

# 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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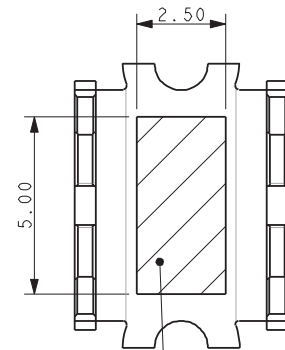
## CONTACT DETAILS



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:

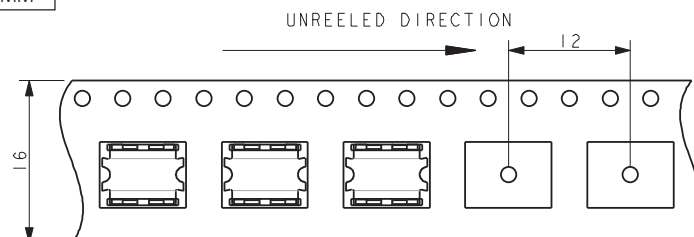
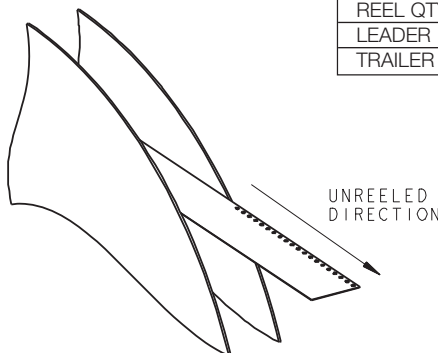
- CONNECTOR FO IDC WIRE TO BOARD CONNECTION.
- CONTACT MATERIAL: PHOSPHORE BRONZE.
- CONTACT PLATING: PURE TIN.
- CONTACTS DESIGNED TO ACCEPT BETWEEN 12 AND 18 GAUGE STANDED WIRE, SEE TABLE.
- ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
- FOR FULL PRODUCT SPECIFICATIONS REFER TO AVX SPECIFICATION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



PICK AND PLACE AREA

## PACKING DETAILS

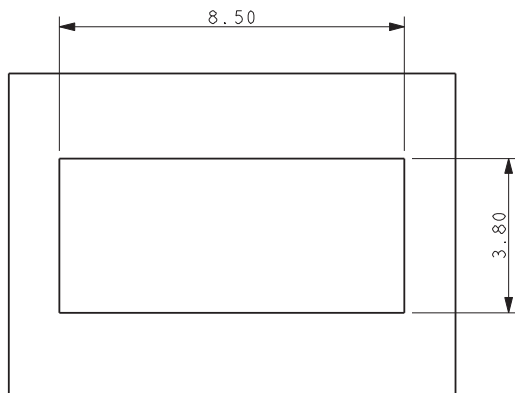
REEL QTY	700
LEADER	480MM
TRAILER	120MM



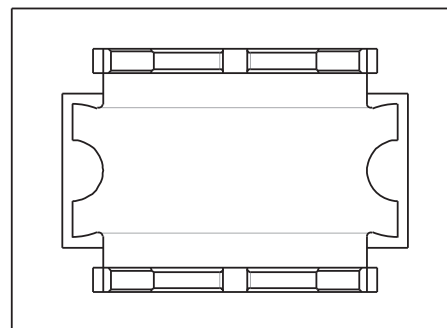
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## 12-18 AWG IDC WIRE TO BOARD CONNECTOR SINGLE CONTACT



**SUGGESTED PCB LAYOUT**



**ORIENTATION OF CONTACT  
ON PAD**

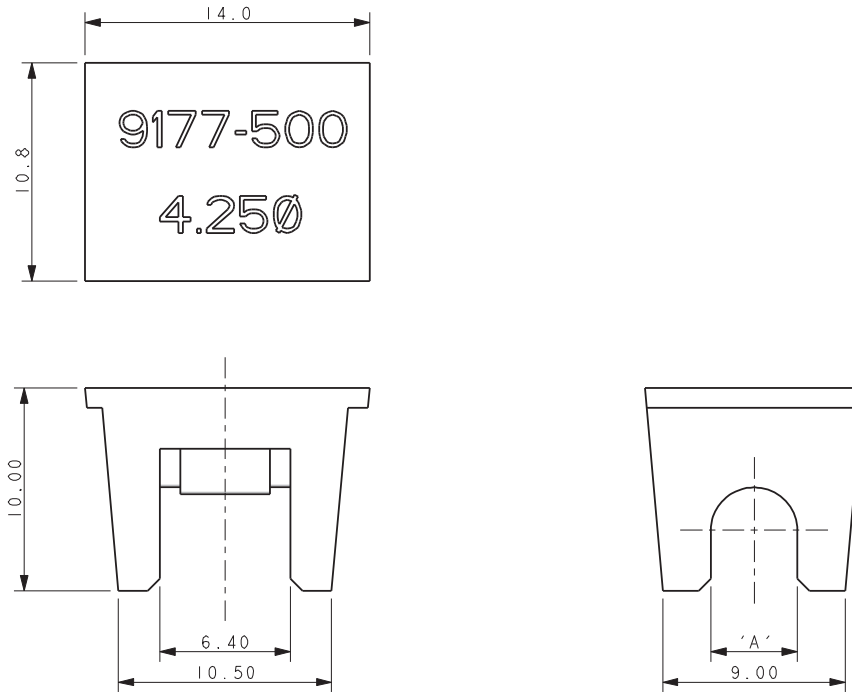
NOTES:

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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## ASSEMBLY TOOLING



Wire Gauge	Max Insulation (Dimensions 'A')	Tool Number Metal Tool for High Volume	Tool Number Plastic Tool for 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.

