


Construction

1 Conductor Diameter	Solid Bare Copper AWG 23
2 Insulation Color Code Diameter (mm) Pair 1 Pair 2 Pair 3 Pair 4	Skin-Foam-Skin PE 1.35 ± 0.05 Blue / White-Blue Orange / White-Orange Green / White-Green Brown / White-Brown
3 Each Pair Shield Coverage	Al-Pet (Al outside) Foil ≥ 115%
4 Drain Wire	
5 General Shield Formation (mm) Coverage	Braid 8x7x0.12 30%
6 Outer Jacket Diameter (mm) Jacket Color	LSZH 7.50 ± 0.30 Orange RAL 2000

Marking

BCABLES SMART  LINE EN50575 Cca s1d1a1 DOP-BSYXXX-4 PAIRS
 AWG 22 S/FTP CAT 7 600 MHZ - 100 OHM - DELTA - ISO 11801
 TIA/EAI 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 50288-4 -1:2013

Electrical characteristics

Characteristics Impedance @	1~100 MHz (Ω)	100 ± 15
	100~250 MHz (Ω)	100 ± 20
	250 ~ 600 MHz	100 ± 25
Conductor DC Resistance @ 20 °C (Ω/km)		95
Capacitance Unbalance @ 1Khz (pF/km)		1600
Min. Insulation Resistance (Ohm/km)		5000
Velocity of Propagation		78%
Suitable for POE++		
EIA/TIA 568 & ISO/IEC 11801 CAT 7 Standard:		

Frequency (MHz)	Attenuation (dB/100m)	Return Loss (dB)	NEXT (dB)
1	2.0	78.0	20.0
4	3.7	78.0	23.0
10	5.9	78.0	25.0
16	7.4	78.0	25.0
20	8.3	78.0	24.3
31.25	10.4	78.0	23.6
62.5	14.9	75.5	21.5
100	19.0	72.4	20.1
200	27.5	67.9	18.0
250	31.0	66.4	17.3
300	34.2	65.2	17.3
500	45.3	61.9	17.3
600	50.1	60.7	17.3

