

BCT50U

HighFlex CAT5E U/UTP Networking cable



The BCT50U is a CAT5E networking cable featuring a HighFlex™ outer jacket which is specifically designed for professional use in highly demanding applications.

The conductor section of the BCT50U consists of 4 twisted pairs with stranded copper 24 AWG conductors. 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 and 1000Base-T gigabit networks.



MOBILE

STAGE

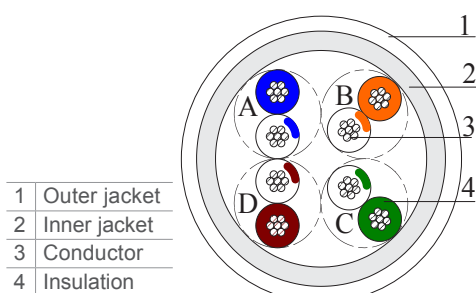
Physical Characteristics

Type of cable	CAT5E U/UTP Networking cable
Inner conductor	BC 7 x 0.20 mm (OFC)
Inner conductor section	0.22 mm ²
Number of conductors	8 (4 pairs)
Insulation	HDPE Ø 1.0 mm
Insulation colour	Blue & Blue / White Orange & Orange / White Green & Green / White Brown & Brown / White
Twisting lay length	≤ 30mm
Separator	None
Inner jacket	Hard PVC
Inner jacket dimensions	Ø 6.0 mm
Outer jacket	Soft PVC
Outer jacket colour	Black
Outer jacket dimensions	Ø 7.6 mm
American Wire Gauge	24 AWG

Electrical Characteristics

Dielectricum Σr	HDPE
Max. conductor DC resistance	140 (Ω /Km)
Max. conductor DC resistance unbal.	3%
Nom. mutual capacitance	□ 5.6 (nF/100m)
Pair to ground capacitance unbalance	□ 330 (pF/100m)
Nom. Velocity of propagation	65 %
Max. Delay / Skew	45 (ns/100m)
Dielectric strength	1.5 (KV/1min. DC)
Nom. shield DC resistance	(Ω /Km)
Characteristic impedance	100 Ω +/- 15 Ω
Voltage rating	300V

Cross section



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-568-C.2

Mechanical Characteristics

Temperature range	fixed installation	-20° C till +75° C
	flexible installation	-15° C till +60° C
Bending radius	fixed installation	10 x cable Ø OD
	flexible installation	12 x cable Ø OD

Ordering & packaging

BCT50U/1	IEC 60332-1, Black	100 m wooden reel
BCT50U/3	IEC 60332-1, Black	300 m wooden reel

Recommended accessories & connections

RJ45 Connector	Procab	
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Additional specifications



Frequency	Characteristic Impedance Upper limit	Characteristic Impedance Lower limit	ATT	RL	NEXT	PS NEXT	ELFNEXT	PS ELFNEXT	PD
(MHz)	Zu (Ω)	Zl (Ω)	(dB/100m)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(ns/100m Max)
1	-	-	2.4	20.0	65.3	62.3	63.8	60.8	570.0
4	115.2	86.8	4.9	23.0	56.3	53.3	51.7	48.7	552.0
8	112.6	88.8	6.9	24.5	51.8	48.8	45.7	42.7	546.7
10	111.9	89.4	7.8	25.0	50.3	47.3	43.8	40.8	545.4
16	111.9	89.4	9.9	25.0	47.2	44.2	39.7	36.7	543.0
20	111.9	89.4	11.1	25.0	45.8	42.8	37.7	34.7	542.0
25	112.9	88.5	12.5	24.2	44.3	41.3	35.8	32.8	541.2
31.25	114.1	87.7	14.1	23.3	42.9	39.9	33.9	30.9	540.4
62.5	118.3	84.5	20.4	20.7	38.4	35.4	27.8	24.8	538.6
100	121.9	82.0	26.4	19.0	35.3	32.3	23.8	20.8	537.6