



Usage



Outdoor (rain/UV) resistant

Rodent resistant

Construction

Inner conductor (1) - (4)	
Material	Annealed copper
Diameter	$\varnothing 0.56 \pm 0.01$ mm
Insulation (1) - (4)	
Material	Skin/Foam/Skin HDPE
Diameter	$\varnothing 1.33 \pm 0.10$ mm
Screening (1) - (4)	
Material	Alu/PET per pair (Alu side out)
Assembly	
4 shielded twister pairs	
(1)	Blue / white
(2)	Brown / white
(3)	Orange / white
(4)	Green / white
Drain wire (5)	
Material	Tinned copper $\varnothing 0.4 \pm 0.01$ mm
Sheath (6)	
Material	LSZH Blue RAL 5005
Diameter	$\varnothing 7.2 \pm 0.2$ mm
Protect sheath (7)	
Material	PE black RAL 9005
Diameter	$\varnothing 8.4 \pm 0.2$ mm
Armouring	
Material	Galvanized steel (8)
Braid	$24 \times (6 \times \varnothing 0.20$ mm)
Coverage	> 90%
Water repellent	Jelly filled (9)
Outer sheath (10)	
Material	PE for outdoor UV resistant
Color	Black - RAL 9005
Diameter	$\varnothing 11.4 \pm 0.40$ mm
Weight	
Linear mass	TbD kg/km
Marking of sheath	
Printing with XXX : Quantity in meter still available per reel DDDDD : Date code	U/FTP CAT6A 650MHz SWB PE - 4 PAIRS AWG23 - ISO 11801 - TIA/EIA 568B - elbaC 219545 - DDDDD - XXX m
Color / Process	White pigment ink / Ink jet 1 m

Packaging

- W1 : 100m / Wooden drum
- W3 : 250m / Wooden drum

Electrical characteristics

Impedance	1 - 100MHz	$100 \pm 15 \Omega$
	100- 250 MHz	$100 \pm 20 \Omega$
	250 -500 MHz	$100 \pm 25 \Omega$
Propagation velocity		76%
Mutual pair capacitance		≤ 42 pF/m
Capacitance unbalance pair/ground		≤ 1500 pF/km
Conductor DC resistance		$< 79.8 \Omega/\text{km}$
Pair resistance unbalance DC		$< 1.5\%$
Dielectric strength		2.5 kV DC (2s)
Insulation resistance (500V)		> 5000 M Ω .km
Voltage rating		58 V

Performances

Frequency MHz	Max attenuation dB/100m	NEXT dB	RL dB
1.0	2.1	75.3	20.0
4.0	3.8	66.3	23.0
10.0	5.9	60.3	25.0
16.0	7.5	57.2	25.0
31.25	10.5	52.9	23.6
62.5	15.0	48.4	21.5
100.0	19.1	45.3	20.1
250.0	31.8	39.3	17.3
500.0	45.3	34.8	17.3
650.0	52.3	31.1	17.3

Frequency MHz	PS NEXT dB	ELFEXT dB	PS ELFEXT dB
1.0	72.3	68.0	65.0
4.0	63.3	56.0	53.0
10.0	57.3	48.0	45.0
16.0	54.2	43.9	40.9
31.25	49.9	38.1	35.1
62.5	45.4	32.1	29.1
100.0	42.3	28.0	25.0
250.0	36.3	20.0	27.0
500.0	31.8	14.0	11.0
650.0	30.1	11.7	8.7

Thermal characteristics

Storage / Transport / Installation	0 / 50°C
CPR fire reaction class	F _{ca}
Operation	-20 / 70°

Mechanical characteristics

Bending radius	80 mm
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Meet Standards

Electrical :	EIA/TIA 568A - ISO/IEC 11801
Fire reaction :	EN 50575:2014/A1:2016
Smoke density :	IEC 61034
Halogen free :	IEC 60754
Environment/Marking :	2011/65/EU