



LanMarin® Cat 5E SHF1

S/FTP

Stranded or solid conductors

SHF1

DNV / RMRS

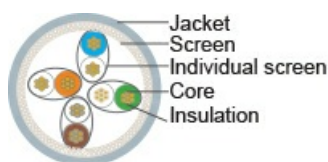
Application

Lancable for use in harsh environment, specially for ship and offshore.



Construction

Conductor	Solid or stranded Bare Cu AWG 24
Insulation	Foamskin PE
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
Screen	Tinned Cu-braid ≥60 [% optical coverage]
Jacket	Grey SHF1 UV-resistant
O.D.	7,3 / 8,5 ± 0,40 [mm]
Jacket marking	NEK KABEL - LANMARIN CAT5E 4X2X24AWG SHF1- DNV / RS - IEC 60332-3-22 - ****M - yy/mm/dd



Specifications

Operating temperature normal	-40 – +80 [°C]
Temperature @ installation	-20 – +60 [°C]
Test Voltage	1 [kV-DC]] (for 1 min.)
Characteristic impedance	100 ± 15 Ω at 1 - 100MHz
Conductor resistance	≤93,8 [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 & IEC 60754-2
Material properties, insulation and sheath	IEC 60092-360
Transmission performance	IEC 61156-6
Flame resistance	IEC 60332-3-22
Flame retardant	IEC 60332-1-2
Smoke emission	IEC 61034-2 (≥60%)
Oil and fuel resistant	IRM 902 4h @ 70°C
UV-resistant	UL 1581 (300H)
Certification	DNV / RS



Prod.no	Stranded: 2010003 Solid: 2010004
---------	-------------------------------------

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]	
1	-	-	-	-	65,3	101,0	62,3	98,0	64,0	93,0	6'
4	6,01	4,10	23,0	25,0	56,3	99,0	53,3	96,0	52,0	91,0	4'
8	8,48	5,65	24,5	26,5	51,8	98,0	48,8	95,0	45,9	89,0	4'
10	9,49	6,32	25,0	28,0	50,3	96,0	47,3	93,0	44,0	86,0	4'
16	12,07	8,05	25,0	28,0	47,2	93,0	44,2	90,0	39,9	83,0	3'
20	13,54	9,11	25,0	28,0	45,8	93,0	42,8	90,0	38,0	81,0	3'
25	15,22	10,28	24,2	27,5	44,3	93,0	41,3	90,0	36,0	79,0	3'
31,25	17,11	11,58	23,3	27,0	42,9	88,0	39,9	85,0	34,1	74,0	3'
62,5	24,76	16,60	20,7	24,0	38,4	83,0	35,4	80,0	28,1	69,0	2'
100	31,99	21,18	19,0	22,0	35,3	83,0	32,3	80,0	24,0	63,0	2'