



LanMarin® Cat 6A Flex

S/FTP
SHF1, UV
AWG 23/7
DNV/GL

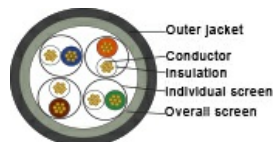
Application

Approved LAN cable, designed for ship- and offshore applications. Tested according to IEC 61156 - 5 for transmission characteristics up to 600 MHz - Horizontal floor wiring - Sectional specification.



Construction

Conductor	0,26 [mm ²] Stranded Tinned Cu 0.22 x 7 [mm] AWG 23/7
Insulation	Cellular PE 1,55 ± 0,05 [mm]
No. of pairs	4
Colour code	IEC 60189-2
Individual Screen pairs	Al/Mylar tape
Screen	Tinned Cu-braid 60 [% optical coverage]
Jacket	Grey SHF1
O.D.	9.0 ± 0.5 [mm]
Weight	80 [kg/km]
Jacket marking	NEK Kabel - CAT6A MARIN Cable 4x2x23AWG SHF1 60332-3-22 ***m YY/MM/DD



Specifications

Operating temperature	-40 – +80 [°C]
Temperature @ installation	-20 – +80 [°C]
Characteristic impedance	100 [Ω]
Conductor resistance	≤ 67 [Ω/km]
Dielectric strength	DC1kV for 1min.
Resistance unbalance	≤ 5 [%]
Insulation resistance	≥ 5000 [MΩ x km] (IEC 61156-5)
Capacitance	≤ 160 [pF/100m]
Transmission performance	IEC 61156-5
Min. bending radius	4 [x outer diam]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1, 2
Design and testing standards	IEC 61156-5 EN 50288-1
Sheathing material	IEC 60092-360 NEK 606
Flame retardant	IEC 60332-1-2
Fire retardant	IEC 60332-3-22 Cat.A
Oil and fuel, hydrocarbons resistant	IEC 60811-2-1 IRM 902 23°C / 7 days, 70°C / 4h
Smoke emission	IEC 61034-2 (≥ 60%)
Transmission performance	IEC 61156-5
UV-resistant	UL 1581 (300H)
Certification	DNV-GL



Part No.	1089651
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Alternatives:

Black jacket: Part No. 10256632 without DNV-GL approval.

Grey Jacket, bare Cu conductors: Part No. 1089687 DNV-GL approved.

LanMarin Cat 6A with solid conductors available on request, or replaced by LanMarin Cat 7 Solid, Part nr. 2030001.

Attenuation

Freq. [MHz]	Att. std. [dB]	Att. typ. [dB]	RL std. [dB]	RL typ. [dB]	NEXT std. [dB]	NEXT typ. [dB]	PSNEXT std. [dB]	PSNEXT typ. [dB]	ELFEXT std. [dB]	ELFEXT typ. [dB]	PSELFEXT std. [dB]
4	3,8	3,78	23,0	25,0	66,3	98,0	63,3	95,0	56,0	76,0	53,0
8	5,31	5,22	24,5	30,0	61,8	98,0	58,8	95,0	49,9	76,0	46,9
10	5,93	5,84	25,0	30,0	60,3	98,0	57,3	95,0	48,0	68,0	45,0
16	7,49	7,47	25,0	30,0	57,2	98,0	54,2	95,0	43,9	64,0	40,9
20	8,38	8,32	25,0	28,0	55,8	93,0	52,8	90,0	42,0	62,0	39,0
25	9,38	9,30	24,3	27,0	54,3	90,0	51,3	87,0	40,0	60,0	37,0
31,25	10,5	10,40	23,6	25,0	52,9	88,0	49,9	85,0	38,1	58,4	35,1
62,5	14,99	14,91	21,5	24,0	48,4	85,0	45,4	82,0	32,1	55,0	29,1
100	19,14	19,10	20,1	24,0	45,3	83,0	42,3	80,0	28,0	48,0	25,0
200	27,58	27,50	18,0	21,0	40,8	81,0	37,8	78,0	22,0	52,0	19,0
250	31,07	30,83	17,3	20,0	39,3	78,0	36,3	75,0	20,0	40,0	17,0
300	34,27	34,09	17,3	19,0	38,1	78,0	35,1	75,0	18,5	38,5	15,5
400	40,05	39,86	17,3	19,0	36,3	73,0	33,3	70,0	16,0	36,0	13,0
500	45,26	44,72	17,3	19,0	34,8	73,0	31,8	70,0	14,0	34,0	11,0

Updated

Date	Rev.	Description
April 2019	1	DNV-GL Approved