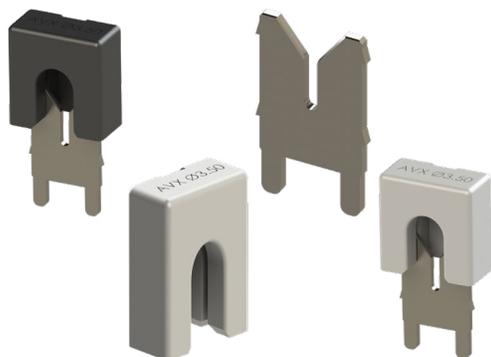


# SINGLE THRU HOLE IDC CONTACT 12-18 AWG: 9177-600



## 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 9177-600 family incorporates all the above-mentioned capabilities. The PTH option provides robust PCB attachment and high current capabilities through the use of a low-cost single contacts to a fully integrated capped connector. This product is a good alternative where older technology connectors or direct solder are used. The unique feature of the 9177-600 series is that it was developed for Plated Through Hole (PTH) termination to the PCB. This addresses applications that require larger wire gauges up to 12 AWG and 15 Amps per contact of current.

### APPLICATIONS

- Industrial pumps, motors and driver boards
- Solar and alternative energy products
- Commercial electrical equipment
- Application Notes: Refer to 201-01-142
- Product Specification: Refer to 201-01-141

### FEATURES AND BENEFITS

- IDC contact provides a "gas tight" wire termination to the PCB to meet harsh industrial environments
- Simple, robust design offers a high performance solution to hand soldering large gauge wires to a PCB
- A single contact can handle up to 15A for high current applications with wire replacement up to 3 times
- The versatile family of IDC contacts can accept 12-18 AWG solid or stranded wires

### ELECTRICAL

- Current Rating: Up to 15 Amps
- Voltage Rating: 600 VAC (RMS) or DC Equivalent

### ENVIRONMENTAL

- Operating Temperature: -40°C to +125°C
- Storage Temperature: -40°C to +70°C

### MECHANICAL

- Insulator Material: Nylon 46, UL94V-0
- Contact Material: Phosphor Bronze
- Plating: Tin over Nickel
- Durability: Wires can be replaced up to 3 times

### HOW TO ORDER – CONNECTOR OPTIONS

**00** Prefix  
**9177** Series  
**00X** Number of Ways  
001 = 1

**6XX** Wire Insulation/Gauge Size

Code	Style	Accepted Wire Gauge	Wire Insulation
691	Through Hole Mount	12 AWG Solid or Stranded	Ø 4.25 Max
601	Through Hole Mount	14 AWG Solid or Stranded	Ø 4.25 Max
612	Through Hole Mount	16 AWG Solid or Stranded	Ø 3.50 Max
622	Through Hole Mount	18 AWG Solid or Stranded	Ø 3.50 Max

**XX** Color/Approval

Code	Insulator Color	Cap Type	Description
00	Black - Special Order	Through Wire	Any Position Along Wire
09	Black - Special Order	Wire Stop	End of Wire - Includes Stop
10	White - Standard	Through Wire	Any Position Along Wire
19	White - Standard	Wire Stop	End of Wire - Includes Stop

**6** Plating Option  
6 = Pure Tin all Over

### HOW TO ORDER – CONTACT OPTIONS

**70** Prefix  
70 = Contact  
**9177** Series  
**001** Number of Ways  
001 = 1

**6XX** Wire Gauge Size

Code	Accepted Wire Gauge
691	12 AWG Solid or Stranded
601	14 AWG Solid or Stranded
612	16 AWG Solid or Stranded
622	18 AWG Solid or Stranded

**006** Plating Option  
006 = Pure Tin all Over



### HOW TO ORDER – CAP OPTIONS

**60** Prefix  
60 = Cap  
**9177** Series  
**001** Number of Ways  
001 = 1

**6XX** Wire Insulation Diameter

Code	Wire Insulation (AWG)	Diameter "A"
627	Ø 2.10 - 2.75	2.75
635	Ø 2.75 - 3.50	3.50
642	Ø 3.50 - 4.25	4.25

**X** Color Options

Code	Color	Application
0	Black	Special Order
1	White	Standard

**XX** Assembly Options

Code	Description
00	Through Wire
99	With Stop

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