

LanMarin® Cat 6A Flex

S/FTP
HFFH
SHF1, UV
AWG 23/7
DNV

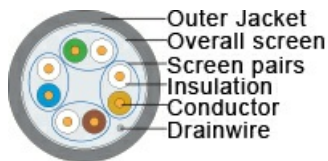
Bruksområde

DNV godkjent LAN kabel, konstruert for skip- og offshoreinstallasjoner. Testet etter IEC 61156-5 for transmisjonsegenskaper opp til 500 MHz, horisontal, seksjonert. IEEE 802.3at-2009 Type 2 (PoE+). Kabelen er en type "Toughcat" og tåler røff behandling.



Konstruksjon

| | |
|-----------------|--|
| Leder | 0.26 [mm ²] Flertrådet Fortinnet Cu 0.22 x 7 [mm] AWG 23/7 |
| Jordtråd | Fortinnet Cu |
| Isolasjon | Skummet PE 1.55 ± 0.05 [mm] |
| Parantall | 4 |
| Fargekode | IEC |
| Skjerm over par | Al/Mylar tape |
| Jordtråd | Fortinnet Cu |
| Skjerm | Flettet fortinnet Cu-tråd |
| Kappe | Grå SHF1 |
| Ytre diameter | 8.5 ± 0.3 [mm] |
| Vekt | 80 [kg/km] |
| Kappemerking | NEK Kabel – LanMarin CAT6A S/FTP 4x2x AWG23/7 – SHF1 – IEC 60332-3-22 – DNV – "batch" – YY/MM/DD – ***** |



Tekniske data

| | |
|----------------------------|---------------------------------|
| Driftstemperatur normalt | -40 – +80 [°C] |
| Temperatur v/installasjon | -20 – +80 [°C] |
| Dielektrisk styrke | DC1kV i 1min. |
| Karakteristisk impedans | 100 ± 5 Ω |
| Ledermotstand DC | ≤ 73.2 [Ω/km] |
| Motstand ubalanse maks. | ≤ 5 [%] |
| Isolasjonsmotstand | ≥ 5000 [MΩ x km] (IEC 61156-5) |
| Power over Ethernet | IEEE 802.3at-2009 Type 2 (PoE+) |
| Rated voltage | ≥ 80 [V] |
| Strekkestyrke | 140 [N] |
| Kapasitans | ≤ 160 |
| Kapasitans ubalanse | ≤ 160 [pF/100m] |
| Hastighetsfaktor | 70 [%] |
| Mutual capacitance | 48 [nF/km] |
| Min. bøyeradius installert | 5 [x ytre diam] |

Normer

| | |
|---|---|
| Halogenfri, max korrosive og giftige gasser | IEC 60754-1 & IEC 60754- 2 |
| Materialeegenskaper, isolasjon og kappe | IEC 60092-360 |
| Transmisjonsegenskaper | IEC 61156-5 |
| Konstruksjon- og test standarder | IEC 61156-5 EN 50288-4-2 |
| Flammehemmet buntet kabel | IEC 60332-3-22 Cat.A |
| Flammehemmet enkeltkabel | IEC 60332-1-2 |
| Røykutvikling | IEC 61034-2 (≥ 60%) |
| Olje- og drivstoffbestandig | IEC 60811-2-1 IRM 902 23°C / 7 dager, 70°C / 4h |
| UV-bestandig | UL 1581 (300H) |
| Sertifisering | DNV |



| | |
|-----------|---------|
| EI-nummer | 1089651 |
|-----------|---------|



Alternative:
Prod.no. 1089687 bare Cu and DNV approved

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 | 3,8 | 3,78 | 23,0 | 25,0 | 66,3 | 98,0 | 63,3 | 95,0 | 56,0 | 76,0 |
| 8 | 5,31 | 5,22 | 24,5 | 30,0 | 61,8 | 98,0 | 58,8 | 95,0 | 49,9 | 76,0 |
| 10 | 5,93 | 5,84 | 25,0 | 30,0 | 60,3 | 98,0 | 57,3 | 95,0 | 48,0 | 68,0 |
| 16 | 7,49 | 7,47 | 25,0 | 30,0 | 57,2 | 98,0 | 54,2 | 95,0 | 43,9 | 64,0 |
| 20 | 8,38 | 8,32 | 25,0 | 28,0 | 55,8 | 93,0 | 52,8 | 90,0 | 42,0 | 62,0 |
| 25 | 9,38 | 9,30 | 24,3 | 27,0 | 54,3 | 90,0 | 51,3 | 87,0 | 40,0 | 60,0 |
| 31,25 | 10,5 | 10,40 | 23,6 | 25,0 | 52,9 | 88,0 | 49,9 | 85,0 | 38,1 | 58,4 |
| 62,5 | 14,99 | 14,91 | 21,5 | 24,0 | 48,4 | 85,0 | 45,4 | 82,0 | 32,1 | 55,0 |
| 100 | 19,14 | 19,10 | 20,1 | 24,0 | 45,3 | 83,0 | 42,3 | 80,0 | 28,0 | 48,0 |
| 200 | 27,58 | 27,50 | 18,0 | 21,0 | 40,8 | 81,0 | 37,8 | 78,0 | 22,0 | 52,0 |
| 250 | 31,07 | 30,83 | 17,3 | 20,0 | 39,3 | 78,0 | 36,3 | 75,0 | 20,0 | 40,0 |
| 300 | 34,27 | 34,09 | 17,3 | 19,0 | 38,1 | 78,0 | 35,1 | 75,0 | 18,5 | 38,5 |
| 400 | 40,05 | 39,86 | 17,3 | 19,0 | 36,3 | 73,0 | 33,3 | 70,0 | 16,0 | 36,0 |
| 500 | 45,26 | 44,72 | 17,3 | 19,0 | 34,8 | 73,0 | 31,8 | 70,0 | 14,0 | 34,0 |

Versjon

| Dato | Rev. | Beskrivelse |
|-------------|------|------------------|
| 24.04 2019 | 1 | DNV-GL approval |
| 03.12. 2021 | 2 | Updated norms |
| 13.04.2023 | 3 | Additional info. |
| 17.10.2023 | 4 | Rated voltage |