

# Field Wireable Connectors

## Sensor and Signal

### M12 A-coded Connectors

#### Features

- IP67 rated once properly assembled
- Various cable gauges and diameters accepted
- Plastic and metal housings with good resistance against chemicals and oils
- Various terminal connections: screw, IDC, and push-lock spring clamp



7000-12701-0000000



7000-12821-0000000

### M12 A-coded Connectors Selector Table

| Part Number                        | Price   | Number of Wires, Pins                | Connection Type                      | Conductor Size               | Housing Material                           | Terminal Connection           | Outside Cable Ø               | Drawing Link        |
|------------------------------------|---------|--------------------------------------|--------------------------------------|------------------------------|--|-------------------------------|-------------------------------|---------------------|
| Unshielded                         |         |                                      |                                      |                              |  |                               |                               |                     |
| <a href="#">7000-12701-0000000</a> | \$9.75  | 4-Wire, 5 Pin                        | Axial male with male threads         | 18AWG<br>[0.75 mm²] max      | Polyamide (PA)                             | Screw                         | 4–6mm<br>[0.15–0.23 in]       | <a href="#">PDF</a> |
| <a href="#">7000-12901-0000000</a> | \$9.75  |                                      | Axial female with female threads     |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-12741-0000000</a> | \$9.75  |                                      | Axial male with male threads         |                              |  |                               | 6–8mm<br>[0.23–0.31 in]       | <a href="#">PDF</a> |
| <a href="#">7000-12941-0000000</a> | \$9.75  |                                      | Axial female with female threads     |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-12821-0000000</a> | \$9.75  |                                      | 90-degree male with male threads     |                              |  |                               | 4–6mm<br>[0.15–0.23 in]       | <a href="#">PDF</a> |
| <a href="#">7000-12981-0000000</a> | \$9.75  |                                      | 90-degree female with female threads |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-12481-0000000</a> | \$10.50 |                                      | Axial male with male threads         | 24–20 AWG<br>[0.25–0.5 mm²]  | Thermoplastic polyester elastomer (TPE- E) |                               | 4–5.1 mm<br>[0.157–0.20 in]   | <a href="#">PDF</a> |
| <a href="#">7000-12601-0000000</a> | \$12.00 |                                      | Axial female with female threads     | <a href="#">PDF</a>          |  |                               |                               |                     |
| <a href="#">7000-12491-0000000</a> | \$12.00 |                                      | Axial male with male threads         | 26–22 AWG<br>[0.14–0.34 mm²] | Polyamide (PA)                             | Insulation displacement (IDC) | 2.9–5.1 mm<br>[0.114–0.20 in] | <a href="#">PDF</a> |
| <a href="#">7000-12611-0000000</a> | \$14.00 |                                      | Axial female with female threads     |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-12561-0000000</a> | \$15.00 |                                      | 90-degree male with male threads     | 24–20 AWG<br>[0.25–0.5 mm²]  | Thermoplastic polyester elastomer (TPE- E) |                               | 4–5.1 mm<br>[0.157–0.20 in]   | <a href="#">PDF</a> |
| <a href="#">7000-12681-0000000</a> | \$16.50 |                                      | 90-degree female with female threads |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-12721-0000000</a> | \$12.00 | 5-Wire, 5-Pin                        | Axial male with male threads         | 18AWG<br>[0.75 mm²] max      | Polyamide (PA)                             | Screw                         | 4–6mm<br>[0.15–0.23 in]       | <a href="#">PDF</a> |
| <a href="#">7000-12921-0000000</a> | \$12.00 |                                      | Axial female with female threads     |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-12761-0000000</a> | \$12.00 |                                      | Axial male with male threads         |                              |  |                               | 6–8mm<br>[0.23–0.31 in]       | <a href="#">PDF</a> |
| <a href="#">7000-12961-0000000</a> | \$12.00 |                                      | Axial female with female threads     |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-13041-0000000</a> | \$12.00 |                                      | 90-degree female with female threads |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-13901-0000000</a> | \$16.00 |                                      | Axial male with male threads         | 26–18AWG<br>[0.14–0.75 mm²]  | Polyamide (PA)                             | Push-lock spring clamp        | 4–8mm<br>[0.15–0.31 in]       | <a href="#">PDF</a> |
| <a href="#">7000-13911-0000000</a> | \$16.00 |                                      | 90-degree male with male threads     |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-13941-0000000</a> | \$16.00 |                                      | Axial female with female threads     |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-13951-0000000</a> | \$16.00 |                                      | 90-degree female with female threads |                              |  |                               | <a href="#">PDF</a>           |                     |
| <a href="#">7000-17301-0000000</a> | \$27.00 |                                      | Axial male with male threads         |                              |  |                               | 20AWG<br>[0.5 mm²] max        | Polyurethane (PUR)  |
| <a href="#">7000-17311-0000000</a> | \$27.00 | 90-degree male with male threads     | <a href="#">PDF</a>                  |                              |  |                               |                               |                     |
| <a href="#">7000-17321-0000000</a> | \$27.00 | Axial female with female threads     | <a href="#">PDF</a>                  |                              |  |                               |                               |                     |
| <a href="#">7000-17331-0000000</a> | \$27.00 | 90-degree female with female threads | <a href="#">PDF</a>                  |                              |  |                               |                               |                     |
| Shielded                           |         |                                      |                                      |                              |  |                               |                               |                     |
| <a href="#">7000-13321-0000000</a> | \$25.00 | 5-Wire, 5-Pin                        | Axial male with male threads         | 18AWG<br>[0.75 mm²] max      | Die-cast zinc nickel-plated                | Screw                         | 6–8mm<br>[0.23–0.31 in]       | <a href="#">PDF</a> |
| <a href="#">7000-13361-0000000</a> | \$32.50 |                                      | 90-degree male with male threads     |                              |  |                               |                               | <a href="#">PDF</a> |
| <a href="#">7000-17341-0000000</a> | \$32.50 | 8-Wire, 8-Pin                        | Axial male with male threads         | 20AWG<br>[0.5 mm²] max       |  |                               |                               | <a href="#">PDF</a> |



