

# Reduced Thru Wire Connector

## 18-24 AWG: WTW

9286-200



Wire-to-Wire (WTW) connectors have been used in the industrial market for years with traditional 2-Piece (plug & socket) connector systems. These require crimp and poke wire terminations to connect discrete wires together. While these provide repeated pluggability and latching, they are often size and cost prohibited in applications where the wires may only need to be replaced once or twice during their life.

The reduced 9286-200 series of thru wire connectors expands on the already proven 9286 poke-home discrete WTW family of connectors, but in a smaller package size. The development of an active stainless steel spring contact eliminates the need for push button activation to insert and remove wires which offers a significant cost savings. The mechanical properties of this contact provide maximum wire retention across a broad range of solid and stranded wire gauges, making this connector very versatile in field installations.

### APPLICATIONS

- Industrial Machine Controls; motors, drives, solenoids, sensors, fans, pumps, etc...
- Commercial Buildings; controls, security, fire and sensors
- Smart Grid; meters, breakers and panels
- SSL/LED; fixtures, signage and streetlights
- Application notes; refer to 201-01-172

### FEATURES AND BENEFITS

- Simple strip and poke-home wire insertion with twist and pull wire extraction
- High spring force stainless steel contact maximizes cost, strength and flexibility
- Accepts 18-24 AWG solid and stranded wires
- Expanded size offering to cover multiple power and signal applications: 1p-6p

### ELECTRICAL

- Voltage Rating: 300 VAC
- Current Rating: See matrix below

### ENVIRONMENTAL

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

### MECHANICAL

- Insulator Material: Glass-Filled Nylon 46; UL94V0
- Fixed Contact Material: Copper Alloy
- Flexing Contact: Stainless Steel
- Fixed Contact Plating; Tin over Nickel
- Durability: 5 Cycles

### HOW TO ORDER

| <b>00</b> | <b>9286</b> | <b>00X</b>  |      |            |         |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |
|-----------|-------------|---|------|------------|---------|-----|---|--------|-----|---|--------|-----|---|--------|-----|---|--------|-----|---|--------|-----|---|--------|
| Prefix    | Series      | Number of Ways  |      |            |         |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |
|           |             | <table border="1"> <thead> <tr> <th>Code</th> <th>No of Ways</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>001</td> <td>1</td> <td>Page 2</td> </tr> <tr> <td>002</td> <td>2</td> <td>Page 3</td> </tr> <tr> <td>003</td> <td>3</td> <td>Page 4</td> </tr> <tr> <td>004</td> <td>4</td> <td>Page 5</td> </tr> <tr> <td>005</td> <td>5</td> <td>Page 6</td> </tr> <tr> <td>006</td> <td>6</td> <td>Page 7</td> </tr> </tbody> </table> | Code | No of Ways | Details | 001 | 1 | Page 2 | 002 | 2 | Page 3 | 003 | 3 | Page 4 | 004 | 4 | Page 5 | 005 | 5 | Page 6 | 006 | 6 | Page 7 |
| Code      | No of Ways  | Details   |      |            |         |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |
| 001       | 1           | Page 2  |      |            |         |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |
| 002       | 2           | Page 3  |      |            |         |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |
| 003       | 3           | Page 4  |      |            |         |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |
| 004       | 4           | Page 5  |      |            |         |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |
| 005       | 5           | Page 6  |      |            |         |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |
| 006       | 6           | Page 7  |      |            |         |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |     |   |        |

| <b>203</b>  |                                  |                     |                |     |                                  |                 |
|---|----------------------------------|---------------------|----------------|-----|----------------------------------|-----------------|
| Wire Size   |                                  |                     |                |     |                                  |                 |
| <table border="1"> <thead> <tr> <th>Code</th> <th>Accepted Wire Gauge</th> <th>Max Insulation</th> </tr> </thead> <tbody> <tr> <td>203</td> <td>18 – 24 AWG<br/>Solid or Stranded</td> <td>2.10mm Diameter</td> </tr> </tbody> </table> | Code                             | Accepted Wire Gauge | Max Insulation | 203 | 18 – 24 AWG<br>Solid or Stranded | 2.10mm Diameter |
| Code  | Accepted Wire Gauge              | Max Insulation      |                |     |                                  |                 |
| 203   | 18 – 24 AWG<br>Solid or Stranded | 2.10mm Diameter     |                |     |                                  |                 |

|                 |                   |
|-----------------|-------------------|
| <b>X</b>        | <b>06</b>         |
| Insulator Color | Plating Option    |
| 9 = UL White    | 06 = Tin All Over |



