

# Connection Cables - Sensor and Signal

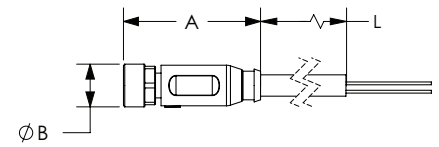
## M12 A-coded Cable to Pigtail

### Features

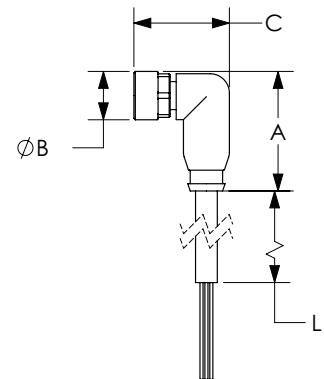
- Industry standard axial and 90-degree M12 screw-lock connectors with open leads
- Cables listed can be used with patch cables
- 2m [6.5 ft], 3m [9.8 ft], 5m [16.4 ft], 7m [22.9ft], 10m [32.8 ft] and 15m [49.2 ft] cable lengths
- PVC (polyvinyl chloride) jacketed cable for general use and chemical washdown applications, ex. food & beverage industry
- PUR (polyurethane) jacketed cable for applications with exposure to oil and dynamic applications requiring more flexibility
- PP (polypropylene) wire insulation for low temperature applications
- TPE (thermoplastic elastomer) wire insulation for applications requiring high flexibility



