General Information





GENERAL DESCRIPTION

AVX industrial/transportation grade insulation displacement connectors (IDC) have been proven in the market for over ten years. Providing a very simple one-step termination process, these connectors proved a robust wire-to-board (WTB) termination in harsh applications.

The 9176-800 series has been developed specifically for 22-26AWG discrete wires in size critical applications. By reducing the "Z" axis height by 1.0mm and the overall volume by up to 50%, this new package size is an ideal choice in space constrained applications over previous IDC connectors. In addition, an expanded size range is available starting from a 1 position up to 4 positions in each wire gauge. The entire range provides new packaging solutions in industrial, medical and transportation applications such as smart metering, LED lighting, industrial controls and portable monitoring and measurement devices.

APPLICATIONS

- Connecting discrete wires and components to a PCB
- Bringing power and signals onto a PCB
- Daisy chaining or interconnecting PCB's together
- Application Notes: Refer to 201-01-216

FEATURES AND BENEFITS

- · Redundant and fatigue resistant phosphor bronze material provides a gas tight, cold welded connection to the wire
- IDC connectors can be potted or over molded to encapsulate electronic modules and provide environmental protection
- The 1p version is available in industry standard colors to match individual wires for error free wire termination

ELECTRICAL

· Current Rating: 22AWG: 7 amps

24AWG: 6 amps 26AWG: 5 amps 28AWG: 4 amps 30AWG: 3 amps

Voltage Rating: 1p: 600V

2p-4p: 100V

· Durability: 1 Cycle

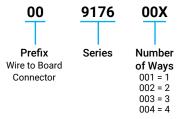
ENVIRONMENTAL

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

MECHANICAL

- · Insulator Material: Glass-Filled Nylon 46; UL94V0
- · Contact Material: Phosphor Bronze
- · Plating: Lead-Free Tin Over Nickel

HOW TO ORDER





| Time dadge dize | | | | | | | |
|-----------------|--------------------------|------------------------------------|----------------|--|--|--|--|
| Code | Accepted Wire Guage | Maximum Wire Isulation Diameter | UL Approved | | | | |
| 853 | 22AWG Solid and Stranded | 1.40 | Approved | | | | |
| 863 | 24AWG Solid and Stranded | 1.40 | Approved | | | | |
| 873 | 26AWG Solid and Stranded | 1.40 | Approved | | | | |
| 883 | 28AWG Solid and Stranded | 0.80 to 1.40 | Approved | | | | |
| 884 | 28AWG Solid and Stranded | 0.80 | Approved | | | | |
| 893 | 30AWG Solid and Stranded | 0.80 to 1.40 | Approved | | | | |
| 894 | 30AWG Solid and Stranded | 0.80 | Approved | | | | |



9 = White Standard Solid Colors (1p only)

3 = Blue 4 = Yellow 5 = Red

6 = Green 7 = Orange 8 = Black



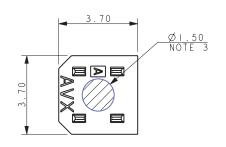
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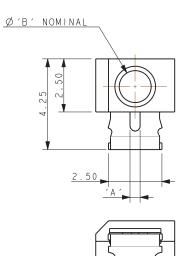


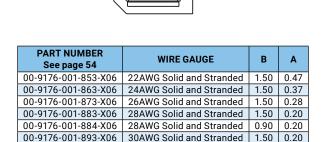
1 Position



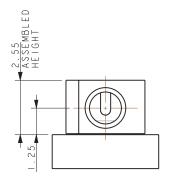
00-9176-001-8XX-X06 1 WAY

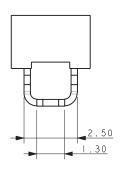






00-9176-001-894-X06 30AWG Solid and Stranded 0.90 0.20



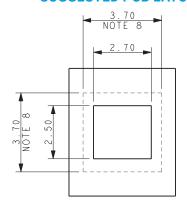


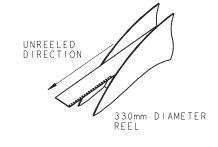
NOTES:

- 1. 1 WAY CONNECTOR FOR IDC WIRE TO BOARD CONNECTOR.
- 2. CONTACT/CAP TO MATCH 22AWG TO 26AWG STRANDED AND SOLID WIRE, MAXIMUM INSULATOR 1.40 DIAMETER
- 3. FLAT FACE ON TOP OF CAP TO AID PICK AND PLACE ASSEMBLY.
- 4. FOR FULL PRODUCT SPECIFICATION REFER TO AVX SPEC 201-01-215.
- 5. ASSEMBLY PROCEDURE, REFER TO APPLICATION NOTES 201-01-216.
- 6. GENERAL TOLERANCE ±0.20 UNLESS STATED.
- 7. PACKED IN TAPE AND REEL, QUANTITY PER REEL 1700.
- 8. CONNECTOR OUTLINE.
- 9. CONTACT MATERIAL: TIN PLATED COPPER ALLOY.
- 10. INSULATOR MATERIAL: HIGH TEMPERATURE NYLON, GLASS FILLED. UL94 V-0, COLOR REFER TO PAGE 54.
- 11. UL REFERENCE E90723 (US AND CANADA).

PACKING DETAILS

SUGGESTED PCB LAYOUT



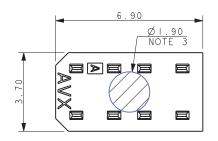


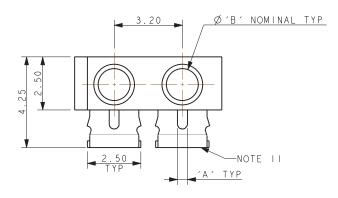


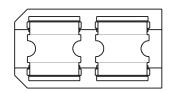
2 Position



00-9176-001-8XX-X06 2 WAY

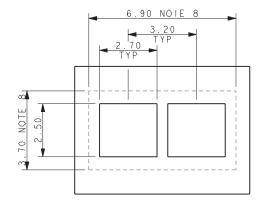


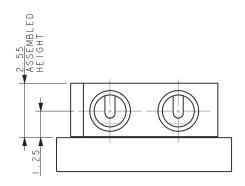


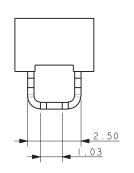


| PART NUMBER See page 54 | WIRE GAUGE | В | A |
|----------------------------|--------------------------|------|------|
| 00-9176-002-853-X06 | 22AWG Solid and Stranded | 1.50 | 0.47 |
| 00-9176-002-863-X06 | 24AWG Solid and Stranded | 1.50 | 0.37 |
| 00-9176-002-873-X06 | 26AWG Solid and Stranded | 1.50 | 0.28 |
| 00-9176-002-883-X06 | 28AWG Solid and Stranded | 1.50 | 0.20 |
| 00-9176-002-884-X06 | 28AWG Solid and Stranded | 0.90 | 0.20 |
| 00-9176-002-893-X06 | 30AWG Solid and Stranded | 1.50 | 0.20 |
| 00-9176-002-894-X06 | 30AWG Solid and Stranded | 0.90 | 0.20 |

SUGGESTED PCB LAYOUT



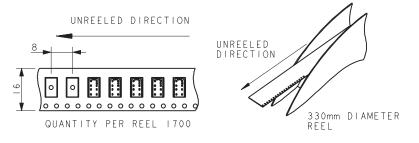




NOTES:

- 1. 2 WAY CONNECTOR FOR IDC WIRE TO BOARD CONNECTOR.
- 2. CONTACT/CAP TO MATCH 22AWG TO 26AWG STRANDED AND SOLID WIRE, MAXIMUM INSULATOR 1.40 DIAMETER
- 3. FLAT FACE ON TOP OF CAP TO AID PICK AND PLACE ASSEMBLY.
- 4. FOR FULL PRODUCT SPECIFICATION REFER TO AVX SPEC 201-01-215.
- 5. ASSEMBLY PROCEDURE, REFER TO APPLICATION NOTES 201-01-216.
- 6. GENERAL TOLERANCE ±0.20 UNLESS STATED.
- 7. PACKED IN TAPE AND REEL, QUANTITY PER REEL 1700.
- 8. CONNECTOR OUTLINE.
- 9. CONTACT MATERIAL: TIN PLATED COPPER ALLOY.
- 10. INSULATOR MATERIAL: HIGH TEMPERATURE NYLON, GLASS FILLED. UL94 V-0, COLOR REFER TO PAGE 54.
- 11. UL REFERENCE E90723 (US AND CANADA).

