

PROFINET Cat.5e Type B 2x2x22/7 AWG  
LSZH-SHF1



## Application

Offshore installations, Maritime Environment, Indoor & Outdoor Use, Fixed or Portable Installation. Industrial Ethernet, PROFINET Applications. DNVGL Type Approval Certificate TAE000041G

## Cable Design

### Wire

Conductor	Stranded tinned copper wire 7/0,25mm (22awg) Ø 0,75 mm
Insulation	Polypropylene (PP) Ø 1,50 mm

### Core

Central Element	Filler
1° Layer	4 wires twisted (WH-YE-BU-OG)
Tape	Plastic tape overlapped
Easystrip Jacket	Soft Thermoplastic copolymer Ø 3,90 mm
Screen	Alulaminare foil overlapped
Braid	Tinned copper wire braid, 85% coverage Ø 4,70 mm

### Outer Jacket

	LSZH (Low Smoke Zero Halogen) SHF-1 Ø 6,5 ± 0,40 mm
Wall thickness	0,9 mm

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## Electrical Data @ 20°C

Loop resistance	≤	120	Ohm/km
Signal run time	≤	5,3	ns/m
Insulation resistance	≥	500	MOhm*km
Characteristic Impedance	1-100 MHz	100±15	Ohm
Surface Transfer Impedance	10 MHz	≤ 10	mOhm/m
Test Voltage (wire/wire/screen rms 50Hz min.)	=	700	V
Operating Voltage	≤	100	V AC

Frequency (MHz)	1	4	10	16	20	31,25	62,5	100
Attenuation typ. Value (dB/100m)	1,8	3,6	6,0	7,6	8,7	11	16	21
NEXT typ. Value (dB/100m)	80	76	70	65	63	60	55	50

The electrical requirements acc. to EN 50288-2-1.

## Mechanical & Thermal Characteristics

Temperature range	Permissible	-40 ~ +75	°C
Temperature range	During laying	0 ~ +50	°C
Temperature range	Transport	-40 ~ +75	°C
Min. Bending radius allowed	repeated	7,5	x Ø
Min. Bending radius allowed	single	3	x Ø
Tensile loading	≤	150	N
Weight (approx.)		65	kg/km

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## Standards

Applicable Standards	DNV certified, IEC 60092-360, IEC 60092-359, IEC 60092-350, RoHS 3 2015/863/EU
Flammability Rating	IEC 60332-3-22 Cat. A/F , IEC 60754, IEC 61034

## Specification

Part Number	Type
AMN222-UAZF1	Armada <sup>®</sup> PROFINET Cat.5e Industrial Ethernet 2x2x22/7 AWG LSZH SHF-1 DNVGL Type Approval Certificate TAE000041G - Green