### CURRENT RATING

| Wire gauge | Maximum approved current (amps) |             |
|------------|---------------------------------|-------------|
|            | UL (USA)                        | UL (Canada) |
| 18AWG      | 8                               | 8           |
| 20AWG      | 6                               | 4           |
| 22AWG      | 5                               | 4           |
| 24AWG      | 3                               | 2           |

UL File #E90723

091416



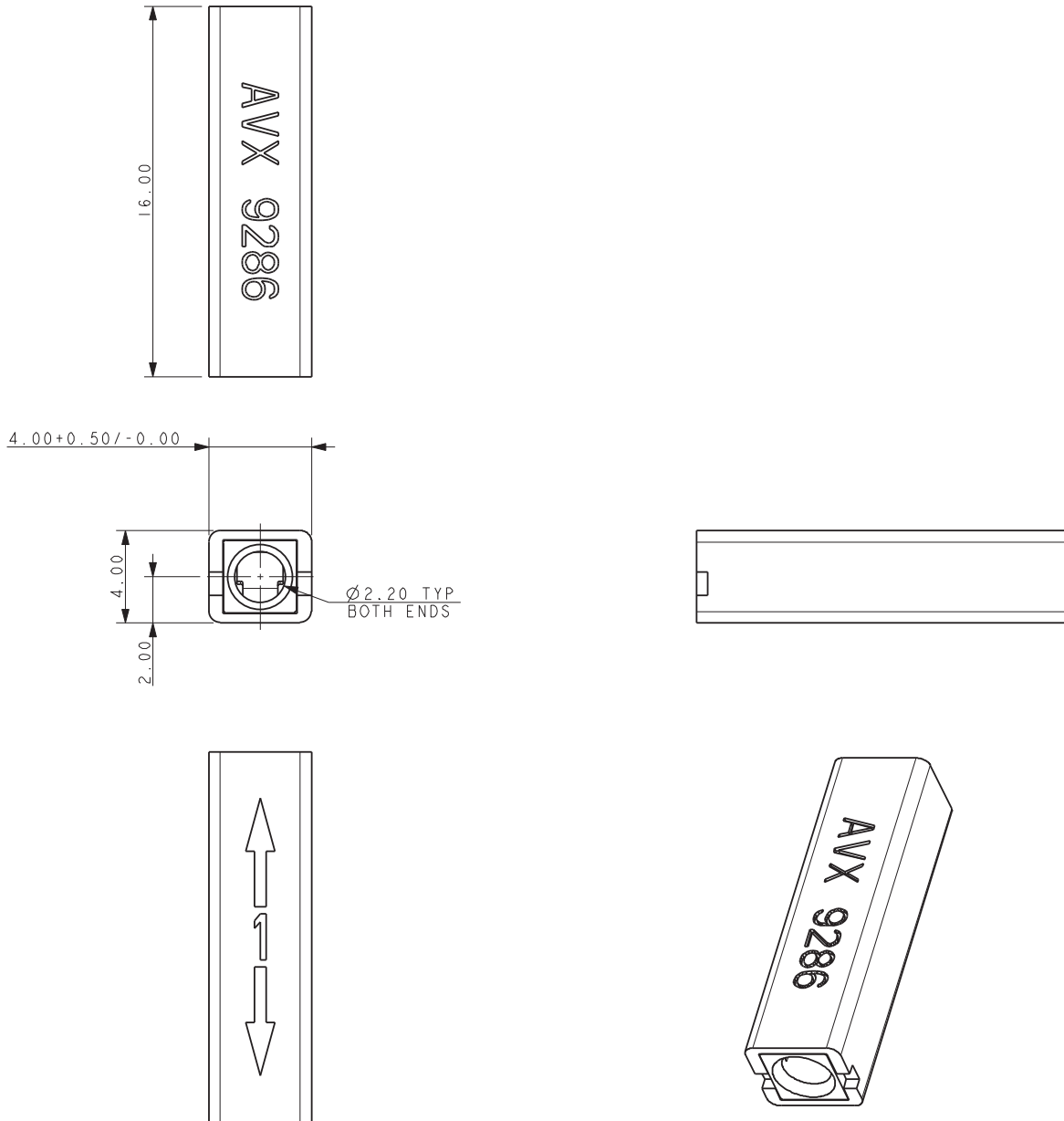
# Reduced Thru Wire Connector

## 18-24 AWG: WTW

9286-200

### POKE HOME 1 WAY – THRU WIRE

#### 18AWG TO 24AWG



NOTES:

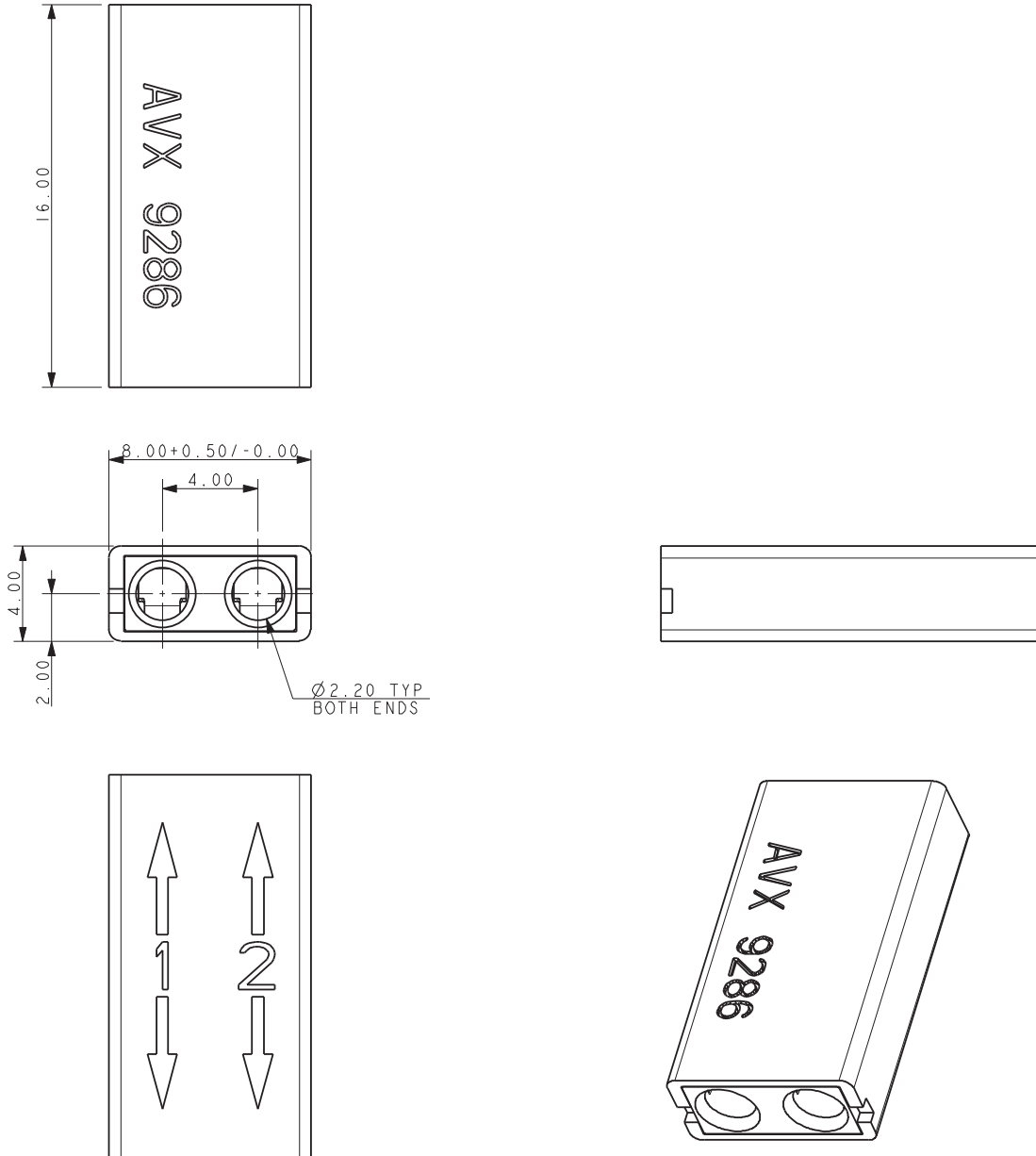
1. 1 WAY WIRE TO WIRE POKE HOME CONNECTOR.
2. WIRE CONDUCTOR SIZES 18-24AWG (SOLID OR STRANDED).  
MAXIMUM INSULATION 2.10MM DIAMETER.
3. INSULATION MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR SEE PAGE 1.
4. CONTACT MATERIAL: FIXED CONTACT: TIN PLATED COPPER ALLOY.  
FLEXING CONTACT: STAINLESS STEEL.
5. PACKING IN BAGS, 1000 PIECES PER BAG.
6. FOR FURTHER DETAILS REFER TO SPECIFICATION 201-01-171 AND APPLICATION NOTES 201-01-172.
7. UL APPROVED, UL FILE REFERENCE E90723 (US AND CANADA).

