



# LanMarin® Cat6 S/FTP SHF1 Solid

4 x 2 x AWG23/1

S/FTP - Solid

UV-resistant

DNV

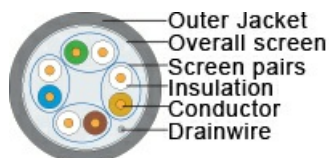
## Application

Individual and collective screened LAN-cable, designed for ship- and offshore applications. The cable is used for datatransmission with characteristic impedance for 100 Ω. Ethernet IEEE 802.3at-2009 Type 2 (PoE+). This cable can be used in rough environments.



## Construction

Conductor	Solid plain Cu 0.56 [mm] AWG 23/1
Drainwire	Tinned Cu Ø = 0.40mm
Insulation	Foam PE Ø = 1.34 ± 0.05 [mm]
No. of pairs	4
Individual Screen pairs	Al/Mylar tape
Overall Screen	Tinned Cu-braid ≥ 60 [% coverage]
Jacket	Grey SHF1
O.D.	8.0 ± 0.3 [mm]
Jacket marking	NEK Kabel – LanMarin CAT6 4 x 2 x AWG23/1 – SHF1 – IEC 60332-3-22 – DNV – **** m – YY/MM/DD



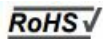
## Specifications

Operating temperature normal	-40 – +80 [°C]
Temperature @ installation	-20 – +60 [°C]
Dielectric strength	DC1kV for 1min.
Conductor DC resistance	≤ 93.8 [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]
Velocity factor	70 [%]
Capacitance core-earth	160 [pF100/m] (IEC 61156-5)
Mutual capacitance	48 [nF/km]



## Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Material properties, insulation and sheath	IEC 60092-360
Transmission performance	IEC 61156-5
Flame resistance	IEC 60332-3-22
Flame retardant	IEC 60332-1-2
Toxic gases max.	IEC 61034-2 (≥ 60%)
Oil and fuel resistant	IRM 902 4h @ 70°C
UV-resistant	UL 1581 (300H)



Part No. 1089702

## 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	3.83	23.0	66.3	63.3	56.0	53.0
8	5.37	24.5	61.8	58.8	49.9	46.9
10	6.00	25.0	60.3	57.3	48.0	45.0
16	7.61	25.0	57.2	54.2	43.9	40.9
20	8.53	25.0	55.8	52.8	42.0	39.0
25	9.57	24.3	54.3	51.3	40.0	37.0
31.25	10.75	23.6	52.9	49.9	38.1	35.1
62.5	15.48	21.5	48.4	45.4	32.1	29.1
100	19.92	20.1	45.3	42.3	28.0	25.0
150	25.30	18.8	42.4	39.4	24.2	21.2
200	29.14	18.0	40.8	37.8	22.0	19.0
250	33.02	17.3	39.3	36.3	20.0	17.0

## Updated

Date	Rev.	Description
15.03.2023	1	Added drainwire