### Dimensions



**Axial female**



**90-degree female**

| M12 A-coded Cable to Pigtail        |         |                  |                  |                                       |              |            |      |           |           |           |           |
|-------------------------------------|---------|------------------|------------------|---------------------------------------|--------------|------------|------|-----------|-----------|-----------|-----------|
| Part Number                         | Price   | Number of Wires  | Connector        | Cable Jacket/Wire Insulation Material | Jacket Color | Dimensions |      |           |           |           |           |
|                                     |         |                  |                  |                                       |              | A          | B    | C         | L         |           |           |
|                                     |         |                  |                  |                                       |              | mm         |      | m [ft]    |           |           |           |
| <a href="#">CD12M-0B-050-A1*</a>    | \$14.00 | 3                | Axial female     | PVC/PVC                               | Black        | 38         | 15   | -         | 5 [16.4]  |           |           |
| <a href="#">CD12M-0B-050-C1*</a>    | \$14.00 |                  | 90-degree female |                                       |              | 39         | 15   | 28        |           |           |           |
| <a href="#">CD12M-0D-050-A1-A*</a>  | \$16.00 |                  | Axial female     | PUR/PP                                | 38           | 15         | -    |           |           |           |           |
| <a href="#">CD12M-0D-050-C1*</a>    | \$16.50 |                  | 90-degree female | PUR/PVC                               | 39           | 15         | 28   |           |           |           |           |
| <a href="#">CD12M-0D-050-C1-A*</a>  | \$16.00 |                  | 90-degree female | PUR/PP                                | 39           | 15         | 28   |           |           |           |           |
| <a href="#">7000-12181-2130500*</a> | \$8.75  |                  | Axial female     | PVC/PVC                               | Gray         | 38         | 15   | -         |           |           |           |
| <a href="#">7000-12321-2130500*</a> | \$8.75  |                  | 90-degree female |                                       |              | 39         | 15   | 28        |           |           |           |
| <a href="#">7000-12181-0330500*</a> | \$13.00 |                  | Axial female     | PUR/PP                                | Yellow       | 38         | 15   | -         |           |           |           |
| <a href="#">7000-12321-0330500*</a> | \$13.00 |                  | 90-degree female | PUR/PP                                |              | 39         | 15   | 28        |           |           |           |
| <a href="#">CD12L-0B-020-A0</a>     | \$11.00 |                  | 4                | Axial female                          | PVC/PVC      | Gray       | 38   | 15        |           | -         | 2 [6.5]   |
| <a href="#">CD12L-0B-020-C0</a>     | \$11.00 | 90-degree female |                  | 39                                    |              |            | 15   | 28        | 7 [22.9]  |           |           |
| <a href="#">CD12M-0B-070-A1</a>     | \$18.00 | Axial female     |                  | 38                                    |              |            | 15   | -         | 2 [6.5]   |           |           |
| <a href="#">CD12M-0B-070-C1</a>     | \$18.00 | 90-degree female |                  | 39                                    |              |            | 15   | 28        | 7 [22.9]  |           |           |
| <a href="#">7000-12221-0340200</a>  | \$10.00 | Axial female     |                  | PUR/PP                                | Yellow       | 38         | 15   | -         | 2 [6.5]   |           |           |
| <a href="#">7000-12341-0340200</a>  | \$10.00 | 90-degree female |                  | PUR/PP                                |              | 39         | 15   | 28        | 7 [22.9]  |           |           |
| <a href="#">7000-12221-0340700</a>  | \$18.00 | Axial female     |                  | PUR/PP                                |              | 38         | 15   | -         | 10 [32.8] |           |           |
| <a href="#">7000-12341-0340700</a>  | \$18.00 | 90-degree female |                  | PUR/PP                                |              | 39         | 15   | 28        | 15 [49.2] |           |           |
| <a href="#">7000-12221-0341000</a>  | \$22.00 | Axial female     |                  | PUR/PP                                |              | 38         | 15   | -         | 10 [32.8] |           |           |
| <a href="#">7000-12341-0341000</a>  | \$22.00 | 90-degree female |                  | PUR/PP                                |              | 39         | 15   | 29        | 15 [49.2] |           |           |
| <a href="#">7000-12221-0341500</a>  | \$30.00 | Axial female     |                  | PUR/PP                                |              | PVC/PVC    | Gray | 38        | 15        | -         | 10 [32.8] |
| <a href="#">7000-12341-0341500</a>  | \$30.00 | 90-degree female |                  | PUR/PP                                |              |            |      | 39        | 15        | 29        | 15 [49.2] |
| <a href="#">7000-12221-2141000</a>  | \$21.00 | Axial female     |                  | PVC/PVC                               | 38           |            |      | 15        | -         | 15 [49.2] |           |
| <a href="#">7000-12341-2141000</a>  | \$21.00 | 90-degree female |                  | PVC/PVC                               | 39           |            |      | 15        | 29        | 15 [49.2] |           |
| <a href="#">7000-12221-2141500</a>  | \$27.00 | Axial female     |                  | PVC/PVC                               | 38           | 15         | -    | 15 [49.2] |           |           |           |
| <a href="#">7000-12341-2141500</a>  | \$27.00 | 90-degree female |                  | PVC/PVC                               | 39           | 15         | 29   | 15 [49.2] |           |           |           |

\* Note: Do not use with sensors that require 4-wires cables.  
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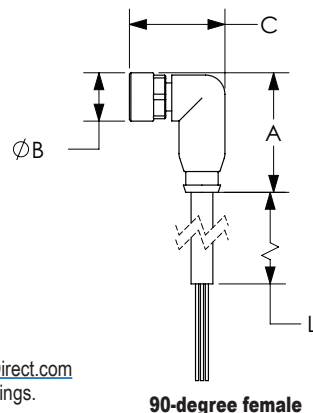
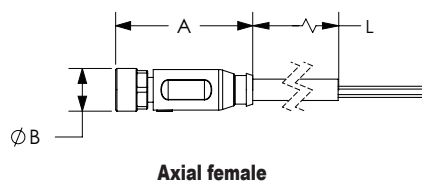
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# Connection Cables - Sensor and Signal

