

# BCT60U

## HighFlex CAT6 U/UTP Networking cable



The BCT60U is a CAT6 networking cable featuring a HighFlex™ outer jacket which is specifically designed for professional use in highly demanding applications.

The conductor section of the BCT60U consists of 4 twisted pairs with stranded copper 24 AWG conductors with a polyethylene '+' shaped separator in between. Thanks to this separator, better performance in terms of crosstalk and system noise can be achieved resulting in a higher bandwidth. 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.



Physical Characteristics	
Type of cable	CAT6 U/UTP Networking cable
Inner conductor	BC 7 x 0.20 mm (OFC)
Inner conductor section	0.22 mm <sup>2</sup>
Number of conductors	8 (4 pairs)
Insulation	HDPE Ø 1.02 mm
Insulation colour	Blue & Blue / White Orange & Orange / White Green & Green / White Brown & Brown / White
Twisting lay length	≤ 30mm
Separator	Cross web filler (PE)
Inner jacket	Hard PVC
Inner jacket dimensions	Ø 6.6 mm
Outer jacket	Soft PVC
Outer jacket colour	Black
Outer jacket dimensions	Ø 8.2 mm
American Wire Gauge	24 AWG

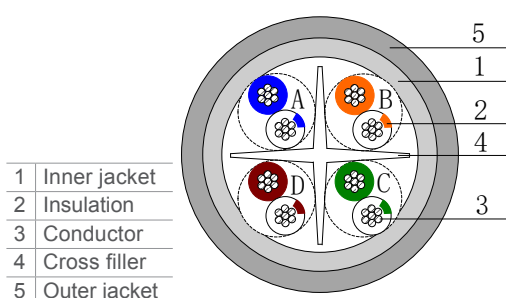
Standards & regulations	
RoHS2 compliant	According EU Directive 2011/65/EU
Reach compliant	According EC 1907/2006
Flammability test	According IEC 60332-1
Indoor / outdoor	Indoor
Cabling standard	ISO/IEC11801; IEC61156; UL444; ANSI/TIA-568-C.2

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

Electrical Characteristics	
Dielectricum $\Sigma r$	HDPE
Max. conductor DC resistance	140 ( $\Omega$ /Km)
Max. conductor DC resistance unbal.	5%
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	( $\Omega$ /Km)
Characteristic impedance	100 $\Omega$ +/-15 $\Omega$
Voltage rating	300V

Ordering & packaging		
BCT60U/1	IEC 60332-1, Black	100 m wooden reel
BCT60U/3	IEC 60332-1, Black	300 m wooden reel

### Cross section



Recommended accessories & connections		
RJ45 Connector	Procab	

# Additional specifications



Frequency	Characteristic Impedance Upper limit	Characteristic Impedance Lower limit	ATT	RL	NEXT	PS NEXT	ELFNEXT	PS ELFNEXT	PD
(MHz)	Zu ( $\Omega$ )	Zl ( $\Omega$ )	(dB/100m)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(ns/100m Max)
1	-	-	2.4	20.0	74.3	72.3	67.8	64.8	570
4	115.2	86.8	4.5	23.0	65.3	63.3	55.8	52.8	552
8	112.6	88.8	6.4	24.5	60.8	58.8	49.7	46.7	547
10	111.9	89.4	7.1	25.0	59.3	57.3	47.8	44.8	545
16	111.9	89.4	9.1	25.0	56.2	54.2	43.7	40.7	543
20	111.9	89.4	10.2	25.0	54.8	52.8	41.8	38.8	542
25	112.9	88.5	11.4	24.2	53.3	51.3	39.8	36.8	541
31.25	114.1	87.7	12.8	23.3	51.9	49.9	37.9	34.9	540
62.5	118.3	84.5	18.5	20.7	47.4	45.4	31.9	28.9	539
100	121.9	82.0	23.8	19.0	44.3	42.3	27.8	24.8	538
200	128.8	77.6	34.8	16.4	39.8	37.8	21.8	18.8	537
250	131.5	76.0	39.4	15.6	38.3	36.3	19.8	16.8	536