



LanMarin® Fire Cat 7 Arm SHF1

AWG 23/1

S/FTP

Armoured

SHF1

DNV

Application

High performance offshore LAN cable with stranded conductors, AWG 23/1. Compliant with the Category 7 standards, requiring bandwidths up to 600 MHz. Foil screened pairs with an overall tinned copper braid. Tested for high-frequency and transmission measurements for Class F-Link. IEEE 802.3at-2009 Type 2 (PoE+). This cable can be used in rough environments.



Construction

Conductor	Solid bare Cu 0.58 [mm] AWG 23/1
Dielectricum	PE , each insulation cord is wrapped with fire resistant mica tape
No. of pairs	4
Colour code	pair 1: white/blue - blue pair 2: white/orange - orange pair 3: white/green - green pair 4: white/brown - brown
Individual Screen pairs	Al-/polyester tape > 100 % [coverage]
Overall Screen	Tinned Cu-braid
Inner jacket	SHF1
Armour	Galvanized steel wire
Outer Jacket	Grey SHF1
O.D.	11.4 ± 1.0 [mm]
Jacket marking	NEK Kabel AS – LanMarin® Fire Cat 7 S/FTP 4x2xAWG23/1 – Armoured – Fire Resistant 60331-23 (180min) – SHF1 – DNV – <batch no> – dd/mm/yyyy – ****m



Specifications

Operating temperature normal	-40 – +80
Temperature @ installation	-15 – +50 [°C]
Power over Ethernet	IEEE 802.3at-2009 Type 2 (PoE+)
Rated voltage	≥ 80 [V]
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
Design and testing standards	TIA/EIA 568 C.2 , IEC 11801 2nd.ed. , IEC 61156-5 2nd.ed
Flame resistance	IEC 60332-3-22
Flame retardant	IEC 60332-1-2
Fire resistant	IEC 60331-23 EN 50289-4-16 (180 min.)
Smoke emission	IEC 61034-1 & IEC 61034-2
Oil and fuel resistant	IEC 60811-404 IRM 902 & IRM 903



Part No.	2030011
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Attenuation

Frequency (MHz)	Attenuation Max. (dB/100m)	Return Loss (dB/100m)	NEXT (dB/100m)	PS-NEXT (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)
1	2.0	20	78	75	78	75
4	3.74	23	78	75	78	75
10	5.86	25	78	75	74	71
16	7.41	25	78	75	69.9	66.9
20	8.29	25	78	75	68	65
30	10.20	23.8	78	75	64.5	61.5
31.25	10.41	23.6	78	75	64.1	61.1
62.5	14.88	21.5	75.5	72.5	58.1	55.1
100	19.02	20.1	72.4	69.4	54	51
155	29.98	18.8	69.5	66.5	50.2	47.2
200	27.47	18.0	67.9	64.9	48	45
250	30.97	17.3	66.4	63.4	46	43
300	34.19	17.3	65.2	62.2	44.5	41.5
600	50.10	17.3	60.7	57.7	38.4	35.4