## M12 A-coded Cable to Pigtail (continued)

| M12 A-coded Cable to Pigtail       |         |                  |                  |                                       |              |            |      |              |              |              |
|------------------------------------|---------|------------------|------------------|---------------------------------------|--------------|------------|------|--------------|--------------|--------------|
| Part Number                        | Price   | Number of Wires  | Connector        | Cable Jacket/Wire Insulation Material | Jacket Color | Dimensions |      |              |              |              |
|                                    |         |                  |                  |                                       |              | A          | B    | C            | L            |              |
|                                    |         |                  |                  |                                       |              | mm         |      |              | m [ft]       |              |
| <a href="#">7000-12241-0350300</a> | \$14.00 | 5                | Axial female     | PUR/PP                                | Yellow       | 38         | 15   | -            | 3            |              |
| <a href="#">7000-12361-0350300</a> | \$14.00 |                  | 90-degree female | PUR/PP                                |              | 39         | 15   | 28           | [9.8]        |              |
| <a href="#">7000-12241-0250500</a> | \$18.00 |                  | Axial female     | PUR-PVC/PVC                           |              | 38         | 15   | -            | 5<br>[16.4]  |              |
| <a href="#">7000-12241-0350500</a> | \$18.00 |                  | Axial female     | PUR/PP                                |              | 38         | 15   | -            |              |              |
| <a href="#">7000-12361-0350500</a> | \$18.00 |                  | 90-degree female | PUR/PP                                |              | 39         | 15   | 28           |              |              |
| <a href="#">7000-12241-0351000</a> | \$28.00 |                  | Axial female     | PUR/PP                                |              | 38         | 15   | -            |              |              |
| <a href="#">7000-12361-0251000</a> | \$26.50 |                  | 90-degree female | PUR-PVC/PVC                           |              | 39         | 15   | 28           |              |              |
| <a href="#">7000-12361-0351000</a> | \$28.00 |                  | 90-degree female | PUR/PP                                |              | 39         | 15   | 28           |              |              |
| <a href="#">7000-12241-2150300</a> | \$12.50 |                  | Axial female     | PVC/PVC                               |              | Gray       | 38   | 15           | -            | 3            |
| <a href="#">7000-12361-2150300</a> | \$12.50 |                  | 90-degree female |                                       |              |            | 39   | 15           | 28           | [9.8]        |
| <a href="#">7000-12241-2150500</a> | \$17.50 |                  | Axial female     |                                       |              |            | 38   | 15           | -            | 5<br>[16.4]  |
| <a href="#">7000-12361-2150500</a> | \$17.50 |                  | 90-degree female |                                       |              |            | 39   | 15           | 28           |              |
| <a href="#">7000-12241-2151000</a> | \$25.00 | Axial female     | 38               |                                       | 15           |            | -    | 10<br>[32.8] |              |              |
| <a href="#">7000-12361-2151000</a> | \$25.00 | 90-degree female | 39               |                                       | 15           |            | 28   |              |              |              |
| <a href="#">7000-17041-2920300</a> | \$28.00 | 8                | Axial female     | PUR/PP                                | Gray         |            | 44.5 | 15           | -            | 3            |
| <a href="#">7000-17061-2920300</a> | \$28.00 |                  | 90-degree female |                                       |              |            | 39   | 15           | 32           | [9.8]        |
| <a href="#">7000-17041-2920500</a> | \$36.50 |                  | Axial female     |                                       |              |            | 44.5 | 15           | -            | 5<br>[16.4]  |
| <a href="#">7000-17061-2920500</a> | \$36.50 |                  | 90-degree female |                                       |              |            | 39   | 15           | 32           |              |
| <a href="#">7000-17041-2921000</a> | \$55.00 |                  | Axial female     |                                       |              |            | 44.5 | 15           | -            | 10<br>[32.8] |
| <a href="#">7000-17061-2921000</a> | \$55.00 |                  | 90-degree female |                                       |              |            | 39   | 15           | 32           |              |
| <a href="#">7000-17041-2950300</a> | \$29.50 |                  | Axial female     |                                       |              | 44.5       | 15   | -            | 3            |              |
| <a href="#">7000-17061-2950300</a> | \$29.50 |                  | 90-degree female |                                       |              | 39         | 15   | 32           |              |              |
| <a href="#">7000-17041-2950500</a> | \$37.00 |                  | Axial female     |                                       |              | 44.5       | 15   | -            | 5<br>[16.4]  |              |
| <a href="#">7000-17061-2950500</a> | \$37.00 |                  | 90-degree female |                                       |              | 39         | 15   | 32           |              |              |
| <a href="#">7000-17041-2951000</a> | \$58.00 |                  | Axial female     |                                       |              | 44.5       | 15   | -            | 10<br>[32.8] |              |
| <a href="#">7000-17061-2951000</a> | \$58.00 |                  | 90-degree female |                                       |              | 39         | 15   | 32           |              |              |
| <a href="#">7000-19041-7050300</a> | \$47.00 | 12               | Axial female     | PUR/PP                                | Black        | 43.5       | 15   | -            | 3            |              |
| <a href="#">7000-19061-7050300</a> | \$47.00 |                  | 90-degree female | PUR/TPE                               |              | 39         | 15   | 32           | [9.8]        |              |
| <a href="#">7000-19041-7050500</a> | \$56.00 |                  | Axial female     | PUR/PP                                |              | 43.5       | 15   | -            | 5<br>[16.4]  |              |
| <a href="#">7000-19061-7050500</a> | \$56.00 |                  | 90-degree female | PUR/TPE                               |              | 39         | 15   | 32           |              |              |
| <a href="#">7000-19041-7051000</a> | \$83.00 |                  | Axial female     | PUR/PP                                |              | 43.5       | 15   | -            | 10<br>[32.8] |              |
| <a href="#">7000-19061-7051000</a> | \$83.00 |                  | 90-degree female | PUR/TPE                               |              | 39         | 15   | 32           |              |              |

