Reduced Junction Box Connectors
18-24 AWG: 9286-250

General Information

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; 5 Cycles

HOW TO ORDER

00 — **Prefix**

Code	Type	Details
00	Poke Home	Wire-to-Wire

9286 — **Series**

00X — **Number of Ways**

Code	No of Ways	DIM. A
004	4	8.0/8.5
006	6	12.0/12.5
008	8	16.0/16.5

253 — **Wire Size**

Code	Accepted Wire Gauge	Max Insulation
253	18 – 24 AWG Solid or Stranded	2.10mm Diameter

X — **Insulator Color**
Standard
9 = UL White
Specal Order Only
0 = UL Black
2 = UL Brown
3 = UL Blue
4 = UL Yellow
6 = UL Green
7 = UL Orange

X — **Internal Wire Stop and UL Approval**

Code	Contact Style	UL Approved
0	No wire stop	Yes
1	With wire stop	Yes

06 — **Plating Option**
06 = Tin All Over

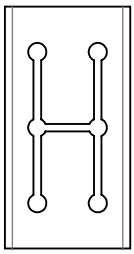
RoHS COMPLIANT

CURRENT RATING

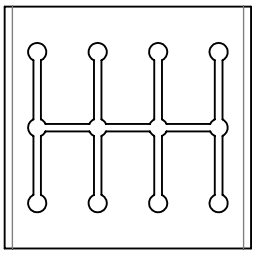
Wire gauge	Maximum approved current (amps)	
	UL (USA)	UL (Canada)
18AWG	8	7
20AWG	8	7
22AWG	6	6
24AWG	4	4

