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

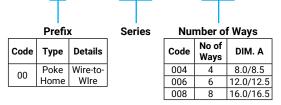
· Operating Temperature: -40°C to +130°C

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

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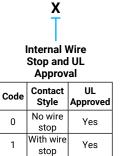
9286

00X



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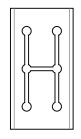
CURRENT RATING

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

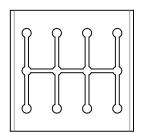
UL File #E90723

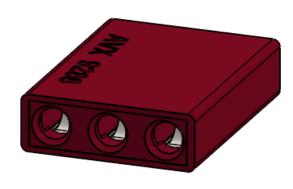
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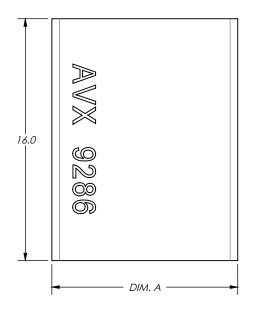




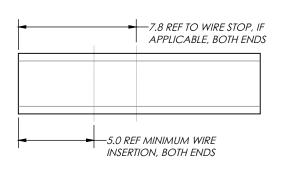
BOTTOM VIEW 4 AND 8 POSITION PARTS FOR REFERENCE

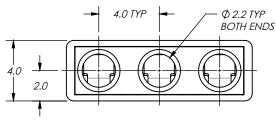


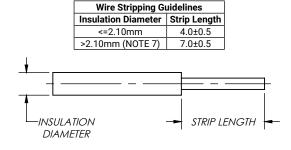


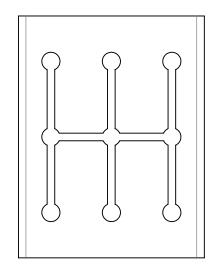


| Code | No of Ways | DIM. A |
|------|---------------|-----------|
| 004 | 4 | 8.0/8.5 |
| 006 | 6 | 12.0/12.5 |
| 800 | 8 | 16.0/16.5 |





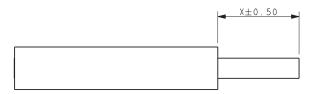




- 1. WIRE-TO-WIRE POKE HOME CONNECTOR, JUNCTION BOX (ALL WIRES CONNECTED). AVAILABLE WITH OR WITHOUT INTERNAL WIRE STOP.
- WIRE CONDUCTOR SIZES: 18-24AWG, SOLID AND STRANDED. SEE ABOVE FOR WIRE STRIPPING GUIDELINES.
- 3. HOUSING MATERIAL: GLASS-FILLED STANYL 46, UL94V-0. COLOR PER P.N. CODE AT LEFT.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



POKE HOME - JUNCTION BOX WIRE TRIM

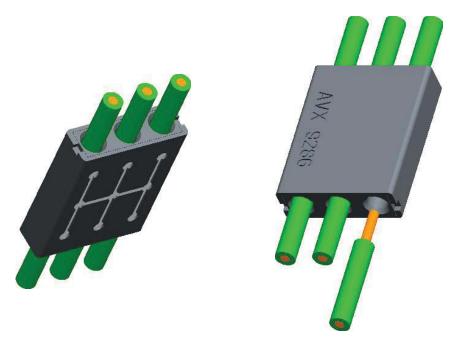


| Insulation Diameter | Wire Trim Length X |
|--|--------------------|
| Up to 2.10 Diameter | 4.00 ± 0.50 |
| Above 2.10mm Diameter See Application Notes 201-01-172 | 7.00 ± 0.50 |

REST POSITION OF CONTACT TIP



POKE HOME - THRU WIRE ASSEMBLY



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