# Reduced Thru Wire Connector

## 18-24 AWG: WTW

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### POKE HOME 2 WAY – THRU WIRE 18AWG TO 24AWG



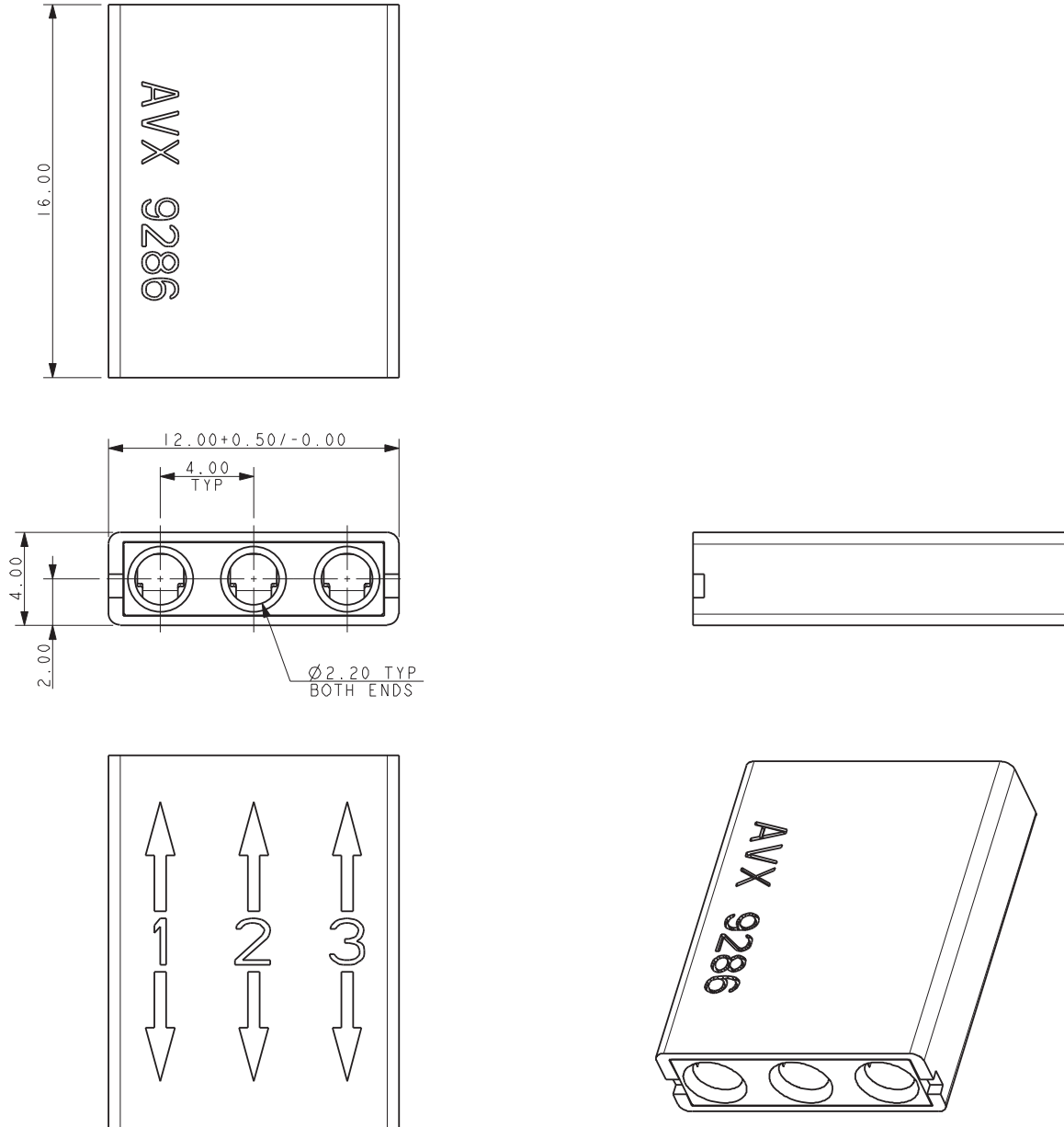
**NOTES:**

1. 2 WAY WIRE TO WIRE POKE HOME CONNECTOR.
2. WIRE CONDUCTOR SIZES 18-24AWG (SOLID OR STRANDED).  
MAXIMUM INSULATION 2.10MM DIAMETER.
3. INSULATION MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR SEE PAGE 1.
4. CONTACT MATERIAL: FIXED CONTACT: TIN PLATED COPPER ALLOY.  
FLEXING CONTACT: STAINLESS STEEL.
5. PACKING IN BAGS, 1000 PIECES PER BAG.
6. FOR FURTHER DETAILS REFER TO SPECIFICATION 201-01-171 AND APPLICATION NOTES 201-01-172.
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# Reduced Thru Wire Connector 18-24 AWG: WTW

