

# Single IDC Contact 12-18 AWG

9177-500



AVX's STRIPT™, insulation displacement naked contact technology provides cost effective, insulator-less, wire-to-board connection for discrete wire applications. Designed from the ground up to function just like a traditional insulated connector, these UL certified contacts have been industry proven for many years. This 9177-500 series has been designed to support the larger wire gauges from a robustness and current rating perspective.

## APPLICATIONS

- Industrial motor controls, drives & pumps
- Commercial building wiring and electrical systems
- Outdoor/Transportation lighting
- Solar and alternative energy

## FEATURES AND BENEFITS

- Proven “gas tight” cold welded wire termination
- Redundant contact systems provides enhanced wire retention and high current carrying capabilities
- Cost effective STRIPT™ insulator-less contact system

## ELECTRICAL

- Current Rating: 15
- Voltage Rating: 600 VAC

## ENVIRONMENTAL

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

## MECHANICAL

- Contact Material: Phosphor Bronze
- Contact Plating: Pure tin over nickel
- Durability: 3 termination cycles

## HOW TO ORDER

**70**  
Prefix  
70 = Contact

**9177**  
Series

**001**  
Number of Ways  
001 = 1

**5XX**  
Wire Gauge Size  
591 = 12AWG Stranded and Solid  
501 = 14AWG Stranded and Solid  
512 = 16AWG Stranded and Solid  
522 = 18AWG Stranded and Solid

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

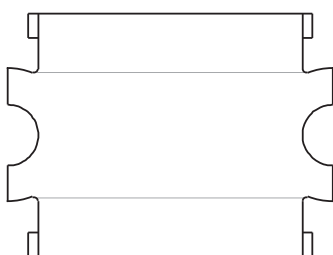
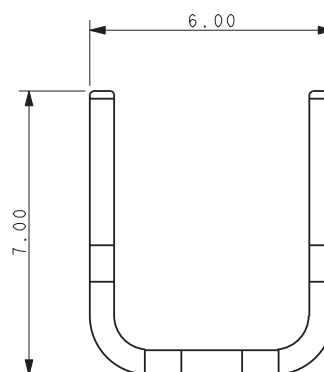
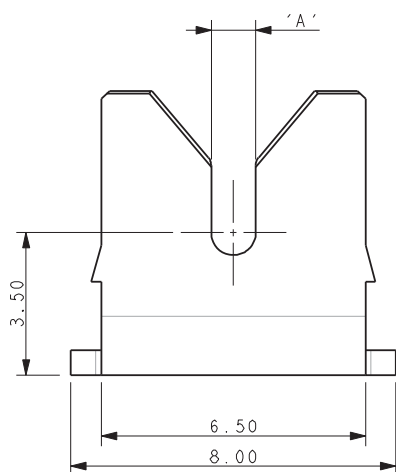


Certification: UL File #E90723

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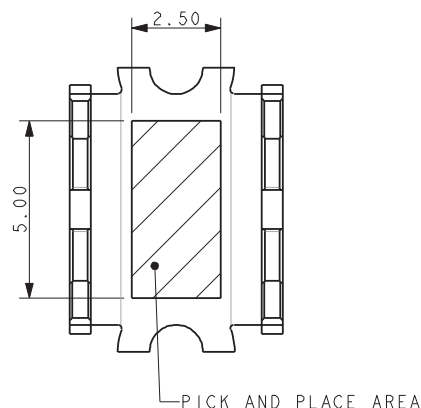
## CONTACT DETAILS



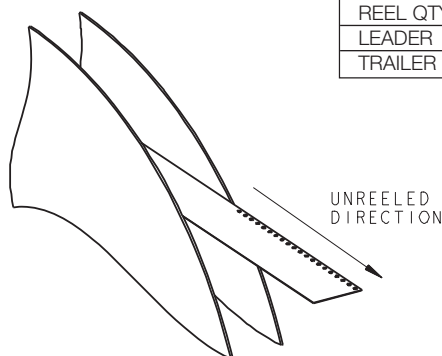
| Code | Accepted Wire Gauge      | A    |
|------|--------------------------|------|
| 591  | 12AWG Stranded and Solid | 1.50 |
| 501  | 14AWG Stranded and Solid | 1.10 |
| 512  | 16AWG Stranded and Solid | 0.82 |
| 522  | 18AWG Stranded and Solid | 0.72 |

