



Profinet B, Industrial BUS SHF1

100 Ω BUS-cable

2 pair Quad, 0,35 mm²

SHF1, UV

DNV

Application

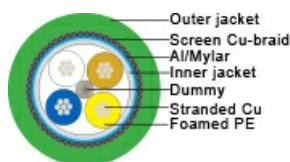
Double screened. Data transmission in industrial environments as well as in ship- offshore installations. Designed for EMC installations.

Flexible cable with SHF1 jacket.



Construction

Conductor	Stranded tinned Cu AWG 22/7
Insulation	PE, $\varnothing = 1.50 \pm 0.05$ [mm] 2 pairs quad
Colour code	White, blue, yellow, orange
Tape	Mylar tape
Inner jacket	LSZH compound
Screen	AL/Mylar 100 [%cover]
Screen 2	Tinned Cu-braid ≥ 85 [% cover]
Outer Jacket	Green SHF1
O.D.	6.5 [mm]
Weight	65 [kg/km]
Jacket marking	NEK Kabel – Profinet B MARIN Cable 4x22/7AWG – SHF1 – DNV - IEC 60332-3-22 – batch no – DD/MM/YY – ****m



Specifications

Operating temperature normal	-40 - +80 [°C]
Temperature @ installation	-20 + 60 [°C]
Dielectric strength	DC 1.5kV for 1min.
Characteristic impedance	100 $\pm$ 15 Ω at 1 - 100MHz
Conductor resistance	≤ 59.4 [Ω /km]
Capacitance	< 60 [pF/m] (IEC 61158-2, type B)



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 TIA/EIA 568 C.2
Flame resistance	IEC 60332-3-22 Cat.A
Flame retardant	IEC 60332-1-2
Smoke emission	IEC 61034-2 , ≥ 60 %
Oil and fuel resistant	IEC 60811-2-1 IRM 902 23°C / 7 days, 70°C / 4h
UV-resistant	UL 1581 (300H)
Certification	DNV



Part No.	1091069
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Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)
1	2,4	65,3
4	4,9	56,3
8	5,8	51,8
10	7,0	50,3
16	9,8	47,2
20	11,2	45,8
25	12,5	44,3
31,25	14,0	42,9
62,5	20,4	38,4
100	26,4	35,3

Updated

Date	Rev.	Description
05.04.2019	1	DNV-GL Approved
15.04.2019	2	Additional information
09.01.2020	3	Jacket marking