

LanMarin® Fire Cat 6A Arm SHF2

AWG 23/1
S/FTP
Armoured
SHF2
DNV

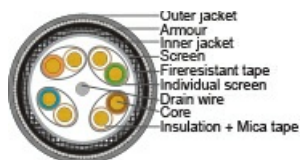
Application

Armoured, 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
Insulation	PE , each insulation cord is wrapped with fire resistant 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-/polyester tape > 100 % [coverage]
Screen	Tinned Cu-braid ≥ 55 [% coverage]
Inner jacket	SHF1
Armour	Galvanised steel wire braid ≥ 90 [% optical cover]
Jacket	SHF2
O.D.	14.0 ± 1.0 [mm]
Weight	100 [kg/km]
Jacket marking	NEK Kabel AS - LanMarin® Fire Cat 6A 4x2x23/1 AWG Armoured - Fire Resistant 60331-23 (180min) - SHF2 - DNV - <batch no.> - <****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	110 [N]
Min. bending radius installed	10 [x outer diam]
Min. bending radius @ installation	20 [x outer diam]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Flame resistance	IEC 60332-3-22 , 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 & IRM 903
UV-resistant	ASTM G 154
Certification	DNV



Prod.no	SHF2: 2020010
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Attenuation

Frequency (MHz)	Attenuation Max. (dB/100m)	Return Loss (dB/100m)	NEXT (dB/100m)	PS-NEXT (dB/100m)	ELFEXT (dB(100m)	PS-ELFEXT (dB/100m)
4	3,8	23,0	66,3	63,3	56,0	53,0
8	5,3	24,5	61,8	58,8	49,9	46,9
10	5,9	25,0	60,3	57,3	48,0	45,0
16	7,5	25,0	57,2	54,2	43,9	40,9
20	8,4	25,0	55,8	52,8	42,0	39,0
25	9,4	24,3	54,3	51,3	40,0	37,0
31,25	10,5	23,6	52,9	49,9	38,1	35,1
62,5	15,0	21,5	48,4	45,4	32,1	29,1
100	19,1	20,1	45,3	42,3	28,0	25,0
150	23,7	18,9	42,7	39,7	24,5	21,5
200	27,6	18,0	40,8	37,8	22,0	19,0
250	31,1	17,3	39,3	36,3	20,0	17,0
300	34,3	17,3	38,1	35,1	18,5	15,5
400	40,1	17,3	36,3	33,3	16,0	13,0
500	45,3	17,3	34,8	31,8	14,0	11,0

Updated

Date	Rev.	Description
17.10.2023	1	Rated voltage