### NOTES:

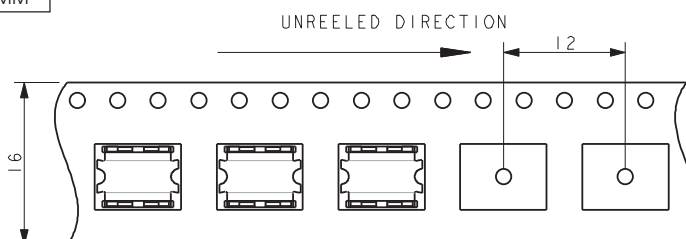
1. CONNECTOR FO IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHORE BRONZE.
3. CONTACT PLATING: PURE TIN.
4. CONTACTS DESIGNED TO ACCEPT BETWEEN 12 AND 18 GAUGE STANDERD WIRE, SEE TABLE.
5. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
6. FOR FULL PRODUCT SPECIFICATIONS REFER TO AVX SPECIFICATION 201-01-208 AND APPLICATION NOTES 201-01-209.
7. SMT PCB LAYOUT, REFER TO PAGE 3.
8. PACKING IN TAPE AND REEL, QUANTITY PER REEL 700.
9. ASSEMBLY TOOLING ON PAGE 4.
10. UL REFERENCE E90723 (US AND CANADA).



## PACKING DETAILS



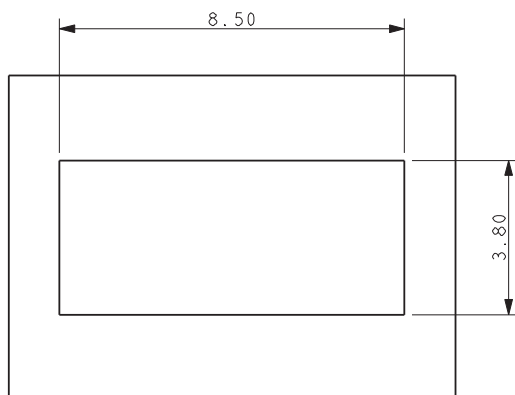
|          |       |
|----------|-------|
| REEL QTY | 700   |
| LEADER   | 480MM |
| TRAILER  | 120MM |



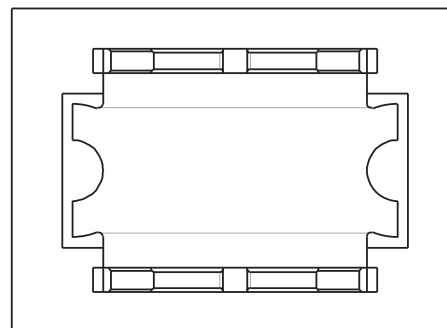
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## 12-18 AWG IDC WIRE TO BOARD CONNECTOR SINGLE CONTACT