stay connected

# Field Wireable Connectors

## Sensor and Signal

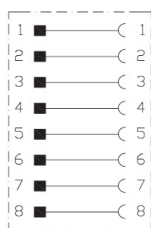
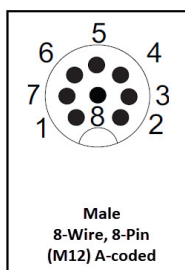
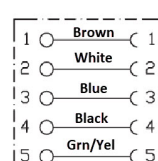
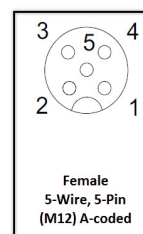
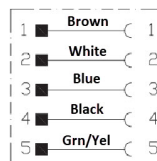
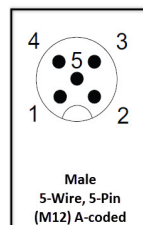
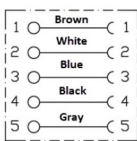
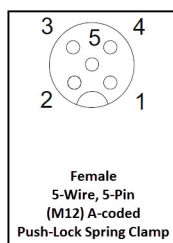
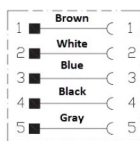
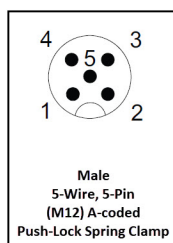
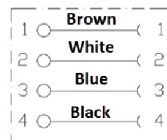
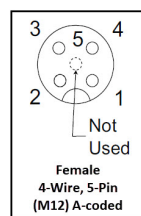
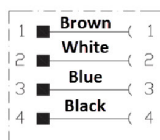
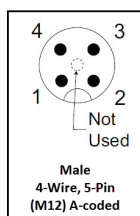
### Specifications

