LanMarin® Cat 7 MUD

S/FTP
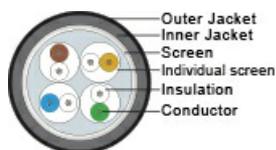## AWG 23/7 Flexible
SHF2, MUD
DNV

Application

LAN cable designed and tested for ship- and offshore applications. In-door/out-door installation. Resistant to chemicals, MUD, UV radiation and harsh weather conditions. Flame retardant. An extra inner sheath provides additional fire protection. Tested for class F-link high frequencies transmission. Ethernet IEEE 802.3at-2009 Type 4 (PoE++).
This cable can be used in rough environments.

Construction

Conductor	0.28 [mm²] Stranded Plain Cu AWG 23/7
Insulation	Foam PE Ø = 1.55 [mm]
No. of pairs	4
Colour code	Pair 1: Blue - White/Blue
	Pair 2: Orange - White/Orange
	Pair 3: Green - White/Green
	Pair 4: Brown - White/Brown
Individual Screen pairs	Al/Mylar tape
Screen	Tinned Cu-braid
Inner jacket	SHF1 Ø = 8.50 ± 0.50 [mm] Grey (similar to RAL7035)
Jacket	Black SHF2 MUD (similar to RAL9004)
O.D.	9.5 ± 0.2 [mm]
Weight	120 [kg/km]
Jacket marking	NEK Kabel – LanMarin® Cat 7 S/FTP - 4x2xAWG23 – SHF2 MUD – IEC61156-5 – IEC 60332-3-22 – DNV – <batch no> – dd/mm/yyyy – ****m

Outer Jacket
Inner Jacket
Screen
Individual screen
Insulation
Conductor

Specifications

Operating temperature normal	-40 to +80 [°C]
Characteristic impedance	100 ± 5 [Ω]
Conductor DC resistance	≤ 73.2 [Ω/km]
Insulation resistance	≥ 5000 [MΩ x km]
Power over Ethernet	IEEE 802.3at-2009 Type 4 (PoE++)
Rated voltage	≥ 80 [V]
Test voltage	1 [kV-1min.]
Capacitance	55 [pF/m]
Capacitance unbalance	1600 [pF/km]
Min. bending radius installed	100 [mm]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Design and testing standards	DNV TAP 6-800 App.A;827.50-2 IEC 61156-6 IEC 60092-360
Flame resistance	IEC 60332-3-22 Cat.A
Flame retardant	IEC 60332-1-2
Smoke emission	IEC 61034-1 & IEC 61034-2
MUD resistant	NEK TS 606 IEC 60092-360 Annex C & D
UV-resistant	UL 1581 (300h)
Certification	DNV

Prod.no.	1089699

RoHS√ CE

Frequency (MHz)	Attenuation Max.(acc.EN) (dB/100m)	NEXT (dB/100m)
1	3.02	78
4	5.61	78
10	8.78	78
16	11.12	78
20	12.44	78
31.25	15.62	78
62.5	22.32	75.46
100	28.53	72.40
155	35.96	69.55
200	41.20	67.88
300	51.28	65.24
600	75.15	60.73

Updated

Date	Rev.	Description
24.04.2018	1	Name change from SSTP to S/FTP
16.03.2021	2	Norms and attenuation
03.10.2023	3	Power over Ethernet
13.01.2025	4	additional info