



S/FTP Cat 6 Marine Approved

BATT Part Number:	91592
Application:	Data-Centres/SANs, Indoor use, fixed installations, High data rates, Maritime Environment, Optimized for IEEE 802.3at PoE+, Compliance with low voltage safety earth-connection and grounding regulations, Ships, High speed & Light craft
Conductor:	Bare Copper
General construction:	4 individually foil-shielded twisted pairs, cabled together with a drain wire, overall braid-shielded and jacketed with a XL-HFFR compound. It exceeds IEC 61156-5 Cat. 6, and Cat. 5e transmission requirements.
Outer Jacket:	SHF-1
Conductor Size:	23 AWG
Conductor Construction:	Solid
Insulation Material:	Cellular PO
Insulation O.D.:	1.35 mm nom.
Conductor unit identification:	Solid Colour
Ind. Shield Material:	Aluminium/Polyester Foil
Ind. Shield Design:	Helically applied Aluminium foil, 100% coverage
Conductor unit lay-up:	Pairs
Overall Shield Design:	Braid
Overall Shield Material:	Tinned-copper braid
Overall Braid Shield:	Yes
Overall Braid Material:	Tinned Copper
Braid Coverage:	55%nom.
Overall Drain-wire Material:	Tinned Copper
Overall Drain-wire size:	0.41 mm
Overall Drain-wire Construction:	Solid
Total number of conductors:	8
Outer Jacket Thickness:	0.8 mm nom.
Outer diameter:	8.0 mm nom.
Weight:	68 kg/km
Frequency Range:	1 - 400 MHz
Impedance:	100 Ω
Transfer Impedance:	Grade 1
Coupling Attenuation:	Type I
DC Resistance:	73 Ω /km nom.
Max. Resistance Unbalance:	2%
Max. Screen Resistance:	20 Ω /Km @20°C
Capacitance Unbalance:	1.2 pF/m max.
Velocity of Propagation:	78%nom.
Propagation Delay Skew:	25 ns/100m max.
Dielectric Strength:	700 V/minute
Dielectric Strength to Shield:	700 V/minute
Min. Insulation Resistance :	5 G Ω •km
Tensile Strength - Short Term:	130 N max.
Min. Bend Radius:	60 mm
Max. Operating Temperature:	+ 85 °C
Min. Operating Temperature:	- 40 °C
Applicable Standards:	DNV – TYPE DB Non-Armoured Solid Copper Conductor Cable, IEC 60092-359, IEC1156, IEEE 802.3at (PoE+), ISO/IEC 11801, RoHS-2 2011/65/EU
Flammability Rating:	IEC 60332-1, IEC 60332-3-24, IEC 60754-2, IEC 61034-1/2

www.batt.co.uk

battindustrial.sales@batt.co.uk



Electrical Properties

Freq MHz	Attenuation dB/100m 20°C		PS NEXT Loss dB		NEXT Loss dB		RL dB		PS ELEFEXT dB		ELFEXT dB	
	Typical value	Cat 6	Typical value	Cat 6	Typical value	Cat 6	Typical value	Cat 6	Typical value	Cat 6	Typical value	Cat 6
1	2.0	2.8	90	72.3	93	75.3	22	20	90	65	93	68
4	3.7	3.8	85	63.3	88	66.3	25	23	90	53	93	56
10	5.7	6	85	57.3	88	60.4	28	25	80	45	83	48
20	8.1	8.5	85	52.8	88	55.8	28	25	80	39	83	42
30	10	10.5	85	50.1	88	53.1	27	23.8	70	35.5	73	38.5
100	19	19.9	80	42.3	83	45.3	24	21.1	63	25	66	28
150	23.6	24.9	80	39.7	83	42.7	22	18.8	60	21.5	63	24.5
200	27.7	29.1	80	37.8	83	40.8	21	18	58	19	61	22
250	31.4	33	77	36.3	80	39.3	20	17.3	55	17	58	20