

LanMarin® Cat 6A Flex SHF2

S/FTP - AWG23/7

SHF2

DNV

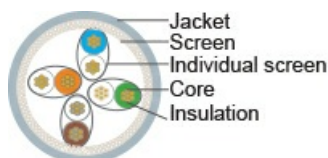
Application

Approved LAN cable, designed for ship- and offshore applications. Tested according to IEC 61156 - 5 for transmission characteristics up to 500 MHz - Horizontal floor wiring - Sectional specification. POE application. Ethernet IEEE 802.3at-2009 Type 2 (PoE+). This cable can be used in rough environments.



Construction

Conductor	Stranded tinned Cu 7 x 0.23 [mm]
Insulation	Foam PE 1.55 ± 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
Overall Screen	Tinned Cu-braid ≥ 60 [% coverage]
Jacket	Grey SHF2
O.D.	8.50 ± 0.40 [mm]



Specifications

Operating temperature normal	-40 – +80 [°C]
Temperature @ installation	-20 – +60 [°C]
Dielectric strength	DC1kV for 1min. (conductor to conductor, conductor to screen)
Conductor DC resistance	≤ 73.2 [Ω/km]
Resistance DC unbalance	≤ 5 [%]
Insulation resistance	≥ 5000 [Ω x km] (IEC 61156-5)
Power over Ethernet	IEEE 802.3at-2009 Type 2 (PoE+)
Rated voltage	≥ 80 [V]
Capacitance unbalance	≤ 160 [pF/100m at 1kHz] pair to ground (IEC 61156-5)
Transmission speed	IEC 61156-5

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Material properties, insulation and sheath	IEC 60092-360 SHF2
Flame resistance	IEC 60332-3-22
Flame retardant	IEC 60332-1-2
Smoke emission	IEC 61034-2 , $\geq 60\%$
Oil and fuel resistant	IRM 902 100°C x 24h
UV-resistant	UL 1581

Part No.	2020009
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Attenuation

Freq. [MHz]	Att. std [dB]	Att.typ [dB]	RL std [dB]	RLtyp [dB]	NEXTst [dB]	NEXTtyp [dB]	PSNEXTstd [dB]	PSNEXT typ [dB]	ELFEXT std [dB]	ELFEXT typ [dB]
4	3.80	3.50	23.0	25.0	66.3	98.0	63.3	95.0	56.0	76.0
8	5.31	4.83	24.5	30.0	61.8	98.0	58.8	95.0	49.9	76.0
10	5.93	5.40	25.0	30.0	60.3	98.0	57.3	95.0	48.0	68.0
16	7.49	6.92	25.0	30.0	57.2	98.0	54.2	95.0	49.3	64.0
20	8.38	7.80	25.0	28.0	55.8	93.0	52.8	90.0	42.0	62.0
25	9.38	8.80	24.3	27.0	54.3	90.0	51.3	87.0	40.0	60.0
31.25	10.50	9.90	23.6	25.0	52.9	88.0	49.9	85.0	38.1	58.4
62.5	14.99	14.11	21.5	24.0	48.4	85.0	45.4	82.0	32.1	55.0
100	19.14	17.90	20.1	24.0	45.3	83.0	42.3	80.0	28.0	48.0
200	27.58	25.67	18.0	21.0	40.8	81.0	37.8	78.0	22.0	52.0
250	31.07	28.83	17.3	20.0	39.3	78.0	36.3	75.0	20.0	40.0
300	34.27	31.69	17.3	19.0	38.1	78.0	35.1	75.0	18.5	38.5
400	40.05	36.96	17.3	19.0	36.3	73.0	33.3	70.0	16.0	36.0
500	45.26	41.72	17.3	19.0	34.8	73.0	31.8	70.0	14.0	34.0

Updated

Date	Rev.	Description
16.10.2023	1	Rated voltage