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## POKE HOME 3 WAY – THRU WIRE 18AWG TO 24AWG



**NOTES:**

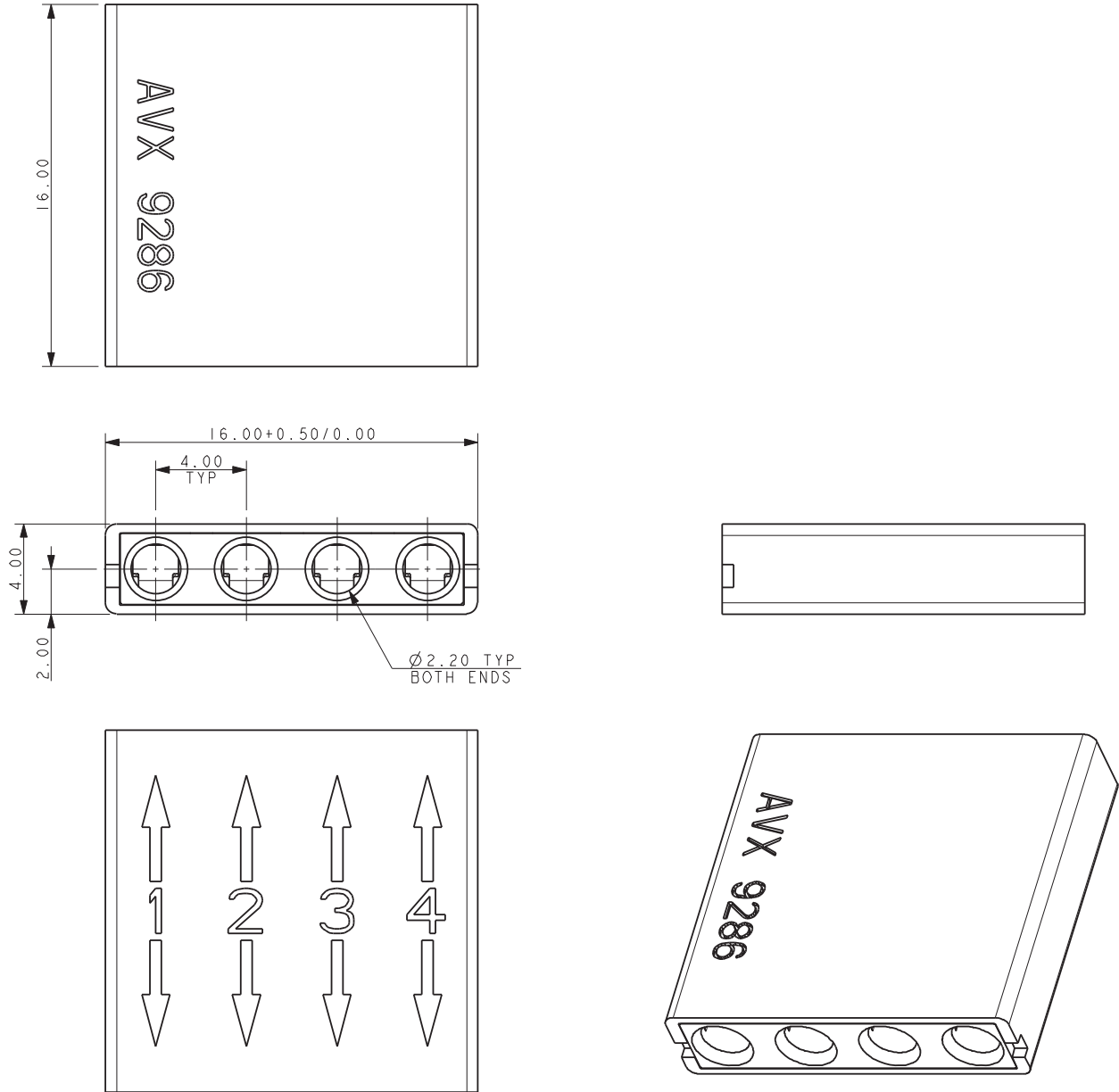
1. 3 WAY WIRE TO WIRE POKE HOME CONNECTOR.
2. WIRE CONDUCTOR SIZES 18-24AWG (SOLID OR STRANDED).  
MAXIMUM INSULATION 2.10MM DIAMETER.
3. INSULATION MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR SEE PAGE 1.
4. CONTACT MATERIAL: FIXED CONTACT: TIN PLATED COPPER ALLOY.  
FLEXING CONTACT: STAINLESS STEEL.
5. PACKING IN BAGS, 1000 PIECES PER BAG.
6. FOR FURTHER DETAILS REFER TO SPECIFICATION 201-01-171 AND APPLICATION NOTES 201-01-172.
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# Reduced Thru Wire Connector

