


Construction

1 Conductor Diameter	Solid Bare Copper AWG 23
2 Insulation Color Code Pair 1 (insulation Ø 1.15 ± 0.05) Pair 2 Pair 3 Pair 4 (pair 2-4 insulation Ø 1.05 ± 0.05)	Solid PE Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown
3 Central Cross	PE Spline
4 Synthetic Polyester Foil Coverage	>100%
5 Drain Wire Diameter (mm)	Solid Tinned Copper 0.40 ± 0.05
6 Shielding Coverage	Al / PES ≥115%
7 Sheath Diameter (mm) Color	LSZH 2 x 7.20 ± 0.40 Green - RAL 6016 & 6018 Color on request

Marking

BCABLES SMART  LINE EN 50575 B2_{ca} s1d1a1 DOP-BSYXXX-
4 PAIRS AWG 23 F/UTP CAT 6A 500 MHZ - 100 OHM - DELTA -
ISO 11801 TIA/EIA 568-B2 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 A1:2010
EN 50288-11-1:2012 - NSI/TIA-568-C.2:2009

Euroclass B2_{ca} s1d1a1

Electrical characteristics

Characteristics Impedance (Ω)
from 1 to 250 MHz 100 ± 15
from 250 to 500 MHz 100 ± 25
Conductor DC Resistance @ 20 °C (Ω/km) 95
Min. insulation resistance (MΩm/Km) 5000
Mutual capacitance (nF/Km) 56
Nominal Velocity of Propagation 75%
Suitable for POE++

Frequency (MHz)	Attenuation (dB/100m)	Return Loss (dB)	NEXT (dB)
4	3.8	23.0	65.0
10	5.9	25.0	59.0
16	7.5	25.0	56.0
20	8.4	25.0	55.0
31.25	10.6	23.6	52.0
100	19.8	20.1	44.0
200	29.0	18.0	40.0
250	32.8	17.3	38.3
300	36.4	16.8	37.1
500	48.9	15.2	33.8

