

LanMarin® Cat 6A SHF2 Solid

S/FTP - AWG23/1

SHF2

DNV

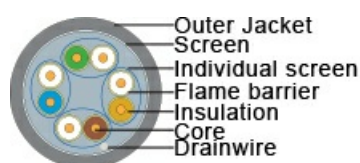
Application

Individual and collective screened LAN-cable, designed for ship- and offshore applications. The cable is used for datatransmission with characteristic impedance for 100 Ω. Ethernet IEEE 802.3at-2009 Type 2 (PoE+). This cable can be used in rough environments.



Construction

Conductor	Solid Bare Cu 0.56 [mm]
Insulation	Foam PE Ø = 1.34 ± 0.05 [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
Drain wire	0.4mm solid Annealed Tinned Copper
Screen	Tinned Cu-braid ≥ 60 [% coverage]
Jacket	Grey SHF2
O.D.	8.00 ± 0.40 [mm]
Weight	66 [kg/km]
Jacket marking	NEK KABEL AS – LanMarin CAT6A 4x2xAWG23/1 – SHF2 – IEC 60332-3-22 – ****m – YY/MM/DD



Specifications

Operating temperature max	-40 – +80 [°C]
Temperature @ installation	-20 – +60 [°C]
Dielectric strength	DC1kV for 1min.
Conductor DC resistance	≤ 73.2 [Ω/km]
Resistance unbalance	≤ 5 [%]
Insulation resistance	≥ 5000 [Ω x km]
Power over Ethernet	IEEE 802.3at-2009 Type 2 (PoE+)
Rated voltage	≥ 80 [V]
Capacitance unbalance	≤ 160 [pF/100m at 1kHz] (pair to ground)



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 ≤ 60 %
Oil and fuel resistant	IRM 902 100°C x 24h
UV-resistant	UL 1581 (300H)
Certification	DNV



Part No.	2020013
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Attenuation

Frequency (MHz)	Attenuation Max. (dB/100m)	Return Loss (dB/100m)	NEXT (dB/100m)	PS-NEXT (dB/100m)
4	3.80	23.0	66.3	63.3
8	5.31	24.5	61.8	58.8
10	5.93	25.0	60.3	57.3
16	7.49	25.0	57.2	54.2
20	8.38	25.0	55.8	52.8
25	9.38	24.3	54.3	51.3
31.25	10.50	23.6	52.9	49.9
62.5	14.99	21.5	48.4	45.4
100	19.14	20.1	45.3	42.3
200	27.58	18.0	40.8	37.8
250	31.07	17.3	39.3	36.3
300	34.27	17.3	38.1	35.1
400	40.05	17.3	36.3	33.3
500	45.26	17.3	34.8	31.8

Updated

Date	Rev.	Description
20.09.2023	1	Drain wire
17.10.2023	2	Rated voltage
27.11.2023	3	Part no.