BCT65S

Networking cable - CAT6A - S/FTP - flex 0.22 mm² - 24 AWG HighFlex™

Highlights:

- 24 AWG thin and dense stranded conductors
- Double shielding (Al-foil + Braiding)
- Highflex™ solid & flexible jacket
- 8.7 mm (Ø) outer diameter

The BCT65S is a CAT6A networking cable featuring a Highflex™ outer jacket which is specifically designed for professional use in highly demanding applications. The conductor section of the BCT65S consists of 4 pairs with solid 24 AWG conductors which are individually shielded by an aluminum foil while the entire section is surrounded by an overall braiding. Due to the double shielding, better performance in terms of crosstalk and system noise is achieved resulting in a higher bandwidth and improved immunity against noise and interference caused by external devices. The combination with hard and solid inner jacket materials and soft outer jacket materials provides great flexibility with a solid touch. Even after numerous times of winding and unwinding. Supports 10Base-T, 100Base-TX, 1000Base-T and 10GBase-T gigabit.

Properties:

IEC 60332 · Meter indicator · CAT6A 500 MHz · Bi-Jacketed · Shielded · HD Base T Compliant

Inner Conductors:

STRANDED OXYGEN FREE COPPER

Shielding:

TINNED COPPER BRAIDING · ALUMINUM FOIL

Usage:

Stage

Physical Characteristics:

Inner conductor	Insulation	Material	Foamed PE 1.32 mm Ø
		Colours	Green / White & Green ; Blue / White & Blue ; Orange / White & Orange ; Brown / White & Brown
	Shielding	Aluminium foil	Al-mylar, 100% coverage - 25% Overlap
Overall shielding	Braiding		TC 10 x 12 x 0.08 mm (Ø) (OFC)
Inner jacket	Material		Hard PVC
Outer jacket	Material		Soft PVC 8.7 mm (Ø)
	Colours		Black
Type of cable			S/FTP CAT6A Networking cable
Inner conductor	Material		BC 7 x 0.20 mm (Ø) (OFC)
	Section		0.22 mm²
Separator			Non woven foil
Inner conductor	American Wire Gauge		24 AWG
	Number of conductors		8 (4 pairs)
	Conductor twisting		Lay length ≤ 30 mm

Standards & regulations:

RoHS2 compliant	According EU Directive 2011/65/EU
Reach compliant	According EC 1907/2006
Flammability test	According IEC 60332-1
Indoor / outdoor	Indoor
Cabling standard	ISO/IEC11801
	IEC61156
	UL444
	ANSI TIA-EIA 568C.2

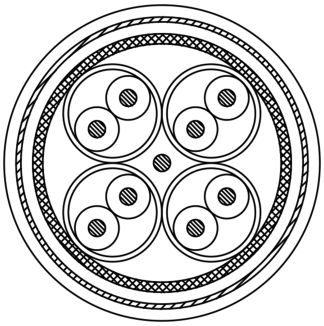
Electrical Characteristics:

Max. conductor	DC resistance	95 (Ω / Km)
	DC resistance unbalanced	2 %
Dielectric strength		1.5 (KV / 1 min. DC)
Max. Delay / Skew		25 (ns / 100 m)
Rated voltage		72 V
Nom. Velocity of propagation		74 %
Characteristic impedance		100 Ω ± 15 Ω
Nom. mutual capacitance		≤ 5.6 (nF / 100 m)
Pair to ground capacitance unbalance		≤ 160 (nF / 100 m)

Mechanical Characteristics:

Temperature range	Fixed installation	- 20 °C till + 75 °C
	Flexible installation	- 15 °C till + 60 °C
Bending radius	Fixed installation	10 x outer diameter
	Flexible installation	12 x outer diameter

Cross sections:



Variants:

- BCT65S/1 - 100 m wooden reel
- BCT65S/3 - 300 m wooden reel

Additional specifications:

Frequency (MHz)	Characteristic Impedance Upper limit - Zu (Ω)	Characteristic Impedance Lower limit - Zl (Ω)	ATT (dB/100m)	RL (dB Min)	NEXT (dB Min)	PS NEXT (dB Min)	ELFNEXT (dB Min)	PS ELFNEXT (dB Min)	PD (ns/100m Max)
4	115.2	86.8	4.6	23.0	66.3	63.3	56.0	53.0	552.0
8	112.6	88.8	6.4	24.5	61.8	58.8	49.9	46.9	546.7
10	111.9	89.4	7.1	25.0	60.3	57.3	48.0	45.0	545.4
16	111.9	89.4	9.0	25.0	57.2	54.2	43.9	40.9	543.0
20	111.9	89.4	10.1	25.0	55.8	52.8	42.0	39.0	542.0
25	113.2	88.3	11.3	24.2	54.3	51.3	40.0	37.0	541.2
31.25	114.6	87.2	12.6	23.3	52.9	49.9	38.1	35.1	540.4
62.5	120.2	83.2	18.0	20.7	48.4	45.4	32.1	29.1	538.6
100	125.3	79.8	23.0	19.0	45.3	42.3	28.0	25.0	537.6
200	135.7	73.7	33.1	16.4	40.8	37.8	22.0	19.0	536.5
250	140.0	71.4	37.3	15.6	39.3	36.3	20.0	17.0	536.3
300	139.8	71.5	41.1	15.6	38.1	35.1	18.5	15.5	536.1
400	139.8	71.5	48.1	15.6	36.3	33.3	16.0	13.0	535.8
500	139.8	71.5	54.3	15.6	34.8	31.8	14.0	11.0	535.6

Additional specifications:

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