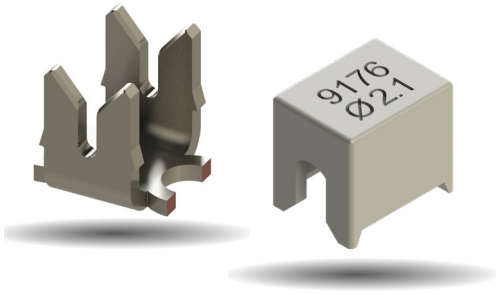


SINGLE IDC CONTACT 18-24 AWG: 9176-500

General Information



The 917X series of surface mount Insulation Displacement Connectors (IDC) were developed to meet the harsh requirements of automotive and industrial applications. This industry proven series of connectors provides a robust, reliable, and efficient method to connect individual wires ranging from 12 AWG to 30 AWG directly to a PCB. The single contact design can function as a standalone component. It provides our designers access to IDC technology in an easy-to-use form factor allowing them to bring power and signal to a PCB in a wide range of applications. These connectors have been tested to various levels of shock, vibration, and temperature cycling to prove their reliability and robustness.

The single 9176-500 series contact and cap accepts 18 AWG to 24 AWG wires. These dual beam contacts support up to a 10 Amp current rating (dependent on wire gauge) with a large SMT solder base to provide maximum stability on the PCB. The optional locking strain relief cap acts as the termination tool for severe vibration applications.

APPLICATIONS

- Connecting discrete wire components directly to the PCB
- Bringing power and signals onto a PCB
- Daisy chaining PCB's together to create a continuous string of boards
- Application notes: Refer to 201-01-124
- Product Specification: Refer to 201-01-126

FEATURES AND BENEFITS

- Supplied in T&R pockets for standard SMT placement
- IDC contact provides a gas-tight connection to the PCB for long term reliability
- Optional termination cap provides additional strain relief for severe environments
- Tested to various levels on shock, vibration and temperature cycling for reliability
- Reduced total applied cost versus solder or crimp processes
- Individual contacts can be located anywhere on the PCB based on specific application

ELECTRICAL

- Current Rating: Up to 10 Amps / Contact
- Voltage Rating: Dependent on Contact Spacing

ENVIRONMENTAL

- Operating Temperature: -40°C to +130°C
- Storage Temperature: -40°C to +70°C

MECHANICAL

- Insulator Material: Nylon 46, UL94V-0
- Contact Material: Phosphor Bronze
- Plating: Tin over Nickel
- Durability: 3 Cycles

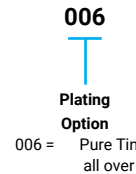
HOW TO ORDER – CONTACT OPTIONS



5XX

Wire Gauge Size

Code	Accepted Wire Gauge
501	18 Gauge Stranded
511	20 Gauge Solid or Stranded
522	22 Gauge Solid or Stranded
532	24 Gauge Solid or Stranded



Safety Standards: UL 1977-File #E90723, CSA C22.2 NO. 182.3

HOW TO ORDER – CAP OPTIONS



5XX

Wire Insulation Size

Code	Wire Insulation Ø
516	1.1-1.6 (22-24)
521	1.6-2.1 (18-20)

X00

Insulator Color

Code	Color
000	Black
100	White



SALES DRAWINGS
CLICK TO DOWNLOAD

CONNECTOR/TOOLING PART NUMBER MATRIX

SERIES 9176-500 IDC				HAND INSERTION TOOLING*		ACCESSORY CAPS		
AWG	Wire Insulation	Positions	Part Number	Plastic (medium volume)	Metal (high volume)	Cap Application Tool	White	Black
18	Ø 1.6 - 2.1	1p	709176001501006	069176702001000	069176701901000	069176701801000 (Plastic)	609176001521100	609176001521000
20	Ø 1.6 - 2.1	1p	709176001511006					
22	Ø 1.1 - 1.6	1p	709176001522006	069176702002000	069176701902000	069176702501000 (Metal)	609176001516100	609176001516000
24	Ø 1.1 - 1.6	1p	709176001532006					

Additional tools available.

069176701903000: 2.2-2.8mm Diameter.

069176701904000: 0.75-1.0mm Diameter.

* Hand Insertion Tooling and Cap Application - Universal Hand Tool 067000773001000; Consult Application Notes 201-01-124

**Other tools are available for special wires (thick insulator, copper enameled wire...), Please contact KYOCERA AVX for more details



The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

TDS-WTB-0017 | Rev 2

— WIRE-TO-BOARD CONNECTORS —