



LanMarin® CAT 6 Robust

F/UTP, Solid conductors

SHF1, UV resistant

4 pair AWG 23/1

DNV-GL

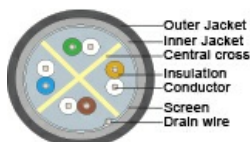
Application

Double jacketed halogenfree screened LAN cable, designed for ship- and offshore applications, and other harsh environments. Collective screened, indoor/outdoor use, inner- and outer jacket SHF1. Strong mechanical and fire retardant properties.



Construction

Conductor	Solid Bare Cu 0.565 [mm] AWG 23/1
Insulation	HDPE Ø=1,12 [mm]
No. of pairs	4 pairs, assembled around a PE central cross
Colour code	IEC 60189-2
Drainwire	Tinned Cu 0,5mm
Sheath	Collective Al - polyester tape
Inner jacket	SHF1 Ø=7,2 [mm]
Outer Jacket	Grey SHF1 UV-resistant
O.D.	8,6 [mm]
Weight	95 [kg/km]
Jacket marking	NEK Kabel - LanMarin Cat 6-F/UTP 4x2xAWG23 - SHF1 - ****m - DD/MM/YY



Specifications

Operating temperature	-40 – +90 [°C]
Temperature @ installation	-10 - +60 [°C]
Characteristic impedance	@100MHz: 100 ± 5 Ω
Conductor resistance	≤70 [Ω/km]
Insulation resistance	500 [MΩ x km]
Test voltage	2500 [V-DC x 2]
Delay skew	≤45ns/100m @ 1,0-250MHz
Capacitance core-earth	≤160 [pF100/m]



Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1, 2
Design and testing standards	DNV TAP 6-800 aPP.a;827.50-2 IEC 61156-5
Sheathing material	IEC 60092-360 (359) NEK 606
Flame retardant	IEC 60332-1-2
Toxic gases max.	EN 50305 9.2
Fire retardant	IEC 60332-3-22
Smoke emission	IEC 61034-1, -2
UV-resistant	ASTM D 2565 92A
Certification	DNV-GL
Part No.	1089601



Frequency (MHz)	Attenuation Max. (dB/100m)	NEXT (dB)	Return loss (dB/100m)
1	2,1	66	-
4	3,8	65,3	23,1
10	6,0	59,3	25
16	7,6	56,2	25
20	8,5	54,8	25
31.25	10,8	51,9	23,6
62.5	15,5	47,4	21,5
100	19,9	44,3	20,1
155	25,3	41,4	18,8
200	29,1	39,8	18
250	33,0	38,3	17,3

Updated

Date	Rev.	Description
Sept. 2016	1	Improved electrical data
April 2019	2	Norms supplement