## 18-24 AWG: WTW

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### POKE HOME 4 WAY – THRU WIRE 18AWG TO 24AWG



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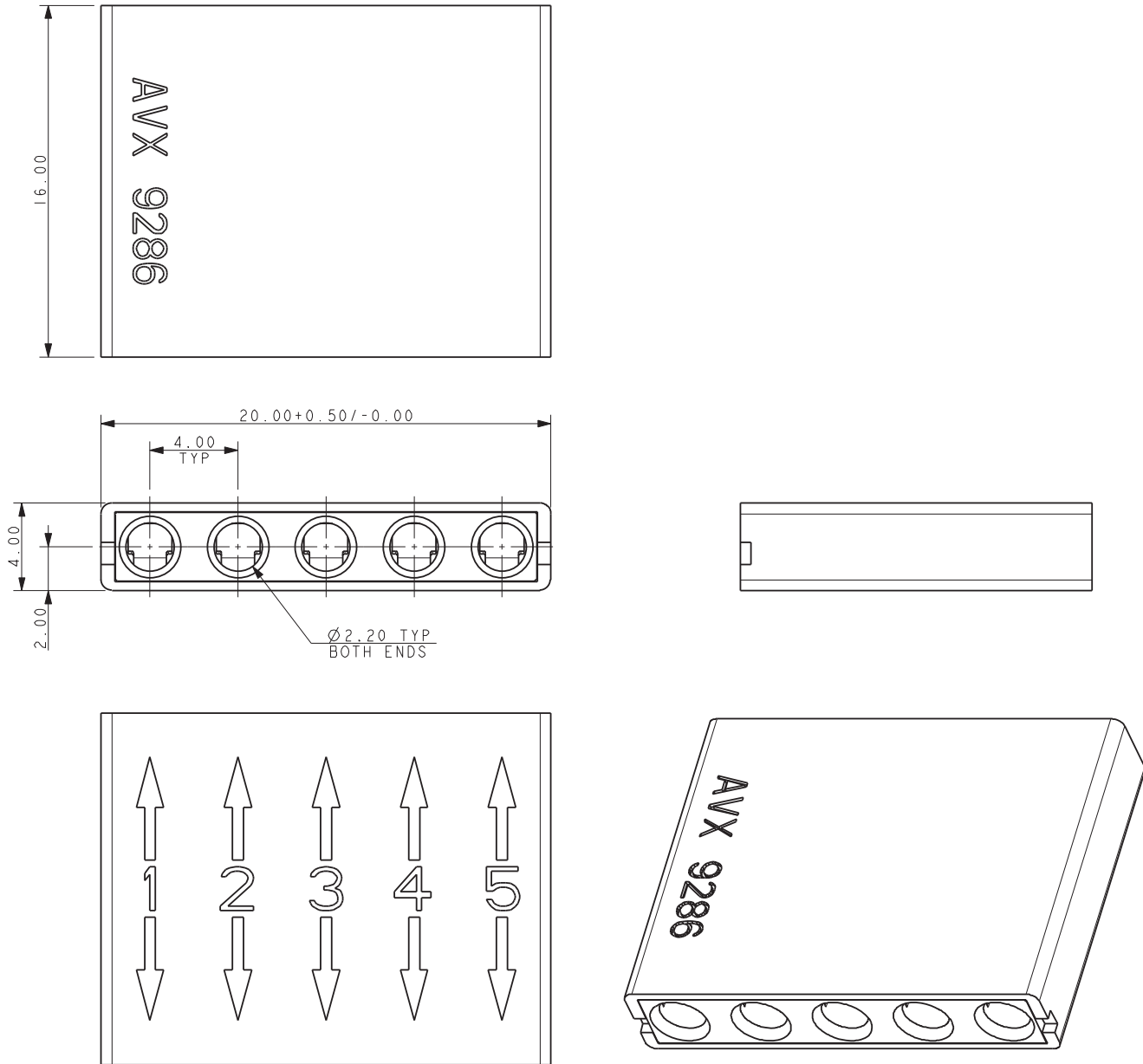
1. 4 WAY WIRE TO WIRE POKE HOME CONNECTOR.
2. WIRE CONDUCTOR SIZES 18-24AWG (SOLID OR STRANDED).  
MAXIMUM INSULATION 2.10MM DIAMETER.
3. INSULATION MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR SEE PAGE 1.
4. CONTACT MATERIAL: FIXED CONTACT: TIN PLATED COPPER ALLOY.  
FLEXING CONTACT: STAINLESS STEEL.
5. PACKING IN BAGS, 1000 PIECES PER BAG.
6. FOR FURTHER DETAILS REFER TO SPECIFICATION 201-01-171 AND APPLICATION NOTES 201-01-172.
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# Reduced Thru Wire Connector

