

# Reduced Junction Box Connector

## 18-24 AWG: WTW

9286-250



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 9286-250 series of junction connectors expands on the already proven 9286 poke-home discrete WTW family of connectors, but in a smaller package size. Junction box connectors electrically connect each of the inserted wires together, similar to a branch or splitter application but with multiple outputs. 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 allow up to 8 wires to be connected together

### 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; 3 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>004</td> <td>4</td> <td>Page 22</td> </tr> <tr> <td>006</td> <td>6</td> <td>Page 23</td> </tr> <tr> <td>008</td> <td>8</td> <td>Page 24</td> </tr> </tbody> </table>	Code	No of Ways	Details	004	4	Page 22	006	6	Page 23	008	8	Page 24
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<b>253</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>253</td> <td>18 – 24 AWG Solid or Stranded</td> <td>2.10mm Diameter</td> </tr> </tbody> </table>	Code	Accepted Wire Gauge	Max Insulation	253	18 – 24 AWG Solid or Stranded	2.10mm Diameter
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<b>X</b>	<b>06</b>
Insulator Color	Plating Option
Standard 9 = Red	06 = Tin All Over
Special Order Only	
0 = Black	
2 = Brown	
3 = Blue	
4 = Yellow	
6 = Green	
7 = Orange	



### CURRENT RATING

18AWG	20AWG	22AWG	24AWG
9A	8A	7A	3A

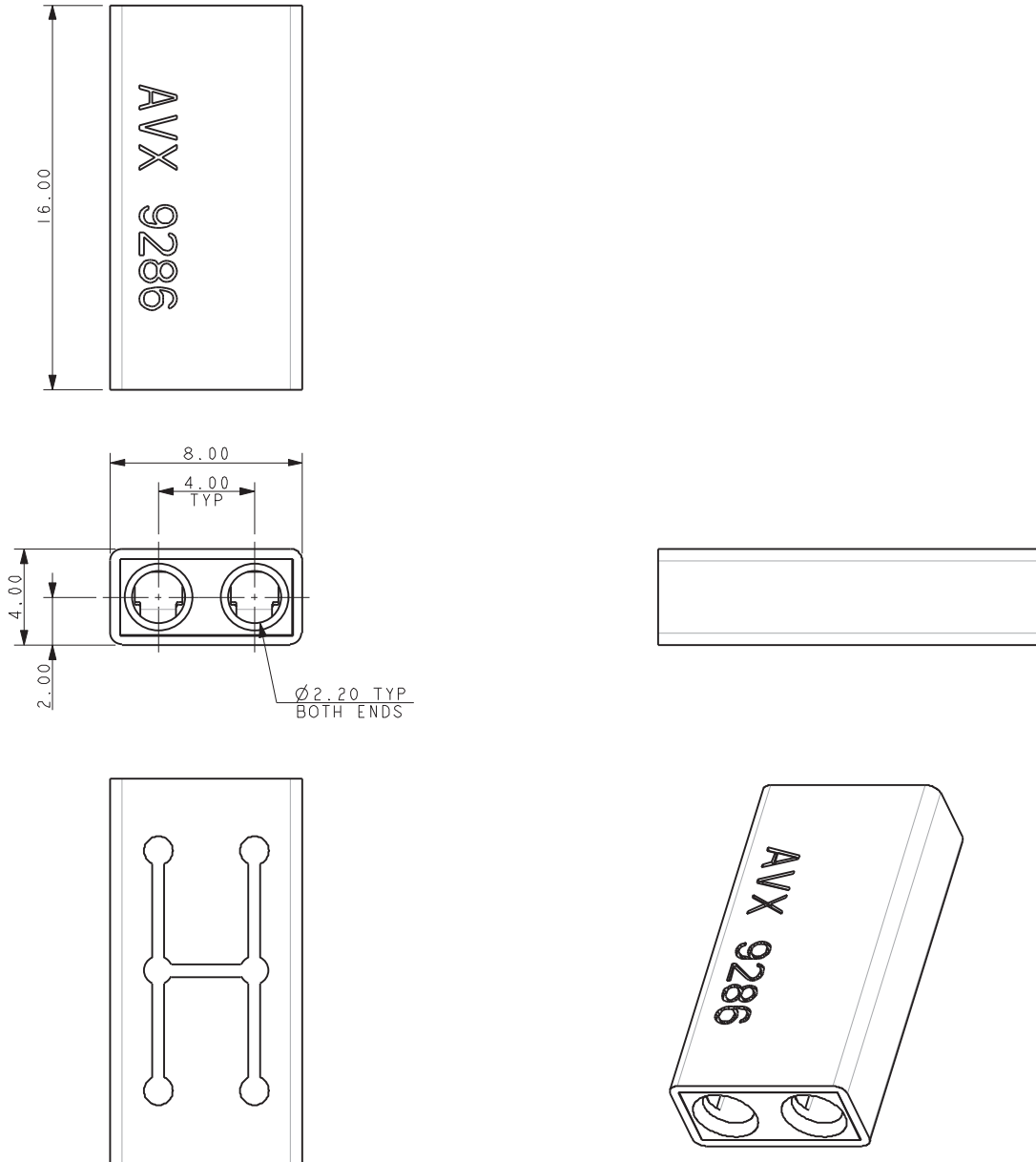
# Reduced Junction Box Connector

## 18-24 AWG: WTW

9286-250

### POKE HOME 4 WAY

### 18AWG TO 24AWG (ALL WIRES CONNECTED)



**NOTES:**

1. 4 WAY WIRE TO WIRE POKE HOME CONNECTOR, JUNCTION BOX, ALL WIRES CONNECTED.
2. WIRE CONDUCTOR SIZES 18-24AWG (SOLID OR STRANDED).  
MAXIMUM INSULATION 2.100MM DIAMETER.
3. INSULATION MATERIAL: NYLON 6, GLASS FILLED, UL94 V-0, COLOR REFER TO PAGE 21.
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.