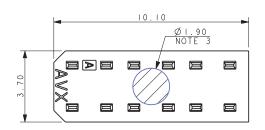
PACKING DETAILS

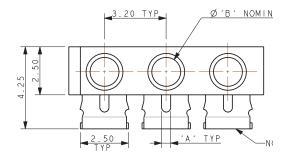


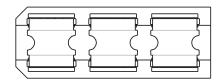
3 Position



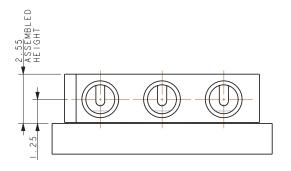
00-9176-001-8XX-X06 3 WAY

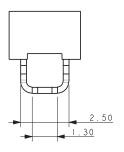






| PART NUMBER See page 54 | WIRE GAUGE | В | Α |
|----------------------------|--------------------------|------|------|
| 00-9176-003-853-X06 | 22AWG Solid and Stranded | 1.50 | 0.47 |
| 00-9176-003-863-X06 | 24AWG Solid and Stranded | 1.50 | 0.37 |
| 00-9176-003-873-X06 | 26AWG Solid and Stranded | 1.50 | 0.28 |
| 00-9176-003-883-X06 | 28AWG Solid and Stranded | 1.50 | 0.20 |
| 00-9176-003-884-X06 | 28AWG Solid and Stranded | 0.90 | 0.20 |
| 00-9176-003-893-X06 | 30AWG Solid and Stranded | 1.50 | 0.20 |
| 00-9176-003-894-X06 | 30AWG Solid and Stranded | 0.90 | 0.20 |

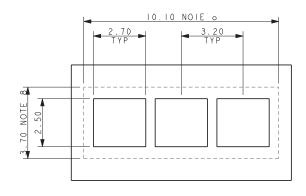




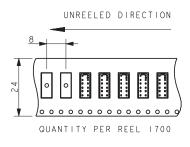
NOTES:

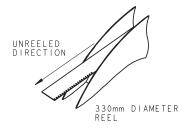
- 1. 3 WAY CONNECTOR FOR IDC WIRE TO BOARD CONNECTOR.
- 2. CONTACT/CAP TO MATCH 22AWG TO 26AWG STRANDED AND SOLID WIRE, MAXIMUM INSULATOR 1.40 DIAMETER
- 3. FLAT FACE ON TOP OF CAP TO AID PICK AND PLACE ASSEMBLY.
- 4. FOR FULL PRODUCT SPECIFICATION REFER TO AVX SPEC 201-01-215.
- 5. ASSEMBLY PROCEDURE, REFER TO APPLICATION NOTES 201-01-216.
- 6. GENERAL TOLERANCE ±0.20 UNLESS STATED.
- 7. PACKED IN TAPE AND REEL, QUANTITY PER REEL 1700.
- 8. CONNECTOR OUTLINE.
- 9. CONTACT MATERIAL: TIN PLATED COPPER ALLOY.
- 10. INSULATOR MATERIAL: HIGH TEMPERATURE NYLON, GLASS FILLED. UL94 V-0, COLOR REFER TO PAGE 54.
- 11. UL REFERENCE E90723 (US AND CANADA).

