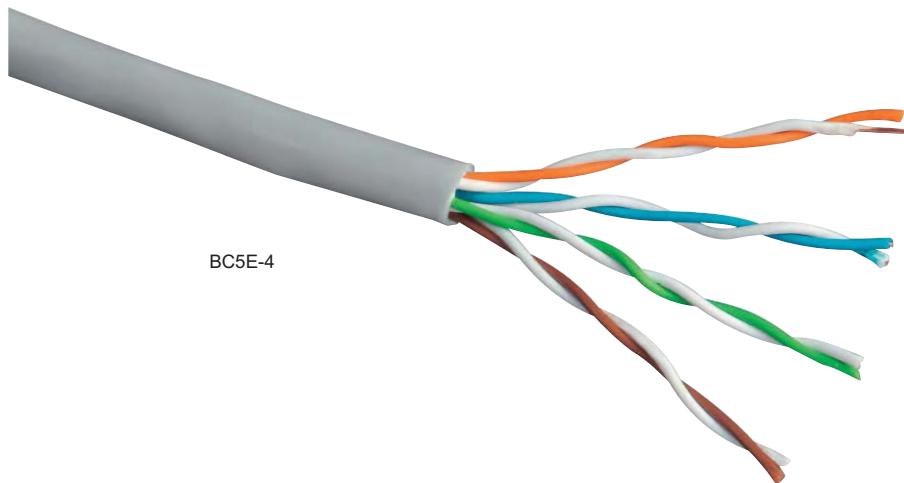


UTP Category 5E Installation Cable

The Category 5E unshielded installation cable is mostly used cable for data transmission where no electromagnetic disturbance is a problem. Supplied as part of complete Signamax Category 5E solution, the cable represents one of the key elements for safety and economical data transfer. Sophisticated cable design ensures very low electromagnetic emityency and low crosstalk. All parameters exceed requirements specified by TIA/EIA 568-B.2-1, ISO/IEC 11801:2002, and EN 50173-1 standards. The Signamax Category 5E cables are suitable for the high-speed 1000BaseT Ethernet protocol. Sheath material is supported by fire retardant PVC and halogen free compound.



Construction

Conductor	bare copper wire Ø 0.51 mm (AWG 24)
Insulation	Polyethylene, Ø 0.95 mm
Twisting	2 cores to the pair
Sheath	PVC alt. FRNC

Mechanical Properties

Bending radius	≥ 20 mm without load ≥ 40 mm with load
Temperature range, during operation	-20° up to +60°C
during installation	0° up to +50°C

Electrical Properties (at 20°C ± 5°C)

DC loop resistance	≤ 192 Ω/km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 2,000 MΩ *km
Capacitance at 800 Hz	nom. 48 nF/km
Capacitance unbalance (pair to ground)	≤ 1,500 pF/km
Characteristic impedance (1-100 MHz)	(100 ± 15) Ω
Nominal velocity of propagation	approx. 67%
Propagation delay	≤ 535 ns/100 m
Delay skew	≤ 20 ns/100 m
Test voltage (DC, 1 min)	
Core/Core and Core/Screen	1,000 V

Transmission characteristics acc. to Category 5e (at 20°C)

f (MHz)	Attenuation (dB/100 m)		NEXT (dB)		ACR (dB/100 m)		Return loss (dB)
	max.	nom.	min.	nom.	min.	nom.	min.
1	2	1.9	65	71	63.3	69.1	23
4	3.9	3.7	56	62	52.4	58.3	23
10	6.3	6.0	50	56	44.0	50.0	23
16	8.0	7.6	47	53	39.3	45.3	23
20	9.0	8.5	46	51	36.8	43.0	23
31.2	11.4	10.7	43	49	31.5	37.9	23
62.5	16.5	15.7	38	44	21.9	28.4	23
100	21.3	19.8	35	41	14.0	21.2	23

Technical Data

Product code	Outer diameter mm	Fire load		Weight kg/km	Copper content kg/km	Tensile force N
		MJ/km	kWh/m			
BC5E-4	5.9	336	0.093	35	17.5	80

UTP Category 5E Installation Cable

PART NO.	DESCRIPTION
BC5E-4	Category 5E UTP Installation Cable, 305 m boxes, PVC

Halogen free cable available on request.