



STP Category 6A Installation Cable

This Signamax cable for Category 6A and Class E_A systems is manufactured to the highest quality standards. It easily exceeds the performance specifications for Category 6A defined in the ANSI/TIA/EIA 568C.2 standard and also for Class E_A defined in the ISO/IEC 11801 Amendment 2.0. The Signamax Category 6A installation cable is designed using high performance materials and special aluminum foil shielding to guarantee maximum reliability. The cable is tested up to 500 MHz and ensures excellent Alien Cross Talk elimination. This Category 6A cable is especially suitable for all new high-speed and high-bandwidth data protocols, such as 10GBaseT. Sheath material is supported by fire retardant, low smoke, and halogen free compounds, both LSOH and LSOHFR. The color of the Signamax Category 6A cable is grey (RAL 7035).

Transmission Characteristics acc. to Category 6A (at 20°C)

| f (MHz) | Attenuation (dB/100 m) | NEXT (dB) | ACR-N (dB/100 m) | Return loss (dB) |
|---------|------------------------|-----------|------------------|------------------|
| 1 | 1.8 | 100 | 98 | - |
| 4 | 3.4 | 100 | 97 | 27 |
| 10 | 5.4 | 100 | 95 | 30 |
| 16 | 6.8 | 100 | 93 | 30 |
| 20 | 7.7 | 100 | 92 | 30 |
| 31.2 | 9.6 | 100 | 90 | 30 |
| 62.5 | 13.7 | 100 | 86 | 30 |
| 100 | 17.4 | 100 | 83 | 30 |
| 125 | 19.5 | 95 | 75 | 26 |
| 155 | 21.9 | 94 | 72 | 26 |
| 175 | 23.3 | 93 | 70 | 25 |
| 200 | 25.0 | 92 | 67 | 25 |
| 250 | 28.1 | 90 | 62 | 24 |
| 300 | 30.9 | 89 | 58 | 25 |
| 400 | 38.3 | 87 | 48 | 23 |
| 500 | 43.0 | 86 | 43 | 23 |



BC6A-4S-HF

SPECIFICATIONS

ELECTRICAL PROPERTIES AT 20°C ±5°C

Loop Resistance: ≤ 145 Ω/km
 Resistance Unbalance: ≤ 2%
 Insulation Resistance (500 V): ≥ 2,000 MΩ *km
 Mutual Capacitance at 800 Hz: 45 nF/km
 Capacitance Unbalance (pair/ground): ≤ 800 pF/km
 Nominal Velocity of Propagation: 75%
 Propagation Delay: < 500 ns/100 m
 Delay Skew: < 20 ns/100 m

MECHANICAL PROPERTIES

Bending Radius Installation: 8 x outer diameter
 Bending Radius Installed: 4 x outer diameter

TEMPERATURE RANGE

During Operation: -20° to +60°C
 During Installation: 0° to +50°C

CONSTRUCTION

Conductor: bare copper wire, Ø 0.565 mm (AWG 23)
 Insulation: PE, Ø 1.4 mm

FIRE CLASSIFICATION

LSOH: IEC 61034-2, IEC 60754-2, IEC 60332-1-2
 LSOHFR: IEC 61034-2, IEC 60754-2,
 IEC 60332-3-24 available on request

STP Category 6A Installation Cable

| PART NO. | DESCRIPTION |
|------------|--|
| BC6A-4S-HF | Category 6A STP Installation Cable, 500 m reel, LSOH |

LSOHFR cable is available on request.