SUGGESTED PCB LAYOUT



PACKING DETAILS

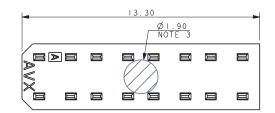


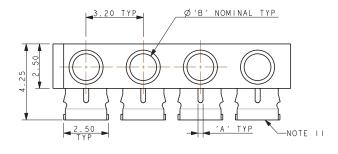


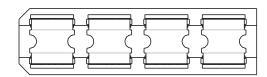
4 Position



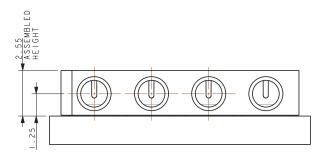
00-9176-001-8X3-X06 4 WAY

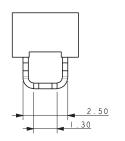






| PART NUMBER See page 54 | WIRE GAUGE | В | A |
|----------------------------|--------------------------|------|------|
| 00-9176-004-853-X06 | 22AWG Solid and Stranded | 1.50 | 0.47 |
| 00-9176-004-863-X06 | 24AWG Solid and Stranded | 1.50 | 0.37 |
| 00-9176-004-873-X06 | 26AWG Solid and Stranded | 1.50 | 0.28 |
| 00-9176-004-883-X06 | 28AWG Solid and Stranded | 1.50 | 0.20 |
| 00-9176-004-884-X06 | 28AWG Solid and Stranded | 0.90 | 0.20 |
| 00-9176-004-893-X06 | 30AWG Solid and Stranded | 1.50 | 0.20 |
| 00-9176-004-894-X06 | 30AWG Solid and Stranded | 0.90 | 0.20 |

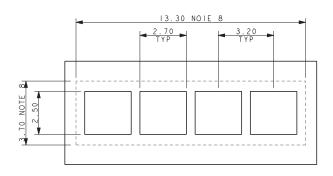




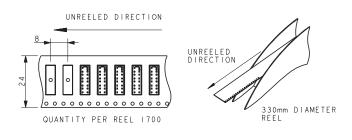
NOTES:

- 1. 4 WAY CONNECTOR FOR IDC WIRE TO BOARD CONNECTOR.
- 2. CONTACT/CAP TO MATCH 22AWG TO 26AWG STRANDED AND SOLID WIRE, MAXIMUM INSULATOR 1.40 DIAMETER
- 3. FLAT FACE ON TOP OF CAP TO AID PICK AND PLACE ASSEMBLY.
- 4. FOR FULL PRODUCT SPECIFICATION REFER TO AVX SPEC 201-01-215.
- $5. \ \ \mathsf{ASSEMBLY} \ \mathsf{PROCEDURE}, \mathsf{REFER} \ \mathsf{TO} \ \mathsf{APPLICATION} \ \mathsf{NOTES} \ \ \mathsf{201-01-216}.$
- 6. GENERAL TOLERANCE ±0.20 UNLESS STATED.
- 7. PACKED IN TAPE AND REEL, QUANTITY PER REEL 1700.
- 8. CONNECTOR OUTLINE.
- 9. CONTACT MATERIAL: TIN PLATED COPPER ALLOY.
- 10. INSULATOR MATERIAL: HIGH TEMPERATURE NYLON, GLASS FILLED. UL94 V-0, COLOR REFER TO PAGE 54.
- 11. UL REFERENCE E90723 (US AND CANADA).

SUGGESTED PCB LAYOUT

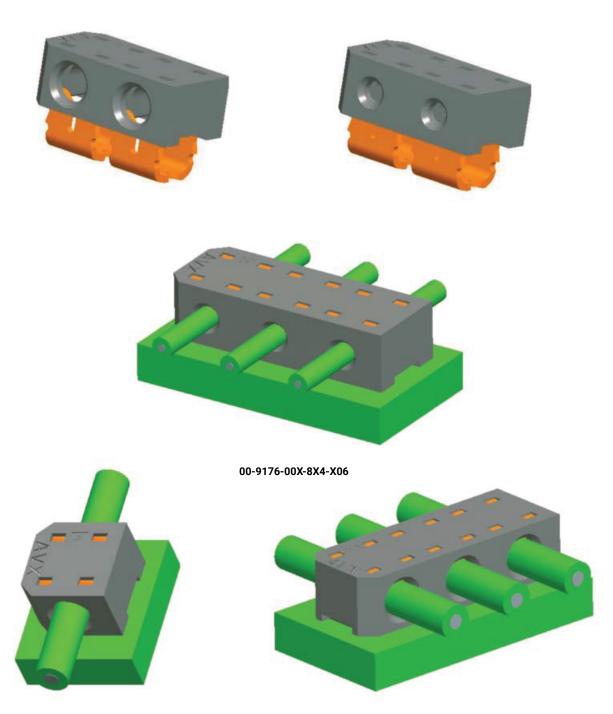


PACKING DETAILS





CONNECTOR DETAILS



00-9176-00X-8X3-X06

单击下面可查看定价,库存,交付和生命周期等信息

>>AVX