

Construction

1 Conductor Diameter	Solid Bare Copper AWG 23
2 Insulation Color Code	Solid PE
Pair 1	Blue/White-Blue
Pair 2	Orange/White-Orange
Pair 3	Green/White-Green
Pair 4	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 / PET ≥115%
7 Sheath Avg. Thickness (mm)	PE (UV resistant) 0.55
Diameter (mm)	7.50 ± 0.30
Color	Black

Marking

BCABLES EN50575 F_{ca} DOP-BSYXX-4 PAIRS AWG 23 F/UTP CAT 6A
500MHZ – 100 OHM – ISO11801/TIA-EIA 568- B.2 CE PE 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 - ANSI/TIA-568-C.2:2009
Euroclass F_{ca}

Electrical characteristics

Characteristics Impedance (Ω)	100 ± 15
from 1 to 250 MHz	
from 250 to 500 MHz	100 ± 25
Conductor DC Resistance @ 20 °C (Ω/km)	95
Min. insulation Resistance (MΩ/km)	5000
Mutual Capacitance(nF/km)	56
Velocity of Propagation	75%
Suitable for POE++	
Comply with EIA/TIA 568 & ISO/IEC 11801 CAT 6A Standard:	

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	10.5	23.6	52.0
100	19.1	20.1	44.0
200	27.6	18.0	40.0
250	31.1	17.3	38.3
300	34.3	16.8	37.1
500	45.3	15.2	33.8

