

LanMarin® Cat 6 ARM SHF2

S/FTP

Solid AWG 23/1

UV, SHF2

Armoured, GSWB

DNV

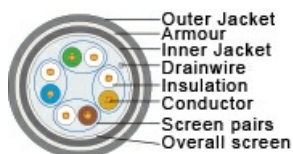
Application

Reinforced high performance cable for ship- and offshore LAN installations. Apply to general wiring system, including 10/100/1000 Base-T, ATM & Token Ring. Galvanized steel wire braid armour. This product is suitable for use in EMC-installations for ship and offshore. Cable for transmission characteristics up to 250 MHz - horizontal floor wiring. Ethernet IEEE 802.3at-2009 Type 2 (PoE+). This cable can be used in rough environments.



Construction

Conductor	Solid bare Cu 0.56 [mm] AWG 23/1
Drainwire	Tinned Cu
Insulation	Foam PE $\varnothing = 1.32$ [mm]
No. of pairs	4
Colour code	IEC
Individual Screen pairs	Al-/polyester tape > 100 % [coverage]
Overall Screen	Tinned Cu-braid
Inner jacket	SHF1
Armour	Galvanised steel wire braid
Outer Jacket	Grey SHF2
O.D.	11.4 \pm 1.0 [mm]
Jacket marking	NEK KABEL – LanMarin® Cat 6 S/FTP ARMoured 4 x 2 x 23/1AWG – IEC 60332-3-22 – SHF2 – Batch no. – **** M – YY/MM/DD



Specifications

Operating temperature normal	-25 – +85 [°C]
Temperature @ installation	-15 – +50 [°C]
Test Voltage	1.0 [kV-DC] for 1 min.
Conductor DC resistance	≤ 78 [Ω/km]
Resistance	Unbalance between pair: ≤ 4 [%] Unbalance within pair: ≤ 2 [%]
Insulation resistance	≥ 5 [GΩ x km @ 20°C]
Power over Ethernet	IEEE 802.3at-2009 Type 2 (PoE+)
Rated voltage	≥ 80 [V]
Capacitance unbalance	≤ 160 [pF/100m] core to earth at 800 Hz or 1000 Hz
Velocity factor	74 %
Min. bending radius	10 [x outer diam]
Min. bending radius @ installation	20 [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
Design and testing standards	IEC 61156-5 EN 50288-4 TIA/EIA 568.2-D ISO/IEC 11801
Flame resistance	IEC 60332-3-22
Flame retardant	IEC 60332-1-2

Part No.	2020011
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Table

Frequency [MHz]	Att. Max.(acc.EN) [dB/100m]	NEXT [dB]	PSNEXT [dB]	ACRF [dB]	PSACRF [dB]	RL [dB]
1	/	75.3	72.3	67.8	64.8	20.0
4	3.8	66.3	63.3	55.8	52.8	23.0
10	6.0	60.3	57.3	47.8	44.8	25.0
16	7.6	57.2	54.2	43.7	40.7	25.0
20	8.0	55.8	52.8	41.8	38.8	25.0
31.25	10.7	52.9	49.9	37.9	34.9	23.6
62.5	15.4	48.4	45.4	31.9	28.9	21.5
100	19.0	45.3	42.3	27.8	24.8	20.1
200	29.0	40.8	37.8	21.8	18.8	18.0
250	32.8	39.3	36.3	19.8	16.8	17.3



Updated

Date	Rev.	Description
16.10.2023	1	Rated voltage