

LanMarin® Cat 7 - Flex

S/FTP
AWG 23/7
SHF1, UV
DNV-GL, ABS

Application



Construction

Conductor	Flexible Bare Cu AWG 23/7 (7 x 0,23mm)
Insulation	Cellular PE Ø=1,55 ± 0,05 [mm]
No. of pairs	4
Colour code	IEC 60189-2
Individual Screen pairs	Al/PET
Overall Screen	Tinned Cu-braid ≥60% coverage
Jacket	Grey SHF1
O.D.	8,5 ± 0,30 [mm]
Weight	97 [kg/km]
Jacket marking NEK Kabel - LanMarin CAT7 S/FTP 4x2xAWG23/7 SHF1 - 60332-3-22 - DNV-GL - <batch no > - <DD/MM/YY> - <meter mark.>	

Specifications

Operating temperature	-40 – +80 [°C]
Temperature @ installation	-20 – +60 [°C]
Conductor resistance	≤ 73,2 [Ω/km]
Insulation resistance	≤ 5000 [MΩ x km] (IEC 61156-5)
Test voltage	1 [kV-DC 1 min.]
Capacitance unbalance	≤ 160 [pF/100m] @ 1 kHz (IEC 61156-5)
Min. bending radius flexible	20 [x outer diam]
Min. bending radius installed	15 [x outer diam]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1, 2
Material properties, insulation and sheath	IEC 60092-360
Design and testing standards	IEC 61156-5
Flame retardant	IEC 60332-1
Fire retardant	IEC 60332-3-22 Cat.A
Weather resistant	IEC 60228
Oil and fuel, hydrocarbons resistant	IRM 902 23°C / 7 days, 70°C / 4h
Smoke emission	IEC 61034-2 ≤ 60%
UV-resistant	UL 1581 (300H)
Certification	DNV-GL, ABS



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	3,74	3,59	23,0	25,0	78,0	101,0	75,0	98,0	78,0	9,30	75,0
8	5,24	5,03	24,5	27,5	78,0	99,0	75,0	96,0	77,2	91,0	74,2
10	5,86	5,63	25,0	28,0	78,0	98,0	75,0	95,0	75,3	89,0	72,3
16	7,41	7,11	25,0	28,0	78,0	96,0	75,0	93,0	71,2	86,0	68,2
20	8,29	7,96	25,0	28,0	78,0	93,0	75,0	90,0	69,3	83,0	66,3
25	9,29	8,92	24,3	28,0	78,0	93,0	75,0	90,0	67,3	81,0	64,3
31,25	10,41	10,00	23,6	27,0	78,0	93,0	75,0	90,0	65,4	79,0	62,4
62,5	14,88	14,28	21,5	25,5	75,5	88,0	72,5	85,0	59,4	74,0	56,4
100	19,2	18,26	20,1	24,0	72,4	83,0	69,4	80,0	55,3	69,0	52,3
200	27,47	26,37	18,0	21,0	67,9	83,0	64,9	80,0	51,5	63,0	48,5
250	31,97	30,69	17,3	20,0	66,4	80,0	63,4	77,0	49,3	61,0	46,3
300	34,19	32,82	17,3	19,0	65,2	80,0	62,2	77,0	45,8	55,0	52,8
500	45,26	43,45	17,3	19,0	61,9	75,0	58,9	72,0	41,3	50,0	38,3
600	50,10	48,10	17,3	19,0	60,7	75,0	57,7	72,0	39,7	48,0	36,7

Updated

Date	Rev.	Description
April 2019	1	DNV-GL Approval