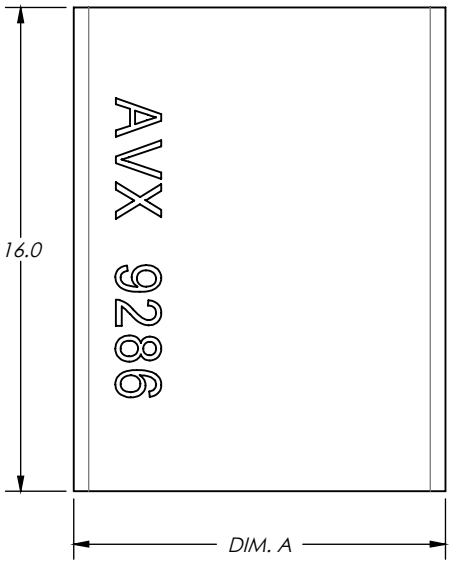
UL File #E90723

Reduced Junction Box Connectors
18-24 AWG: 9286-250

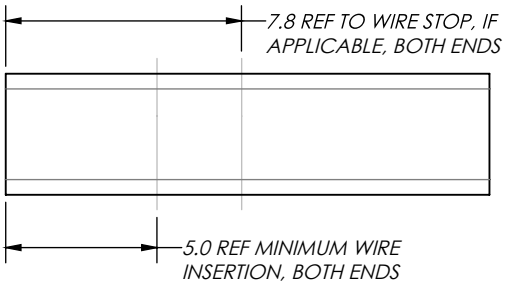


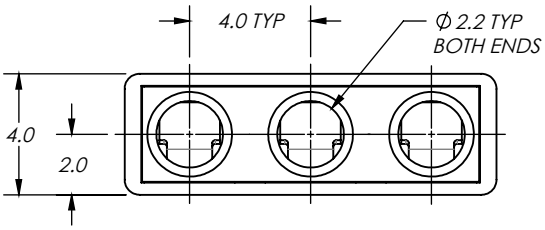
BOTTOM VIEW
4 AND 8 POSITION PARTS
FOR REFERENCE



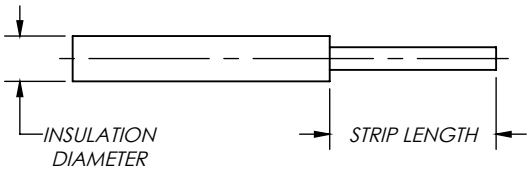


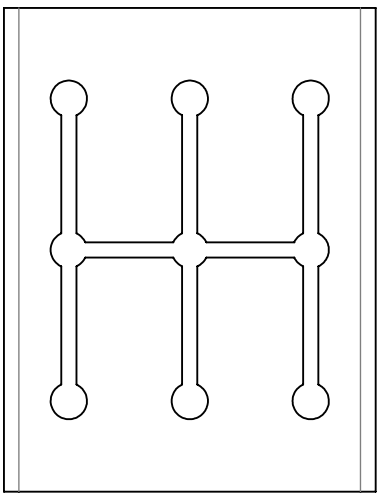
Code	No of Ways	DIM. A
004	4	8.0/8.5
006	6	12.0/12.5
008	8	16.0/16.5





Wire Stripping Guidelines	
Insulation Diameter	Strip Length
<=2.10mm	4.0±0.5
>2.10mm (NOTE 7)	7.0±0.5

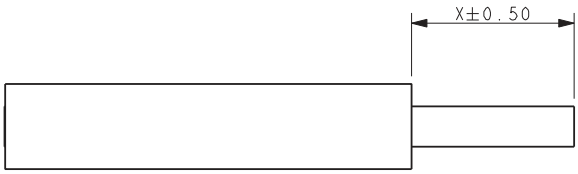




NOTES:
1. WIRE-TO-WIRE POKE HOME CONNECTOR, JUNCTION BOX (ALL WIRES CONNECTED). AVAILABLE WITH OR WITHOUT INTERNAL WIRE STOP.
2. WIRE CONDUCTOR SIZES: 18-24AWG, SOLID AND STRANDED. SEE ABOVE FOR WIRE STRIPPING GUIDELINES.
3. HOUSING MATERIAL: GLASS-FILLED STANYL 46, UL94V-0. COLOR PER P.N. CODE AT LEFT.
4. FIXED CONTACT: TIN PLATED COPPER ALLOY.
5. FLEXING CONTACT: STAINLESS STEEL.
6. PACKAGING TO BE IN BULK; 1,000 PARTS PER BAG.
7. FOR FURTHER DETAILS, REFER TO SPECIFICATION 201-01-171 AND APPLICATION NOTES 201-01-172.
8. UL APPROVED. UL REFERENCE E90723 (US AND CANADA)

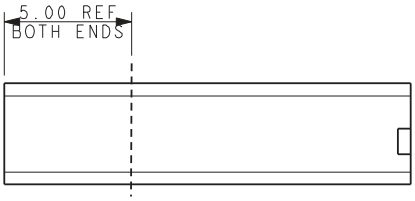
The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

POKE HOME – JUNCTION BOX
WIRE TRIM

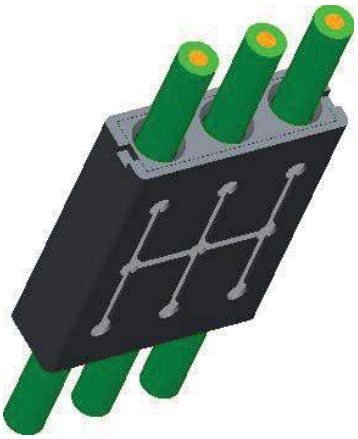


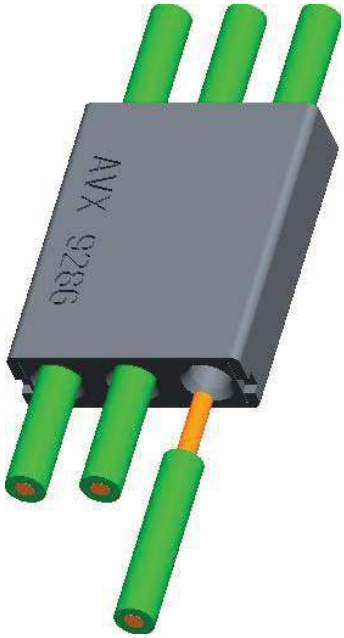
Insulation Diameter	Wire Trim Length X
Up to 2.10 Diameter	4.00 ± 0.50
Above 2.10mm Diameter See Application Notes 201-01-172	7.00 ± 0.50

REST POSITION OF CONTACT TIP



POKE HOME – THRU WIRE ASSEMBLY





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

The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.