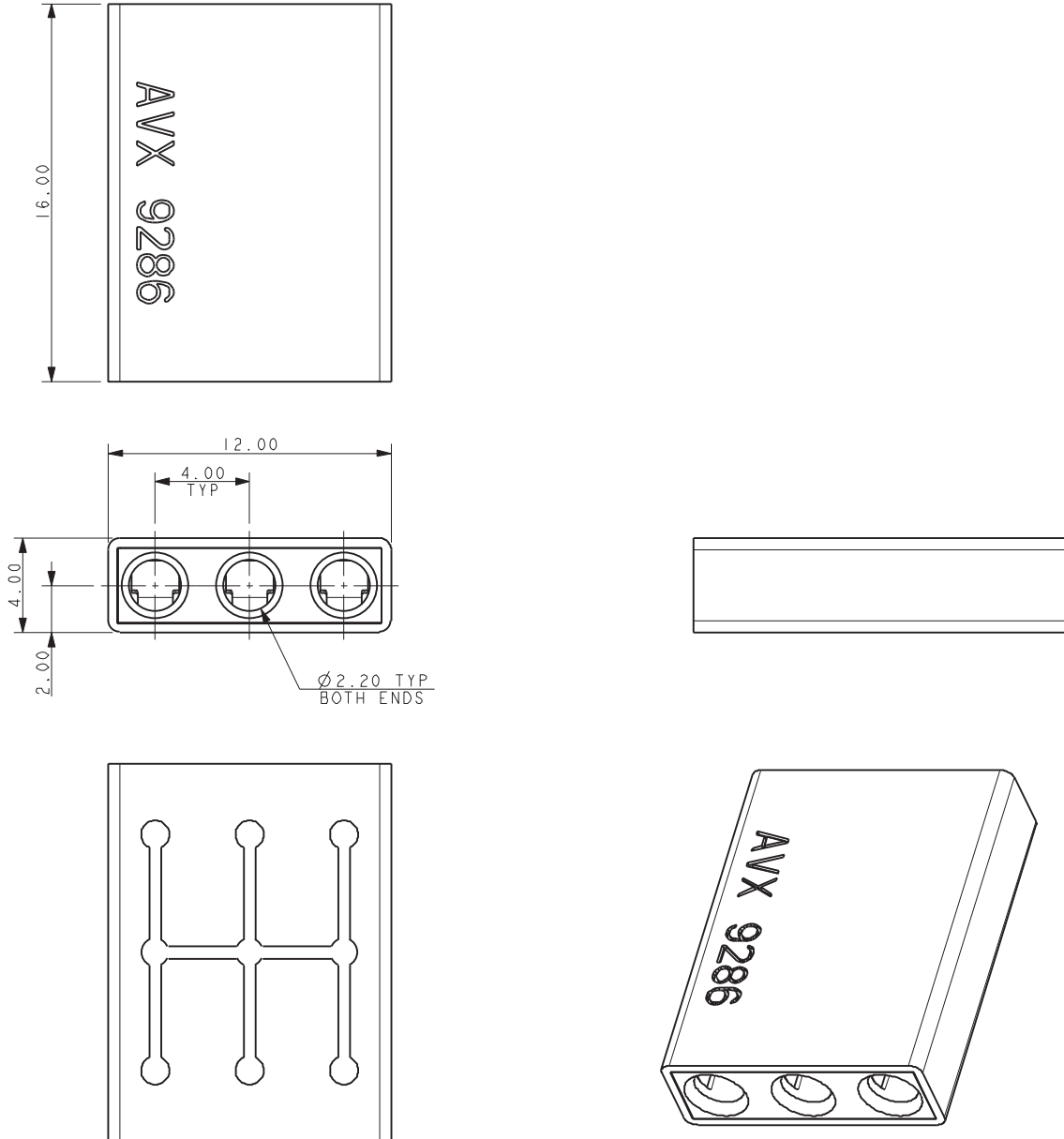
# Reduced Junction Box Connector

## 18-24 AWG: WTW

9286-250

### POKE HOME 6 WAY

#### 18AWG TO 24AWG (ALL WIRES CONNECTED)



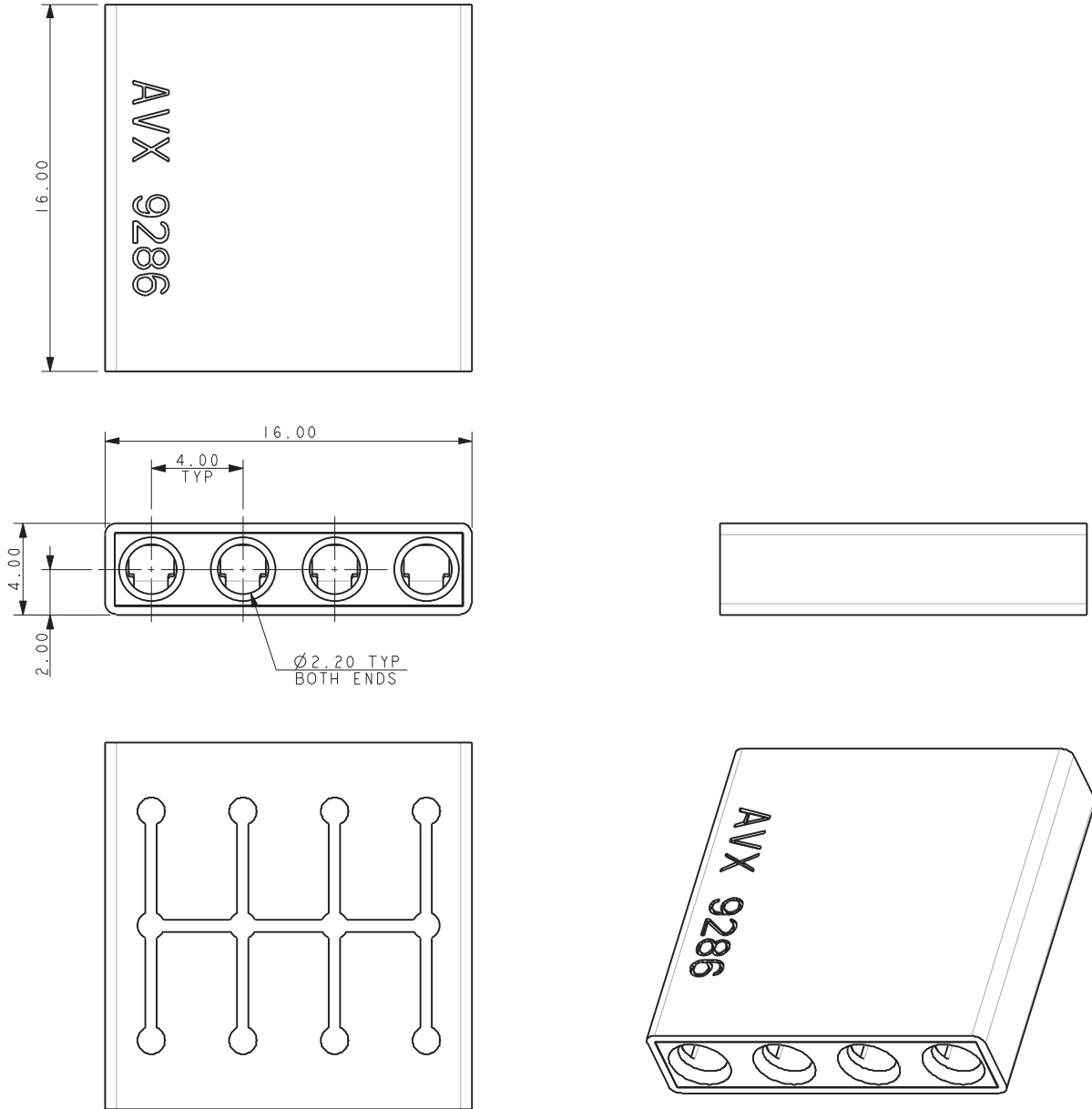
**NOTES:**

1. 6 WAY WIRE TO WIRE POKE HOME CONNECTOR, JUNCTION BOX, ALL WIRES CONNECTED.
2. WIRE CONDUCTOR SIZES 18-24AWG (SOLID OR STRANDED).  
MAXIMUM INSULATION 2.100MM DIAMETER.
3. INSULATION MATERIAL: NYLON 6, GLASS FILLED, UL94 V-0, COLOR REFER TO PAGE 21.
