

LanMarin® Fire Cat 6A Solid

AWG 23/1

S/FTP

SHF1

DNV

Application

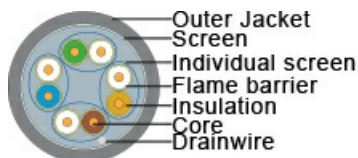
High performance offshore LAN cable with solid conductors, AWG 23/1. Compliant with the Category 6A standards, requiring bandwidths up to 500 MHz. Foil screened pairs with an overall tinned copper braid. Tested for high-frequency and transmission measurements for Class EA-Link. Ethernet IEEE 802.3at-2009 Type 2 (PoE+).

This cable can be used in rough environments.



Construction

Conductor	Solid Bare Cu 0.58 [mm] AWG 23/1
Drainwire	Tinned Cu solid, 0.4 [mm]
Dielectricum	PE
Fire barrier each conductor	Mica tape
No. of pairs	4
Colour code	pair 1: white/blue - blue pair 2: white/orange - orange pair 3: white/green - green pair 4: white/brown - brown
Individual Screen pairs	Al/Mylar tape > 100 % [coverage]
Drain wire	0.4mm solid Annealed Tinned Copper
Overall Screen	Tinned Cu-braid density ≤ 55%
Jacket	Grey SHF1 , optional SHF2 or SHF2 MUD
O.D.	8.9 ± 0.5 [mm]
Weight	100 [kg/km]
Jacket marking	NEK Kabel – LanMarin Cat6A FIRE S/FTP 4x2xAWG23/1 SHF1 – IEC 60332-3-22A – IEC 60331-23 – batch no. **** – YY/MM/DD – ****m





Specifications

Operating temperature normal	-40 – +90 [°C]
Temperature @ installation	-15 – +50 [°C]
Power over Ethernet	IEEE 802.3at-2009 Type 2 (PoE+)
Rated voltage	≥ 80 [V]
Tensile strength installed	110 [N]
Capacitance	55 [pF/m @ 800-1000Hz]
Impedance	100 ± 5 [Ω @ 1MHz]
Min. bending radius	10 [x outer diam]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Flame resistance	IEC 60332-3-22
Flame retardant	IEC 60332-1-2
Fire resistant	IEC 60331-23 (180min) EN 50289-4-16 (180min)
Smoke emission	IEC 61034-1 & IEC 61034-2
Oil and fuel resistant	IEC 60811-404 IRM 902 and IRM 903
Certification	DNV



Part No.	1089668
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Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ELFEXT (dB)	PS-ELFEXT (dB)	RL (dB)
4	3,8	66,3	63,3	56,0	53,0	23,0
8	5,3	61,8	58,8	49,9	46,9	24,5
10	5,9	60,3	57,3	48,0	45,0	25,0
16	7,5	57,2	54,2	43,9	40,9	25,0
20	8,4	55,8	52,8	42,0	39,0	25,0
25	9,4	54,3	51,3	40,0	37,0	24,3
31,25	10,5	52,9	49,9	31,8	35,1	23,6
62,5	15,0	48,4	45,4	32,1	29,1	21,5
100	19,1	45,3	42,3	28,0	25,0	20,1
150	23,7	42,7	39,7	24,5	21,5	18,9
200	27,6	40,8	37,8	22,0	19,0	18,0
250	31,1	39,3	36,3	20,0	17,0	17,3
300	34,3	38,1	35,1	18,5	15,5	17,3
400	40,1	36,3	33,3	16,0	13,0	17,3
500	45,3	34,8	31,8	14,0	11,0	17,3

Updated

Date	Rev.	Description
19.10.2023	1	Rated voltage