

IEC Standard Caledonian Offshore & Marine Cables

MariLan Marine Lan Data & Communication Cables

www.caledonian-cables.co.uk

Mud Resistant Cat 7 S/FTP 0.27 mm²

Application

These Cat7 S/FTP cables are manufactured in accordance with IEC 61156-5 requirements, can support all Class F applications like Ethernet, Fast Ethernet, Gigabit Ethernet, suitable for voice, data, CATV and sharing application installations up to 600MHz. These cables have additional flame retardant, halogen-free, low smoke MUD protecting outer sheaths.

Standards

- EN 50173-1
- EN 50288-4-1
- ISO/IEC 11801
- IEC 61156-5
- IEC 60332-3-24
- IEC 60754-2
- IEC 61034

MUD Protection Stranded Copper Conductor PE Insulation Al/polyester Tape Tinned Copper Braid LSOH (SHF1) Outer Sheath

Construction

- Conductors: Stranded copper conductor.
- Insulation: PE.
- Twinning: Two coloured insulated conductors twisted together to form a pair.
- Individual Screen: Al/polyester tape.
- Overall Screen: Tinned copper wire braid.
- Inner Sheath: Oil resistant, flame retardant and halogen free LSOH (SHF1).
- Outer Sheath: MUD protecting.

Core Identification

Pair 1: White, Blue Pair 2: White, Orange Pair 3: White, Green Pair 4: White, Brown



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Characteristic Impedance(1-250MHz)	Ω	100±15
Characteristic Impedance(100-500MHz)	Ω	100±22
Nominal Velocity of Propagation(NVP)		79%
Maximum Mutual Capacitance	nF/100m	5.6
Maximum Resistance Unbalance		5%
Maximum Propagation Delay Skew(1-125MHz)	ns/100m	30
Maximum Propagation Delay@100MHz	ns/100m	536
Voltage Rating	V rms	60

Nominal Transmission Characteristics @20°C

FREQ	NEXT	Attenuation	RL	ACR	ELFEXT	PSNEXT	PSACR	PSELFEXT
MHz	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m
1.0	80.0	2.0	20.0	78.0	80.0	77.0	75.0	77.0
4.0	80.0	3.6	23.0	76.4	80.0	77.0	73.4	77.0
10.0	80.0	5.7	25.0	74.3	74.0	77.0	71.3	71.0
16.0	80.0	7.2	25.0	72.8	69.9	77.0	69.8	66.9
20.0	80.0	8.1	25.0	71.9	68.0	77.0	68.9	65.0
31.3	80.0	10.1	23.6	69.9	64.1	77.0	66.9	61.1
62.5	75.5	14.5	21.5	61.0	58.1	72.5	58.0	55.1
100.0	72.4	18.5	20.1	53.9	54.0	69.4	50.9	51.0
200.0	67.9	26.8	18.0	41.1	78.0	64.9	38.1	45.0
250.0	66.5	30.2	17.3	36.3	46.0	63.5	33.3	43.0
300.0	65.3	33.3	17.3	32.0	44.5	63.3	29.0	41.5
600.0	60.8	48.9	17.3	11.9	38.4	57.8	8.9	35.4

Mechanical and Thermal Properties

Bending Radius: 8×OD (during installation); 4×OD (fixed installed)

Temperature Range: -40°C ~ +85°C

Dimensions and Weight

Part No.	Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Thick	Nominal Sheath Thickness mm Inner Outer		Nominal Weight kg/km
MLN-S/FTPCAT7M4P27S	4×2×0.27	0.47	0.75	1.0	10.1	112