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.

# Reduced Thru Wire Connector 18-24 AWG: WTW

9286-200

## POKE HOME 8 WAY 18AWG TO 24AWG (ALL WIRES CONNECTED)



**NOTES:**

1. 8 WAY WIRE TO WIRE POKE HOME CONNECTOR, JUNCTION BOX, ALL WIRES CONNECTED.
2. WIRE CONDUCTOR SIZES 18-24AWG (SOLID OR STRANDED).  
MAXIMUM INSULATION 2.100MM DIAMETER.
3. INSULATION MATERIAL: NYLON 6, GLASS FILLED, UL94 V-0, COLOR REFER TO PAGE 21.
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.

# Reduced Thru Wire Connector 18-24 AWG: WTW

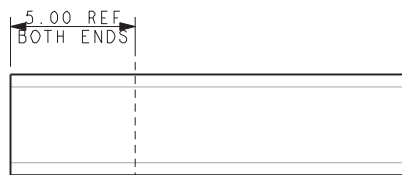
9286-200

## POKE HOME – JUNCTION BOX WIRE TRIM

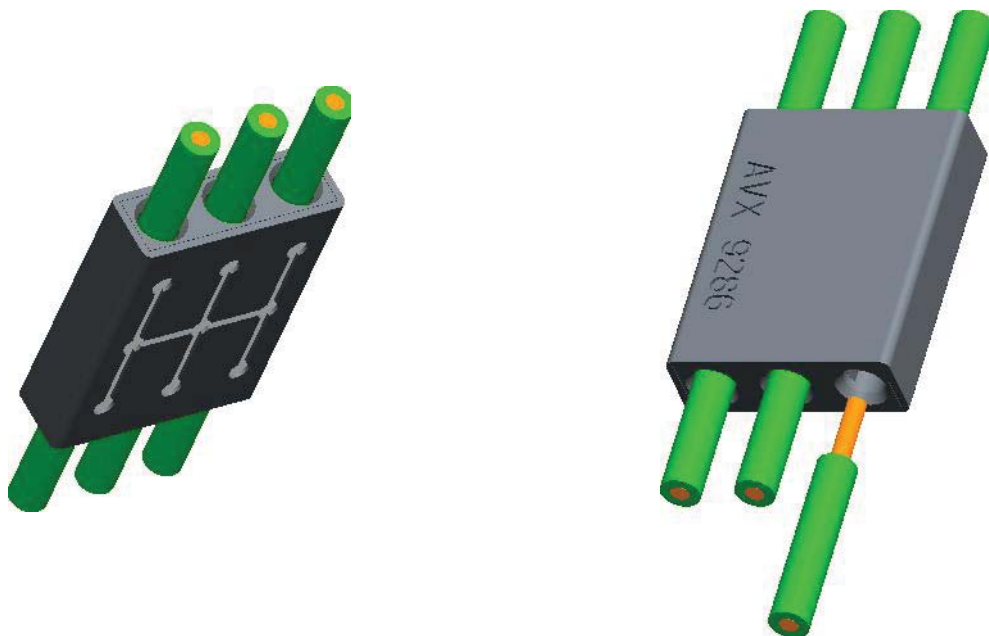


Insulation Diameter	Wire Trim Length X
Up to 2.10 Diameter	$4.00 \pm 0.50$
Above 2.10mm Diameter See Application Notes 201-01-172	$7.00 \pm 0.50$

## REST POSITION OF CONTACT TIP



## POKE HOME – THRU WIRE ASSEMBLY



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