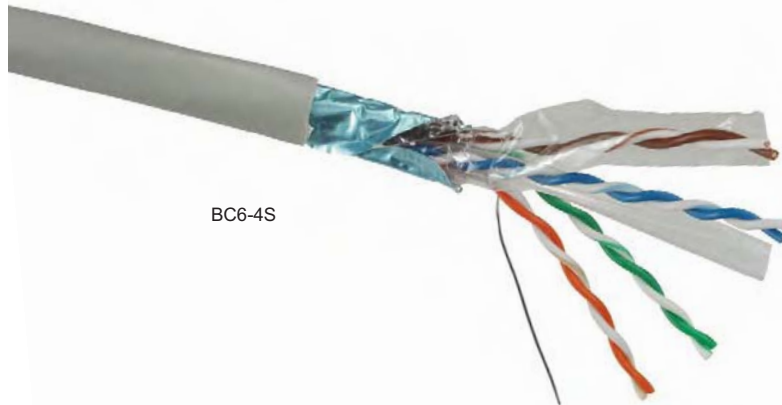


FTP Category 6 Installation Cable

Signamax Category 6 shielded installation cable BC6-4S is a high-performance data cable that is designed to meet the demands of today's most advanced voice and data networks. Category 6 cables support 1000Base-T/TX protocols for data rates up to 1 Gb/s and exceed the requirements of ANSI/TIA/EIA-568-B.2-1, ISO 11801:2002 and EN 50173-1:2002 standards. The Signamax Category 6 cable conductor is AWG 23 bare copper wire with high density polyethylene insulation. The non-metallic cross separator inside the cable ensures the best crosstalk elimination between individual pairs. The jacket of the BC6-4S horizontal cable is produced with PVC compound and its color is grey, the halogen-free version is also available.



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

Construction

Conductor	bare copper wire Ø 0.56 mm (AWG23)
Insulation	Polyethylene, Ø 1.0 mm
Twisting	2 cores to the pair

Electrical Properties (at 20°C ± 5°C)

DC loop resistance	≤ 176 Ω/km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 5,000 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
Characteristic impedance (1-100 MHz) (1-100 MHz)	(100 ± 15) Ω (100 ± 22) 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 6 (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	2	74	90	71.8	88	23
4	3.8	3.8	65	89	61.2	85.2	23
10	6	6	59	89	53	82.8	23
16	7.6	7.6	56	86	48.4	78.1	23
20	8.5	8.5	55	84	46.5	75.8	23
31.2	10.7	10.7	52	81	41.3	70.7	23
62.5	15.5	15.1	47	77	31.5	61.8	23
100	19.9	19.1	44	74	24.1	54.7	23
125	22.5	21.3	43	72	20.5	51	21
155.5	25.4	23.8	42	71	16.6	47.1	21
175	27.1	25.3	41	70	13.9	44.9	21
200	29.2	27	40	69	10.8	42.3	21
250	33	32.6	38	68	5	35.2	19

Technical Data

Product code	Outer diameter mm	Fire load MJ/km	kWh/m	Weight kg/km	Copper content kg/km	Tensile force N
BC6-4S	6.2	329	0.091	42	18	80

FTP Category 6 Installation Cable

PART NO.	DESCRIPTION
BC6-4S	Category 6 FTP Installation Cable, 500 m reels, PVC
BC6-4S-HF	Category 6 FTP Installation Cable, 500 m reels, LSOH