



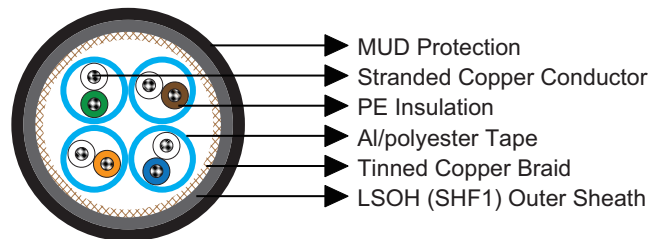
## Mud Resistant Cat 5e S/FTP 0.22mm<sup>2</sup>

### Application

These Cat5e S/FTP cables are manufactured in accordance with IEC 61156-5 requirements, can support all Class D applications like Ethernet, Fast Ethernet, Gigabit Ethernet, suitable for basic voice and data installations up to 100MHz. These cables have additional flame retardant, halogen-free, low smoke MUD protecting outer sheaths.

### Standards

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



### 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



## Electrical Properties

Characteristic Impedance(1-100MHz)	$\Omega$	100±15
Nominal Velocity of Propagation(NVP)		69%
Maximum Mutual Capacitance	nF/100m	5.6
Maximum Capacitance Unbalance	pF/100m	330
Maximum Resistance Unbalance		5%
Maximum Propagation Delay Skew	ns/100m	30
Maximum Propagation Delay@100MHz	ns/100m	536
Voltage Rating	V rms	80

## 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	65.3	2.0	20.2	63.3	63.8	62.3	60.3	60.8
4	56.3	4.1	23.0	52.2	51.7	53.3	49.2	48.7
8	51.8	5.8	24.5	46	45.7	48.8	43	42.7
10	50.3	6.5	25.0	43.8	43.8	47.3	40.8	40.8
16	47.3	8.2	25.0	39.1	39.7	44.3	36.1	36.7
20	45.8	9.3	25.0	36.5	37.7	42.8	33.5	34.7
25	44.3	10.4	24.3	33.9	35.8	41.3	30.9	32.8
31.25	42.9	11.7	23.6	31.2	33.9	39.9	28.2	30.9
62.5	38.4	17.0	21.5	21.4	27.8	35.4	18.4	24.8
100	35.3	22.0	20.1	13.3	23.8	32.3	10.3	20.8
155	32.5	28.1	18.8	4.4	19.9	29.5	-1.4	16.9
200	30.7	32.4	18.0	-1.7	18.7	27.7	-4.7	15.7
310	29.3	41.8	17.3	N/A	10.0	26.3	N/A	13.0
350	27.1	44.9	17.3	N/A	7.1	24.1	N/A	10.1

\* Data for 100MHz above are for reference only

## 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(mm <sup>2</sup> )	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
			Inner	Outer		
MLN-S/FTPCAT5EM4P22S	4×2×0.22	0.4	0.75	0.9	9.5	100