

Construction

1 Conductor Diameter	Solid Bare Copper AWG 23
2 Insulation Color Code Diameter (mm) Pair 1 Pair 2 Pair 3 Pair 4	HDPE 1.08 ± 0.1 Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown
3 Central Cross	PE
4 Inner sheath	
5 Sheat Thickness (mm) Diameter (mm) Color	LSZH 0.50 ± 0.05 7.50 ± 0.3 Green - RAL 6016 Color on request

Marking

B-CABLES SMART  LINE EN50575 C_{ca} s1d1a1 DOP-BSYXXX-4 PAIRS
AWG 23 U/UTP CAT 6A 500 MHZ - 100 OHM - DELTA ISO11801/
TIA-EIA 568-B.2 CE LSZH F2 SA SD 001M

Standards

ISO/IEC 11801-1:2017 (Ed. 1.0) / ISO/IEC 11801-2:2017 (Ed. 1.0)
IEC 61156-5:2012 (Ed. 2.1)
EN 50173-1:2011 / EN 50173-2:2007 including amendment AI:2010
EN 50288-11-1:2012 - ANSI/TIA-568-C.2:2009
including all cable alien crosstalk parameters (PS ANEXT and PS AACR-F)

Euroclass C_{ca} s1d1a1



Electrical Characteristics

Characteristics Impedance (Ω) from 1 to 250 MHz	100 ± 15
from 250 to 500 MHz	100 ± 22
Conductor DC Resistance @ 20°C (Ω/km)	≤ 94
Min Resistance of Insulation (MΩ.Km)	≥ 5000
Max. Pair Mutual Capacitance (nF/100 m)	≤ 5.6
Max. Pair Capacitance Unbalance (pF/100 m)	≤ 330
Nominal Velocity of Propagation	75%
Suitable for POE++	

Comply with EIA/TIA 568 & ISO/IEC 11801 CAT 6A Standard:

	Attenuation	Return Loss	NEXT
4MHz	3.70	23.00	65.00
10 MHz	5.90	25.00	59.00
16MHz	7.50	25.00	56.00
20 MHz	8.40	25.00	55.00
31.25 MHz	10.60	23.60	51.95
62.5 MHz	15.40	21.50	47.00
100 MHz	19.80	20.10	44.00
200 MHz	29.00	18.00	40.00
250 MHz	32.80	17.30	38.30
300 MHz	36.40	16.80	37.10
500 MHz	48.90	15.20	33.80

