



VOKA-LAN MLAN 1000 Patch S/FTP 4PR AWG 26/7 FRNC Fca

Data cable for marine and offshore usage
Category 7 better than class F up to 600 MHz

APPLICATION

UV-resistant reinforced flexible data cable for transmission analog and digital signals for cabling in environments with harder electrical and mechanical requirements, as well as for use on ships and offshore. With DNV and GL rating.

Usage: IEEE 802.3 : Ethernet 10Base-T ; Fast Ethernet 100Base-T ; Gigabit Ethernet 1000Base-T ; 10GBase-T
IEEE 802.5 : ISDN ; FDDI ; ATM ; Cable sharing
IEEE 802.3at : PoE suitable

STANDARDS

EN 50288-4-1 ; EN 50173 ; EN 50174-2 ;
ISO/IEC 11801 2. edition ; IEC 61156-5
DNVGL-certifikate : TAE00003V1

CONSTRUCTION

Conductor: copper strand, tinned, AWG 23/1

Core insulation: SFS-PE

Core diameter: 1,04 ± 0,05 mm

Core identification: wh-bu, wh-or, wh-gn, wh-bn
(IEC 708-1)

Pair screen: plastic-laminated aluminium foil

Screening: tinned copper wire braid

Sheath material: halogen-free compound (FRNC) SHF 1

Sheath color: yellow, RAL 1021

BEHAVIOR UNDER FIRE CONDITIONS

EN 60332-1-2 ; EN 60332-3-24 ; EN 50399 ;
EN 50575 ; EN 61034 ; EN 50267 ;
IEC 60754-2 ; IEC 61034
EN 13501-6 class Fca

CHEMICAL PROPERTIES

RoHS 2011/65/EU ; IEC 60811-2-1 (IRM 902, 4h at 70°C)
UV-resistant

ELECTRICAL CHARACTERISTICS

loop resistance max.	max. 290 Ω / km
Insulation resistance min.	min. 5 GΩ x km at +20°C
Operating capacity	nom. 45 nF / km
Impedance	100 Ω ± 5 Ω
Test voltage	700 V / AC
Nominal voltage U_0/U	125 V
NVP	ca. 0,75 c
Signal delay	max. 425 ns/100m
Delay skew	< 8 ns/100m
Coupling attenuation	> 80 dB, Typ 1B
Coupling resistance	< 10 mΩ/m at 10MHz, Grade 1
Separation class	D

THERMAL & MECHANICAL PROPERTIES

Temperature range stationary	-20°C to +60°C
Temperature range during inst.	0°C to +50°C
max. bending radius installed	5 x outer diameter
max. bending radius moved	10 x outer diameter
Maximum traction	95N
Fire load	0,105kWh/m

Dimension	Diameter appr.mm	Cable weight appr.kg/km	Copper index kg/km	Article number
AWG26/7	6,3	45	22	

Version: 06/2020

We reserve changes which serve technical progress • Price upon quantity-specific request

Transmission characteristics

The stated performance data are characteristic measurements.

f (MHz)	Attenuation (dB/100m)	NEXT (dB)	ACR (dB/100m)	EL-FEXT (dB/100m)	RL (dB)
	NOM	NOM	NOM	NOM	NOM
1	0,28	95	95	95	23
4	0,55	95	94,5	93	27
10	0,85	95	94,1	90	30
16	1,05	95	94	81	30
20	1,2	92	90,8	77	30
31,25	1,5	90	88,5	75	30
62,5	2,1	88	85,9	70	30
100	2,7	86	83,3	58	28
200	3,85	84	80,2	50	26
300	4,7	82	77,3	47	24
400	5,1	80	74,9	45	23
500	5,7	78	72,3	42	22
600	6,75	75	68,3	40	21
900	8,6	72	63,4	36	18
1000	9,15	70	60,2	34	17