

LanMarin® Cat 7 Flex

S/FTP

AWG 23/7, stranded

SHF1, UV

DNV

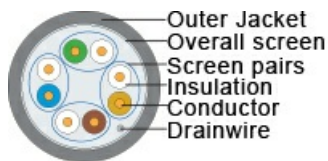
Bruksområde

Høy ytelse offshore LAN-kabel med flertrådet ledere, AWG 23/7. I samsvar med kategori 7-standardene, krever båndbredder opp til 600 MHz. Folieskjermede par med en samlet fortinnet kobberflette. Testet for høyfrekvent og transmisjonsmålinger for klasse F-link. Ethernet IEEE 802.3at-2009 Type 2 (PoE+). Kabelen er en type "Toughcat" og tåler røff behandling.



Konstruksjon

Leder	Mangetrådet Blank Cu AWG 23/7 (7x0,23mm)
Isolasjon	Skummet PE $\varnothing=1,55 \pm 0,05$ [mm]
Parantall	4
Fargekode	pair 1: blue - white/blue pair 2: orange - white/orange pair 3: green - white/green pair 4: brown - white/brown
Skjerm over par	Al/PET
Jordtråd	0.4mm solid Annealed Tinned Copper
Felles skjerm	Fortinnet Cu-fletting $\geq 60\%$ coverage
Kappe	Grå SHF1
Ytre diameter	8.5 ± 0.30 [mm]
Vekt	97 [kg/km]
Kappemerking	NEK Kabel - LanMarin CAT7 S/FTP 4x2xAWG23/7 SHF1 - 60332-3-22 - DNV-GL, RMRS - <batch no > - <DD/MM/YY> - <meter marking>



Tekniske data

Driftstemperatur normalt	-40 – +80 [°C]
Temperatur v/installasjon	-20 – +60 [°C]
Dielektrisk styrke	DC1kV i 1min.
Karakteristisk impedans	100±5 [Ω @ 1MHz]
Ledermotstand	≤ 73,2 [Ω/km]
Motstand ubalanse maks.	≤ 5 [%]
Isolasjonsmotstand	≥ 5000 [MΩ x km] (IEC 61156-5)
Testspenning	1 [kV-DC 1 min.]
Kapasitans ubalanse	≤ 160 [pF/100m] @ 1kHz (IEC 61156-5)
Hastighetsfaktor	70 [%]
Mutual capacitance	48 [nF/km]
Min. bøyeradius	10 [x ytre diam]

Normer

Halogenfri, max korrosive og giftige gasser	IEC 60754-1 & IEC 60754- 2
Materialegenskaper, isolasjon og kappe	IEC 60092-360
Konstruksjon- og test standarder	IEC 61156-5
Flammehemmet buntet kabel	IEC 60332-3-22 Cat.A
Flammehemmet enkeltkabel	IEC 60332-1
Værbestandig	IEC 60228
Røykutvikling	IEC 61034-2 , ≥ 60%
Olje- og drivstoffbestandig	IRM 902 4h @ 70°C
UV-bestandig	UL 1581 (300H)
Sertifisering	DNV



Kan også leveres med MUD kappe i hht. NEK TS 606

El-nummer	1089666
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Dempning

Frekv. [MHz]	Demp. std [dB]	Demp.typ [dB]	RL std [dB]	RLtyp [dB]	NEXTst [dB]	NEXTtyp [dB]	PSNEXTstd [dB]	PSNEXT typ [dB]	ELFEXT std [dB]	ELFEXT typ [dB]
4	3,74	3,59	23,0	25,0	78,0	101,0	75,0	98,0	78,0	93,0
8	5,24	5,03	24,5	27,5	78,0	99,0	75,0	96,0	77,2	91,0
10	5,86	5,63	25,0	28,0	78,0	98,0	75,0	95,0	75,3	89,0
16	7,41	7,11	25,0	28,0	78,0	96,0	75,0	93,0	71,2	86,0
20	8,29	7,96	25,0	28,0	78,0	93,0	75,0	90,0	69,3	83,0
25	9,29	8,92	24,3	28,0	78,0	93,0	75,0	90,0	67,3	81,0
31,25	10,41	10,00	23,6	27,0	78,0	93,0	75,0	90,0	65,4	79,0
62,5	14,88	14,28	21,5	25,5	75,5	88,0	72,5	85,0	59,4	74,0
100	19,2	18,26	20,1	24,0	72,4	83,0	69,4	80,0	55,3	69,0
200	27,47	26,37	18,0	21,0	67,9	83,0	64,9	80,0	51,5	63,0
250	31,97	30,69	17,3	20,0	66,4	80,0	63,4	77,0	49,3	61,0
300	34,19	32,82	17,3	19,0	65,2	80,0	62,2	77,0	45,8	55,0
500	45,26	43,45	17,3	19,0	61,9	75,0	58,9	72,0	41,3	50,0
600	50,10	48,10	17,3	19,0	60,7	75,0	57,7	72,0	39,7	48,0

Versjon

Dato	Rev.	Beskrivelse
April 2019	1	DNV-GL Approved
05.06.2019	2	Add. information
08.11.2023	3	Add. information