

LanMarin® Cat 5E Arctic Grade

AWG 23/7
S/FTP
UV resistant
SHF2
RMRS

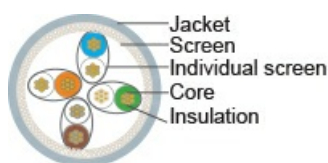
Application

Flexible LAN cable. Designed for ship- and offshore applications in arctic environments. Tested for cold bend and impact.



Construction

Conductor	Stranded plain Cu AWG 23/7
Insulation	Foam 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-/polyester tape
Overall Screen	Tinned Cu-braid ≥60%
Jacket	Grey Arctic grade SHF2
O.D.	9,0 ± 0,4 [mm]
Weight	100 [kg/km]
Jacket marking	NEK Kabel - LanMarin® Cat 5E S/FTP 4x2xAWG23/7 SHF2 Arctic Grade - IEC 60332-3-22A - lot - DD/MM/YY + meter



Specifications

Operating temperature normal	-55 – +80 [°C]
Temperature @ installation	-25 – +60 [°C]
Characteristic impedance	100±5 [Ω @ 100 MHz]
Conductor DC resistance	≤73,2 [Ω/km]
Brittle temperature	-55 [°C]
Insulation resistance	≥5000 [MΩ x km] (IEC 61156-5)
Test voltage	1 [kV-1min.]
Capacitance	at 1kHz
Capacitance unbalance	Pair to ground: ≤160 [pF/100m at 1kHz]
Min. bending radius	10 [x outer diam]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 and IEC 60754-2
Material properties, insulation and sheath	IEC 60092-360
Transmission performance	IEC 61156-5
Flame resistance	IEC 60332-3-22 Cat.A
Flame retardant	IEC 60332-1-2
Cold bend and impact	Cold bend CSA 22.2 @ -55°C Cold impact CSA 22.2 @ -55°C
Smoke emission	IEC 61034-2 ≥60%
Oil and fuel resistant	IEC 60811-3-1 IRM 902 100°C x 24h
UV-resistant	UL 1581 (300H)
Certification	RS



Part No. 1089614

Attenuation

Frequency (MHz)	Attenuation Max. (dB/100m)	Return Loss (dB/100m)	NEXT (dB/100m)	PS-NEXT (dB/100m)
4	4,08	23,0	56,3	63,3
8	5,78	24,5	51,8	58,8
10	6,48	25,0	50,3	57,3
16	8,26	25,0	47,2	54,2
20	9,28	25,0	58,7	52,8
25	10,43	24,2	44,3	51,3
31,25	11,73	23,6	42,9	49,9
62,5	17,00	21,5	38,4	45,4
100	21,28	20,1	35,3	42,3