

Profibus DP Marin ARM SHF2

Flexible type A

LSZH, UV

1 pair 0.35 mm² (AWG 22/7)

DNV-GL

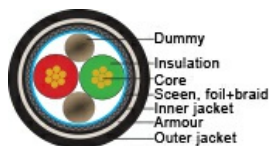
Application

Armoured Profibus data cable for industrial field bus systems of automation and communication, designed for ship and offshore use, for fixed applications such as process control and automation.



Construction

Conductor	Stranded bare or tinned Cu 7 x 0,254 [mm] AWG 22/7 (0.35 mm ²)
Insulation	Foamskin PE Ø= 2.55 [mm]
No. of pairs	1
Colour code	Red, green
Filler	PP
Sheath	Al/Mylar
Screen	Tinned Cu-braid > 80 [% optical coverage]
Inner jacket	SHF1 black
Armour	Galvanised steel wire braid ≥65% [optical cover]
Jacket	Black SHF2
O.D.	11,0 [mm]
Weight	190 [kg/km]
Jacket marking	NEK KABEL - PROFIBUS DP MARIN Armoured - 1x2x22AWG - SHF2 - IEC 60332322 - ****m - DD/MM/YY



Specifications

Operating temperature	-40 – +80 [°C]
Temperature @ installation	-20 - +60 [°C]
Test Voltage	DC 1kV/1min, no break down
Characteristic impedance	270 ± 27Ω @ 9,6kHz 185 ± 18,5Ω @ 38,4kHz 150 ± 15Ω @ 3-20MHz
Conductor resistance	≤55 [Ω/km]
Insulation resistance	≤1 [GΩ x km]
Capacitance	30 [pF/m] at 800 - 1000 Hz
Velocity factor	0,78
Attenuation	≤2,5dB/km @ 9,6kHz ≤3,8dB/km @ 38,4kHz ≤11,0dB/km @ 200kHz ≤22,0dB/km @ 4MHz ≤42,0dB/km @ 16MHz
Min. bending radius	10 [x outer diam]
Min. bending radius flexible	20 [x outer diam]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1, 2 NES 713
Material properties, insulation and sheath	IEC 60092-360 NEK 606
Flame retardant	IEC 60332-1-2 3024
Fire retardant	IEC 60332-3-22 Cat.A
Smoke emission	IEC 61034-2
UV-resistant	UL 1581 (300H) ASTM D 4587
Certification	DNV-GL
Part No.	1087370- (Steel wire armour), 1091063- (Cu wire armour), 3010007 (tinned Cu)



Alternative armour available, tinned copper braid or bronze braid.
Also available with MUD resistant jacket, Part.no. 1091035



Attenuation nominal, max 105%

Frequency MHz	Attenuation dB/100m
16	<4.5
4	2.2
0.0384	<0.5
0.0096	0.3

Updated

Date	Rev.	Description
05.04.2019	1	DNV-GL Approved
13.06.2019	2	Added info.