

LanMarin® Cat 5E

S/FTP Flexible

Tinned conductors

SHF1

DNV

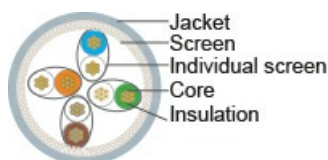
Application

LAN cable, designed for ship- and offshore applications. Tinned Cu-connectors and braid, SHF1 jacket.



Construction

Conductor	0.22 [mm ²] Stranded tinned Cu AWG 24 (7x0.20mm)
Insulation	Foamskin PE Ø=1,4 [mm]
No. of pairs	4
Colour code	IEC 60189-2
Individual Screen pairs	Al-/polyester tape
Screen	Tinned Cu-braid ≥80 [% coverage]
Jacket	Grey SHF1
O.D.	8,4 [mm]
Weight	68 [kg/km]
Jacket marking	NEK Kabel - LanMarin Cat 5e S/FTP 4 x 2 x AWG24/7 - SHF1 - IEC 60332



Specifications

Operating temperature normal	-40 – +80 [°C]
Temperature @ installation	-20 – +60 [°C]
Test Voltage	1 [kV-DC] (for 1 min.)
Characteristic impedance	100 ± 5 Ω
Conductor resistance	≤84 [Ω/km]
Resistance unbalance	≤5 [%]
Insulation resistance	≥ 5000 [MΩ x km]
Capacitance unbalance	≤1600 [pF/km] @800 or 1000Hz
Min. bending radius	10 [x outer diam]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 and IEC 60754-2
Material properties, insulation and sheath	IEC 60092-360 (359) 3582
Transmission performance	IEC 61156-6
Flame resistance	IEC 60332-3-22 Cat.A
Flame retardant	IEC 60332-1-2
Sheath	3453
Smoke emission	IEC 61034-2 (≥60%)
Oil and fuel resistant	IRM 902 23°C / 7 days, 70°C / 4h
UV-resistant	UL 1581 (300H)
Certification	DNV



Part No. 1089606 Alt. 1 Arctic grade, 1089614 Alt. 2 MUD, 1089607

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	6,01	4,10	23,0	25,0	56,3	99,0	53,3	96,0	52,0	91,0
8	8,48	5,65	24,5	26,5	51,8	98,0	48,8	95,0	45,9	89,0
10	9,49	6,32	25,0	28,0	50,3	96,0	47,3	93,0	44,0	86,0
16	12,07	8,05	25,0	28	47,2	93,0	44,2	90,0	39,9	83,0
20	13,54	9,11	25,0	28,0	45,8	93,0	42,8	90,0	38,0	81,0
25	15,22	10,28	24,2	27,5	44,3	93,0	41,3	90,0	36,0	79,0
31,25	17,11	11,58	23,3	27,0	42,9	88,0	39,9	85,0	34,1	74,0
62,5	24,76	16,60	20,7	24,0	38,4	83,0	35,4	80,0	28,1	69,0
100	31,99	21,18	19,0	22,0	35,3	83,0	32,3	80,0	24,0	63,0

Updated

Date	Rev.	Description
Sept. 2016	1	Improved electrical data
24.05.2019	2	Renewal