



## Marine Approved Cat 5e S/FTP

<b>BATT Part Number:</b>	77088
<b>Application:</b>	Generic data transmission. This cable is Cat 5e S/FTP cable meant for use as horizontal cable in tougher electrical and mechanical environment.
<b>Description:</b>	4 x 2 / 0.22mm <sup>2</sup>
<b>Outer diameter:</b>	7.7mm
<b>Weight:</b>	68kg/km
<b>Conductor:</b>	Stranded copper wire Ø 0.22mm <sup>2</sup>
<b>Insulation:</b>	PE Ø 1.4mm
<b>Twisting:</b>	2 cores to the pair
<b>Cable lay up:</b>	4 pairs
<b>Pair screen:</b>	Al-laminated plastic foil around each pair
<b>Overall screen:</b>	Copper braid, tinned Ø 6.2mm
<b>Sheath:</b>	Oil resistant, fire retardant and halogen free LSFROH (SHF1)
<b>Colour:</b>	Grey
<b>Bending radius:</b>	Without load 8 x diameter, with load 4 x Diameter
<b>Temperature range:</b>	During operation: -40°C to +85°C During installation: -15°C to +50°C
<b>Fire load:</b>	4 pair – 515MJ/km
<b>Maximum tensile load:</b>	During operation: No load During installation: 100 N
<b>DC loop resistance:</b>	≤158Ω/km
<b>Resistance unbalance:</b>	≤2%
<b>Insulation resistance:</b>	500C - ≥5000MΩxkm
<b>Capacitance:</b>	At 800Hz – Nom. 43nF/km
<b>Capacitance unbalance:</b>	Pair to ground - ≤300pF/km
<b>Mean characteristic impedance:</b>	At 100MHz - 100± 5Ω
<b>Nominal velocity of propagation:</b>	0.75c
<b>Propagation delay:</b>	≤ 450 ns/100m
<b>Delay skew:</b>	≤ 15 ns/100m
<b>Transfer impedance:</b>	At 1MHz - ≤10mΩ/m At 10MHz - ≤8mΩ/m At 30MHz - ≤10mΩ/m
<b>Chemical Resistance:</b>	Mineral oils IRM 902 (IEC 60811-2-1): 7 days / 23°C 4 days / 70°C Diesel – IRM 903 (IEC 60811-2-1): 7 days / 23°C 4 days / 70°C
<b>Fire Rating:</b>	LSFROH(SHF1): IEC 61034, IEC 60332-3-24, IEC 60754-2
<b>Standards:</b>	EN 50288-2-1. Det Norske Veritas (DNV) specification no: 6-827.50-2 and Lloyd Register approved system 2002

### Nominal Transmission characteristics at 20°

F (MHz)	Attenuation (dB/100m)	NEXT (dB)	ACR (dB/100m)	Return loss (dB)	PS-NEXT (dB)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)
1	2.1	90	88		87	85	85	82
4	4.0	90	86	27	87	83	85	82
10	6.3	90	84	30	87	81	79	76
16	8.0	90	82	30	87	79	75	72
20	9.0	90	81	30	87	78	73	70
31.25	11.4	90	79	30	87	76	69	66
62.50	16.5	86	70	30	83	67	63	60
100	21.3	83	62	30	80	59	59	56
155	24.2	81	57	26	78	54	57	54
200	31.5	78	47	25	75	44	53	50
250	35.8	77	41	25	74	38	51	48
300	47.1	73	26	23	70	23	47	44
600	60.1	71	11	20	68	8	44	41