



# LanMarin® CAT 6 Solid

F/UTP, Solid conductors  
SHF1 UV resistant  
AWG 23/1  
DNV-GL



sales@fscables.com

## Application

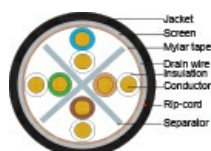
Collective screened LAN-cable for ship- and offshore for data transmission. Tested according to IEC 61156 - 5 for transmission characteristics up to 250 MHz - Horizontal floor wiring - Sectional specification.



## Construction

Conductor	Solid Bare Cu 0,573 [mm] AWG 23/1
Dielectricum	HDPE Ø=1,12 [mm]
Colour code	IEC
Tape	Mylar tape
Separator	PE-cross separator
Drainwire	Tinned Cu-wire
Screen	AL/Mylar ≥100% coverage
Rip cord	Yes
Jacket	Grey SHF1
O.D.	7,8 ± 0,4 [mm]
Weight	60 [kg/km]

Jacket marking  
NEK Kabel - LanMarin Cat 6 F/UTP 4 x 2 x AWG23/1 - SHF1 - IEC 60332-3-22 \*\*\*\*m - DD/MM/YY



## Specifications

Operating temperature	-40 - +80
Temperature @ installation	-10 - +60 [°C]
Characteristic impedance	100 ± 15 Ω at 1 - 250MHz
Conductor resistance	≤67 [Ω/km]
Dielectric strength	DC1kV for 1min.
Resistance unbalance	≤5 [%]
Insulation resistance	≥5000 [Ω x km]
Capacitance unbalance	160 [pF/100m]
Delay skew	≤ 45ns/100m at 1 - 250MHz
Transmission performance	IEC 61156-5

## Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1, 2
Sheathing material	IEC 60092-360 (359) NEK 606
Flame retardant	IEC 60332-1-2
Fire retardant	IEC 60332-3-22 Cat.A
Weather resistant	EN 11507 ASTM G 154
Oil and fuel, hydrocarbons resistant	IEC 60811 IRM 902 23°C / 7 days, 70°C / 4h
Smoke emission	IEC 61034-2 ( ≥60% )
UV-resistant	UL 1581 (300H)
CPR classification	Dca-s2,d1,a1
Euroclass	Dca
Certification	DNV-GL
Part No.	1089623

## 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	3,83	3,70	23,0	25,0	66,3	85,0	63,3	82,0	56,0	93,0	53,0
8	5,37	5,10	24,5	26,0	61,8	80,0	58,8	77,0	49,9	87,0	46,9
10	6,00	5,70	25,0	28,0	60,3	78,0	57,3	75,0	48,0	83,0	45,0
16	7,61	7,40	25,0	28,0	57,2	75,0	54,2	72,0	43,9	83,0	40,9
20	8,53	8,10	25,0	28,0	55,8	72,0	52,8	69,0	42,0	83,0	39,0
25	9,57	9,30	24,3	27,2	54,3	70,0	51,3	67,0	40,0	78,0	37,0
31,25	10,75	10,00	23,6	27,0	52,9	69,0	49,9	66,0	38,1	73,0	35,1
62,5	15,48	14,93	21,5	25,0	48,4	65,0	45,4	62,0	32,1	70,0	29,1
100	19,92	19,00	20,1	24,0	45,3	63,0	42,3	60,0	28,0	66,0	25,0
150	25,30	23,60	18,8	22,0	42,4	60,0	39,4	57,0	24,2	63,0	21,2
200	29,14	27,70	18,0	21,0	40,8	58,0	37,8	55,0	22,0	61,0	19,0
250	33,02	31,40	17,3	20,0	39,3	55,0	36,3	52,0	20,0	58,0	17,0

## Updated

Date	Rev.	Description
April 2019	1	DNV-GL Approval