| M12 A-coded Connectors Specifications |                              |                              |                               |              |                               |                 |   |   |
|---------------------------------------|------------------------------|------------------------------|-------------------------------|--------------|-------------------------------|-----------------|---|---|
| Coding                                | A-coded                      |                              |                               |              |                               |                 |   |   |
| Model                                 | 12491, 12611                 | 12481,12601,<br>12561, 12681 | 12701, 12901,<br>12821, 12981 | 12721, 12921 | 13901, 13911,<br>13941, 13951 | 12741, 12941    | 12761, 12961,<br>13041, 13321,<br>13361 | 17301, 17311,<br>17321, 17331,<br>17341 |
| Max Voltage                           | 32 VAC/VDC                   |                              | 250 VAC/VDC                   | 60 VAC/VDC   | 250 VAC/VDC                   | 250 VAC/VDC     | 60 VAC/VDC                              | 30 VAC/VDC                              |
| Max Current Per Contact               | 4A                           |                              |                               |              |                               |                 |   | 2A                                      |
| Temperature Range                     | -25 to 85°C<br>[13 to 185°F] |                              |                               |              | -40 to 85°C<br>[-40 to 185°F] |                 |   |   |
| Protection Degree                     | IP65, IP67                   |                              | IP67                          |              | IP65, IP67                    | IP67            |   |   |
| Locking Material                      | Zinc die-cast, nickel-plated |                              |                               |              |                               |                 |   |   |
| Weight                                | 0.05 oz [1.42 g]             | 0.06 oz [1.7 g]              | 0.05 oz [1.42 g]              |              | 1oz [28.24 g]                 | 0.06 oz [1.7 g] |   |   |
| Approvals*                            | cURus                        |                              |                               |              |                               |                 |   |   |

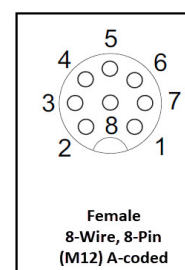
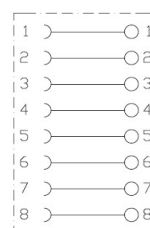
\*To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.

### Pin Assignments

| LEGEND |                           |
|--------|---------------------------|
| ■      | MALE PIN ON CONNECTOR     |
| ○      | FEMALE PIN ON CONNECTOR   |
| ⌋      | FIELD CONNECTION TERMINAL |



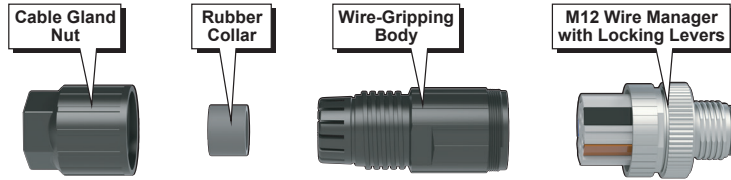
| 8-Wire, 8-Pin Color Code |                    |                    |  |
|--------------------------|--------------------|--------------------|--|
| Based on Cables          |                    |                    |  |
| Pin                      | 7000-17041-292xxxx | 7000-17041-295xxxx |  |
| 1                        | White              | Brown              |  |
| 2                        | Brown              | White              |  |
| 3                        | Green              | Blue               |  |
| 4                        | Yellow             | Black              |  |
| 5                        | Gray               | Gray               |  |
| 6                        | Pink               | Pink               |  |
| 7                        | Blue               | Violet             |  |
| 8                        | Red                | Orange             |  |





# Field Wireable Connectors Sensor and Signal

## Assembly Instructions for M12 A-coded Push-lock Spring Clamp Connectors



- 1** Before stripping cable jacket, install cable gland nut, rubber collar, and wire-gripping body on cable.
- 2** Remove 24mm of outer jacket from cable and strip 7mm of insulation from individual wires.
- 3** Prepare the M12 wire manager using a small screwdriver or fingernail to pry open each locking lever.
- 4** Insert individual wires into the M12 wire manager.
- 5** Close the locking levers and complete the assembly of all components.
- 6** Hand-tighten or use 15mm wrench to secure wire-gripping body and M12 wire manager.
- 7** Hand-tighten or use 15mm wrench to secure cable gland nut and wire-gripping body.
- 8** Assembly complete.