



RS 485 Industrial BUS ARM SHF2

AWG 22/7, Flexible

Armoured

SHF2, UV

120 Ω

DNV

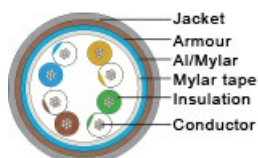
Application

Armoured marine cable for monitoring oil wells and linking POS terminals, to alarm systems, motion control and HVAC controls. Extended capability transceivers offer data rates up to 100Mbps and up to 256 nodes, as well as 2500 VRMS isolation and fault protection up to ± 60V. Installations up to 1200m.



Construction

Conductor	Stranded tinned Cu 7 x 0.254 [mm] AWG 22/7
Insulation	Foam PE Ø = 1.50 ± 0.05 [mm]
No. of pairs	2, 4, 6 & 8
Colour code	pair 1: white/blue - blue pair 2: white/orange - orange pair 3: white/green - green Pair 4: white/brown - brown
Tape	Mylar tape
Screen	Al/Mylar
Screen 2	Tinned Cu braid ≥ 60 [% optical coverage]
Inner jacket	SHF1 2- pairs: Ø = 8.6 ± 0.6 [mm] 4- pairs: Ø = 9.3 ± 0.6 [mm] 6- pairs: Ø = 10.7 ± 0.5 8- pairs: Ø = 11.5 ± 0.5
Armour	Galvanised steel wire braid ≥ 60 [% optical cover]
Outer Jacket	Grey SHF2
O.D.	2- pairs: Ø = 11.6 ± 0.6 [mm] 4- pairs: Ø = 12.5 ± 0.6 [mm] 6- pairs: Ø = 14.5 ± 0.5 [mm] 8- pairs: Ø = 15.5 ± 0.5 [mm]
Weight	2- pairs: 196 [kg/km] 4- pairs: 211 [kg/km] 6- pairs: 277 [kg/km] 8- pairs: 314 [kg/km]
Jacket marking	NEK Kabel – RS485 Industrial BUS – nx2xAWG22/7 – GSWB – SHF2 – DNV – IEC 60332-3-22 – <batch no> – dd/mm/yyyy – ****m





Specifications

Operating temperature normal	-40 – +80 [°C]
Temperature @ installation	-20 – +60 [°C]
Dielectric strength	DC 2kV for 1 min.
Characteristic impedance	120 ± 15 [Ω @ 1 MHz]
Conductor DC resistance	≤ 55 [Ω/km]
Attenuation	≤ 20.0 [dB/km @ 1MHz]
Mutual capacitance	Nom. 42 [pF/m at 800 Hz]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Material properties, insulation and sheath	IEC 60092-360
Flame resistance	IEC 60332-3-22
Flame retardant	IEC 60332-1-2
Smoke emission	IEC 61034-2
Oil and fuel resistant	IRM 902 100°C x 24h
UV-resistant	UL 1581 (300H)
Certification	DNV



Prod.no.	2x2xAWG22/7: 2040053 4x2xAWG22/7: 2040054 6x2xAWG22/7: 2040063 6x2xAWG22/7: 2040064
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Updated

Date	Rev.	Description
26.08.2025	1	Added 2x2xAWG22/7
17.04.2026	2	Added 6 and 8 pairs