**SUGGESTED PCB LAYOUT**



**ORIENTATION OF CONTACT  
ON PAD**

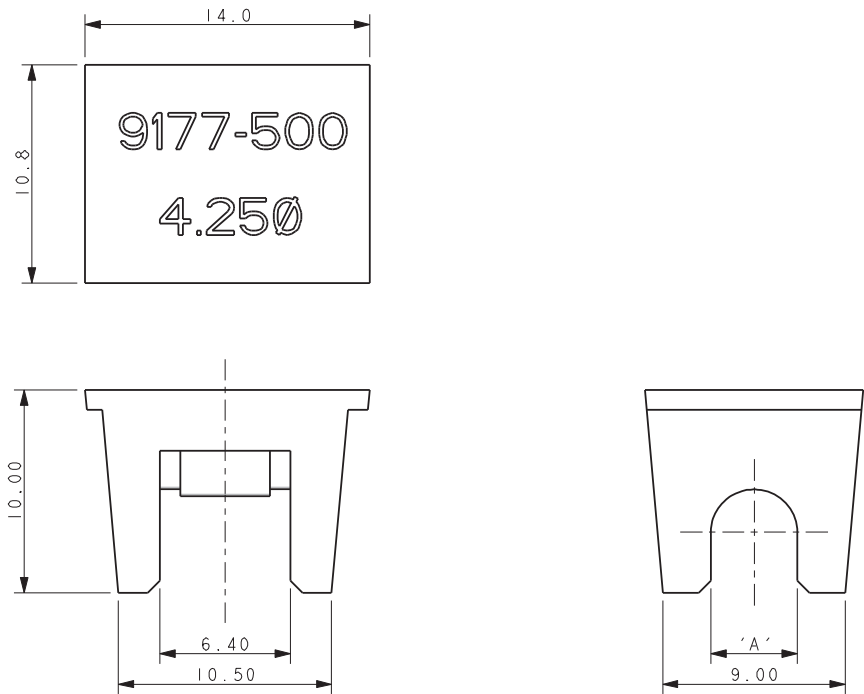
### NOTES:

1. FOR FULL PRODUCT SPECIFICATION REFER TO AVX SPEC 201-01-208 AND 201-01-209
2. DIMENSIONS SHOWN ARE REFERENCE DIMENSIONS.
3. ASSEMBLY TOOLING ON PAGE 4.

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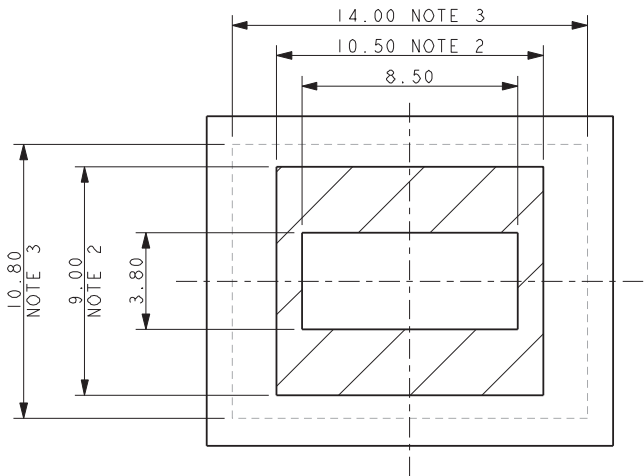
## 9177-500

### ASSEMBLY TOOLING



| Wire Guage | Max Insulation<br>(Dimensions 'A') | Tool Number<br>Metal Tool for<br>High Volume | Tool Numbre<br>Plastic Tool for<br>Small to Medium Volume |
|------------|------------------------------------|----------------------------------------------|-----------------------------------------------------------|
| 12-18 AWG  | ø 4.25                             | 06-9177-7020-01-001                          | 06-9177-7022-01-001                                       |
| 12-18 AWG  | ø 3.50                             | 06-9177-7020-02-001                          | 06-9177-7022-02-001                                       |
| 12-18 AWG  | ø 2.75                             | 06-9177-7020-03-001                          | 06-9177-7022-03-001                                       |

- NOTES:
1. ASSEMBLY TOOLING FOR CONTACTS 70-9177-001-5XX-006 ONLY.
  2. MINIMUM AREA OF PCB TO BE KEPT CLEAR OF COMPONENTS. TRACKS PERMISSIBLE.
  3. MAXIMUM COMPONENT HEIGHT 9.0MM IN THIS AREA.
  4. REFER TO TABLE FOR CORRECT TOOL/WIRE COMBINATION.
  5. REFER TO APPLICATION NOTE 201-01-209 FOR FURTHER INFORMATION.
  6. DIMENSIONS FOR TOOL ARE REFERENCE DIMENSIONS.



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