## 18-24 AWG: WTW

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### POKE HOME 5 WAY – THRU WIRE 18AWG TO 24AWG



**NOTES:**

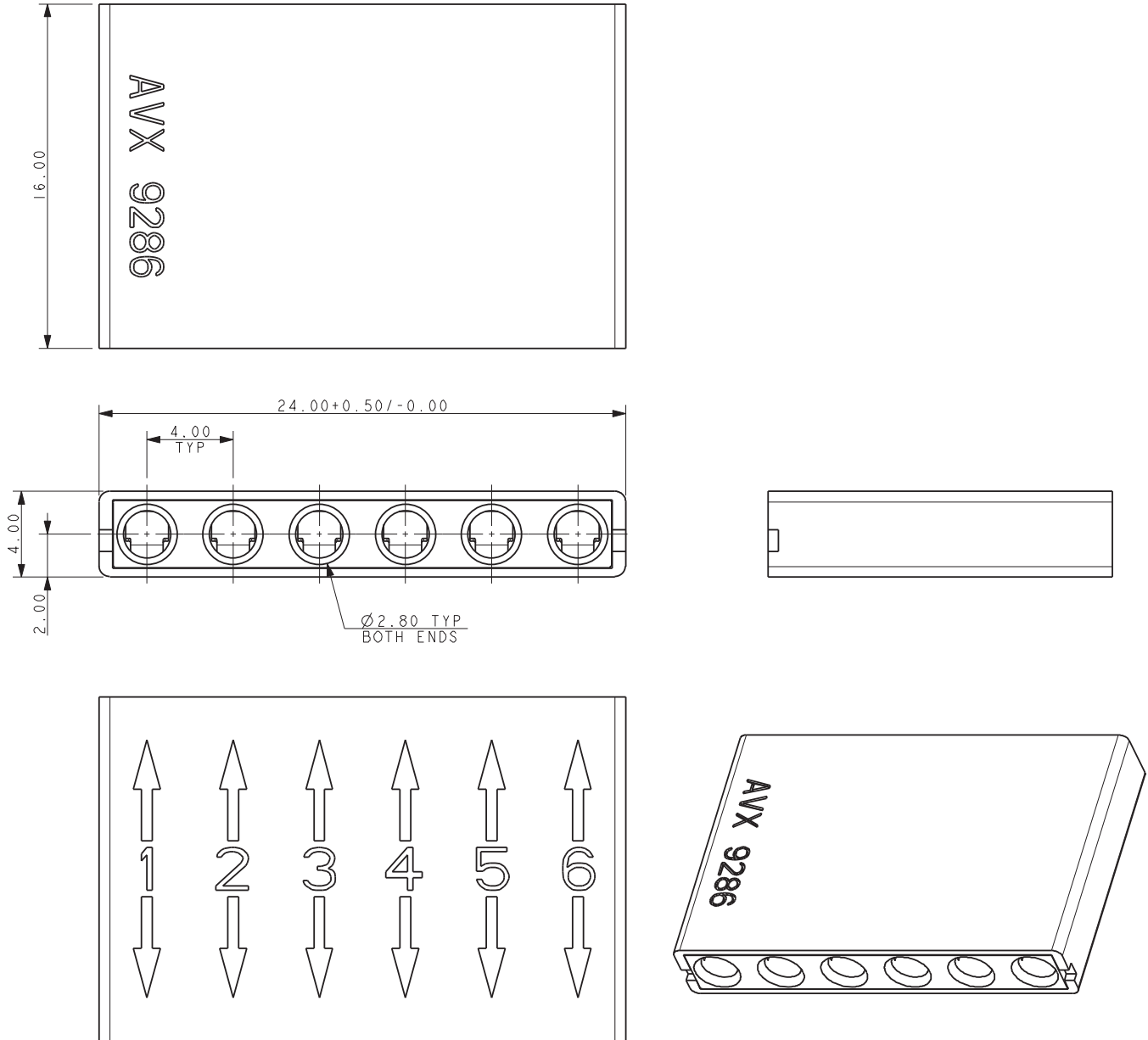
1. 5 WAY WIRE TO WIRE POKE HOME CONNECTOR.
2. WIRE CONDUCTOR SIZES 18-24AWG (SOLID OR STRANDED).  
MAXIMUM INSULATION 2.10MM DIAMETER.
3. INSULATION MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR SEE PAGE 1.
4. CONTACT MATERIAL: FIXED CONTACT: TIN PLATED COPPER ALLOY.  
FLEXING CONTACT: STAINLESS STEEL.
5. PACKING IN BAGS, 1000 PIECES PER BAG.
6. FOR FURTHER DETAILS REFER TO SPECIFICATION 201-01-171 AND APPLICATION NOTES 201-01-172.
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# Reduced Thru Wire Connector

