2
Smoke emission	IEC 61034-2
Oil and fuel resistant	IEC 60811-2-1 IRM 902 23ºC / 7 days, 70°C / 4h
UV-resistant	UL 1581 (300H)
Certification	DNV

RoHS CE

Pairs	Outer diam. [mm]	Weight [kg/km]	Art. no.
1-pair Grey	6.50 ± 0.40	54	2040007
2-pairs Black	8.30 ± 0.40	80	2040000
2-pairs Green	8.30 ± 0.40	80	2040004
4-pairs Grey	9.30 ± 0.50	107	2040008
4-Cores Green	6.50 ± 0.40	64	2040009

Updated

Date	Rev.	Description
5.4.2019	1	DNV Approved
15.4.2019	2	Additional information
25.09.2023	3	Added 1-pair