Category 6 Industrial-Grade Patch Cords

Signamax category 6 industrial-grade patch cords provide the same high-level transmission performance as other Signamax cords intended for regular commercial applications, but with a robustness capable to withstand harsh environments typical to factory floors, chemical, food processing plants, etc. Unique IP67-rated plug housing design guarantees superb protection against liquid and solid agents' penetration, against vibrations, and for a long-life reliable performance.

Cords are furnished with dust caps on the protected ends to prevent exposure of unplugged connectors.

KEY FEATURES

- Industrial-grade plugs are IP67-rated (complete protection against dust, protection against the effects of temporary immersion up to 1 m (3 ft))

- Available in IP67-plug-to-IP67-plug and IP67-plug-to-modular plug designs

- Durable flexible cable strain relief

- Slim-profile snag-free boots on modular plugs of the IP67-plug-to-modular plug design

- Industrial-grade plugs are equipped with dust caps to prevent exposure of unplugged connectors

- Transmission performance exceeds ANSI/TIA-568-C.2 category 6 performance specifications

- 100% factory transmission tested to component performance per ANSI/TIA-568-C.2 specifications

- T568A/B wiring scheme compatible

- Contact design provides enhanced plug to jack connection integrity

- Rated for at least 750 plug insertions providing for the highest level of system reliability

ORDERING INFORMATION

Category 6 Industrial-Grade Patch Cords

Part Number	Description
C6-116IG-xFB	Category 6 Industrial Plug-to-Industrial Plug Patch Cord, x ft.
C6-117IG-xFB	Category 6 Industrial Plug-to-RJ-45 Patch Cord, x ft.

Standard cable color is black. Other colors and lengths are available.
Category 6 patch cords are manufactured using commercial grade cable.
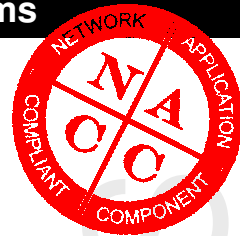For length substitute x in part number with
  "3" – 3 ft,
  "5" – 5 ft,
  "7" – 7 ft,
  "10" – 10 ft,
  "15" – 15 ft,
  "20" – 20 ft.

RELATED PRODUCTS

Product/Product Group	Spec Sheet #	
Category 5e Unscreened Industrial-Grade Patch Cords	PSS.C5E-IG-PC	(A-MAY-10)
Category 6 Unscreened Industrial-Grade Jack	NA	
Category 6 Screened Industrial-Grade Jack	NA	
Category 5e Unscreened Industrial-Grade Jack	NA	
Category 5e Unscreened Industrial-Grade Jack	NA	
Keystone Industrial DIN-Rail Mounting Module	PSS.KI-DIN-RMM	(A-AUG-09)
Industrial-Grade Stainless Steel Faceplates	NA	
Industrial-Grade Surface-Mount Boxes	NA	
Category 5e Field-Installable Industrial-Grade Plugs Assemblies	NA	

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Category 6 Industrial-Grade Patch Cords

SPECIFICATIONS

- **TRANSMISSION PERFORMANCE**
  ANSI/TIA-568-C.2:   category 6 (1–250 MHz) specifications (100% tested)

- **TRANSMISSION MEDIA**
  4-pair unscreened 100-Ohm stranded twisted pair (U/UTP)
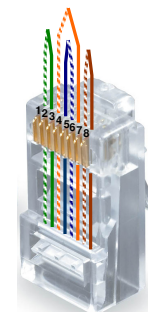
- **WIRING SCHEME**
  ANSI/TIA-568-C.2:   T568A & T568B
  ISO/IEC 11801 2nd Ed.: 8-position conductor/pair assignment
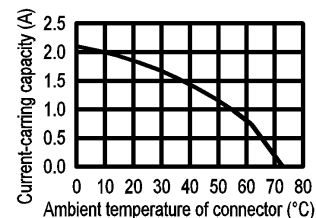 (1-2/3-6/4-5/7-8)

- **CORD CONSTRUCTION**
  – 4 stranded 24-AWG copper pairs in thermoplastic insulation, thermoplastic outer jacket
  – high-impact clear polycarbonate 8p8c plugs
  – IP67-rated industrial-grade thermoplastic plug housings
  – thermoplastic boots
  – thermoplastic strain relief

T568A/T568B

- **MODULAR PLUG**
  Contacts: phosphor bronze, min 50 µin of gold plating over 100 µin of nickel in contact area
  Insulation resistance: min 500 MOhm @ 100 V_{dc}
  Dielectric withstanding voltage: 1,000 $V_{dc/ac}$ peak contact to contact @ 60 Hz for 1 min
  Contact resistance: max 20 mOhm
  Current rating: see figure
  Assembly: FCC Part 68 Subpart F
  Housing: UL listed 94V-0 flame retardant polycarbonate
  Retention: 50 N (11 lbf) for 60±5 s
  Mating cycle life: min 750 cycles
  Tensile strength: ≥ 20 N per wire

- **INDUSTRIAL PLUG HOUSING**
  – industrial-grade high-impact flame-retardant thermoplastic
  – UL 94V-0 rated
  – IP67 rated (complete protection against dust, protection against the effects of temporary immersion up to 1 m (3 ft))

- **CABLE**
  CONDUCTOR:
    Material   bare copper
    Size   24 AWG stranded (7 x 32 AWG strands per conductor)
  INSULATION:
    Color coding   blue/white-blue
                   orange/white-orange
                   green/white-green
                   brown/white-brown
  SHEATH:
    Diameter   < 6 mm (0.25 ± 0.01 in)
    Color   see ORDERING INFORMATION
  Tensile strength: > 400 N (90 lbf)
  Min. bend radius: 25 mm (1 in) recommended

U/UTP

Outer Jacket
Twisted Pair
Insulation
Stranded Conductor

- **ENVIRONMENTAL CONDITIONS**
  Storage: -40 °C – +70 °C (-40 °F – +158 °F)
  Operation: -10 °C – +60 °C (+14 °F – +140 °F)
  RH (operation): max non-condensing 93 %

- **COMPLIANCE**
  ANSI/TIA-568-C.2, IEC 60603-7, IEC 61156-6, IEC 60332-1-2, FCC Part 68 Subpart F, UL 94V-0

- **APPLICATIONS**
  X.21, V.11, S0, ISDN, CSMA/CD 10BASE-T, 100BASE-TX, 100BASE-T4, 100BASE-T2, 1000BASE-T, 10GBASE-T (up to 55 m (180 ft)), TR 4/16/100, 100BASE-VG, ATM LAN 25/51/155, TP-PMD

- **WARRANTY**
  5-year limited component warranty
  10-year Signamax Link/Channel Warranty
  15-year Signamax Extended Component Warranty
  25-year Signamax Cabling System Warranty

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PSS.C6-IG-PC A-MAY-10