## 18-24 AWG: WTW

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### POKE HOME 6 WAY – THRU WIRE 18AWG TO 24AWG



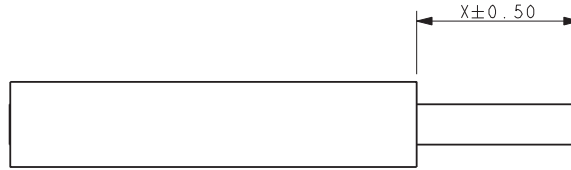
**NOTES:**

1. 6 WAY WIRE TO WIRE POKE HOME CONNECTOR.
2. WIRE CONDUCTOR SIZES 18-24AWG (SOLID OR STRANDED).  
MAXIMUM INSULATION 2.10MM DIAMETER.
3. INSULATION MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR SEE PAGE 1.
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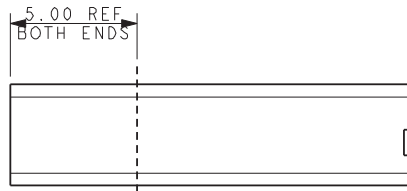
9286-200

## POKE HOME – THRU WIRE WIRE TRIM

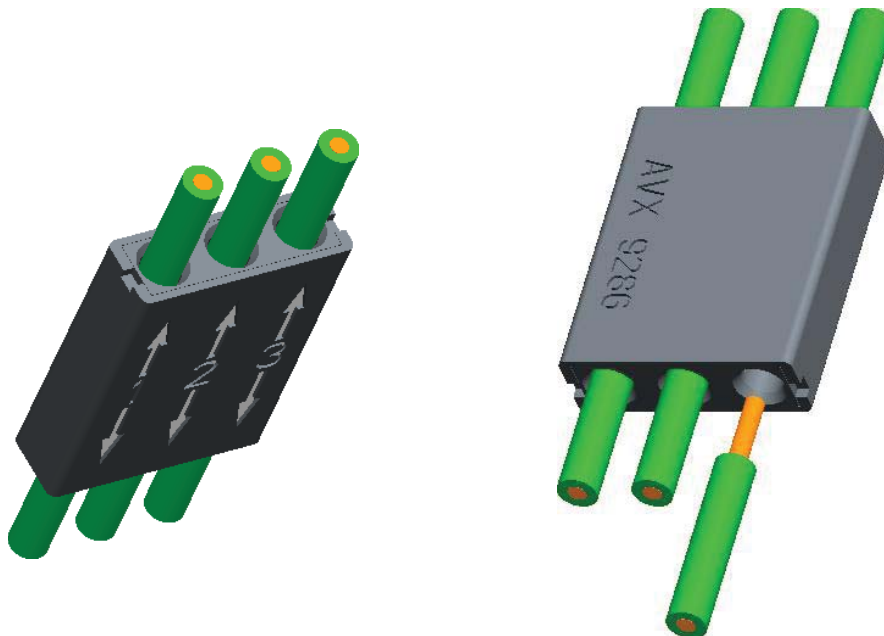


| Insulation Diameter  | Wire Trim Length X |
|--|--------------------|
| Up to 2.10 Diameter  | $4.00 \pm 0.50$    |
| Above 2.10mm Diameter<br>See Application Notes<br>201-01-172 | $7.00 \pm 0.50$    |

## REST POSITION OF CONTACT TIP



## POKE HOME – THRU WIRE ASSEMBLY



FOR FULL ASSEMBLY DETAILS REFER TO APPLICATION NOTE 201-01-172