### Dimensions



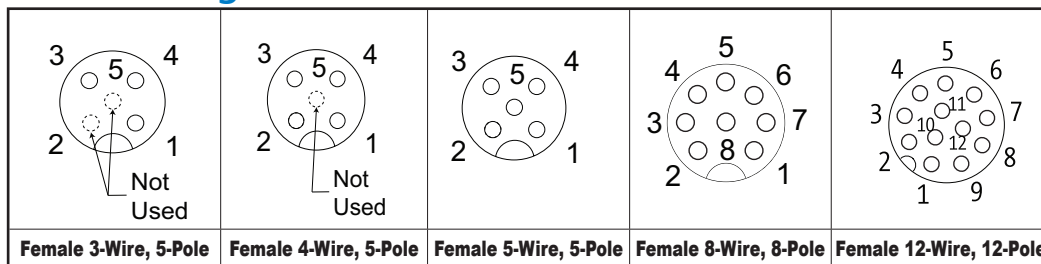
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for complete engineering drawings.

# Connection Cables - Sensor and Signal

| M12 A-coded Cable to Pigtail Specifications         |   |                  |  |  |  |   |                              |
|---|---|------------------|--|--|--|---|------------------------------|
| Model   | CD12 Series   |                  |  | 7000 Series  |  |   |                              |
| Type  | 3-Wire, 5-Pole  | 4-Wire, 5-Pole   | 3-Wire, 5-Pole   | 4-Wire, 5-Pole   | 5-Wire, 5-Pole   | 8-Wire, 8-Pole  | 12-Wire, 12-Pole             |
| Max Voltage   | 250 VAC/VDC   |                  |  |  | 125 VAC/VDC  | 30 VAC/VDC  |                              |
| Max Voltage - UL Rating                             | N/A - not UL recognized   |                  |  | 30 VAC/VDC   |  |   |                              |
| Max Current Per Contact                             | 4A  |                  |  |  | 2A   | 1.5 A   |                              |
| Protection Degree                                   | IP65 / IP66K / IP67   |                  |  |  |  |   |                              |
| Nut Material  | Female threads are nickel plated die cast zinc                                      |                  |  |  |  |   |                              |
| Cable Jacket/Wire Insulation Material               | PUR/PP or PVC/PVC   |                  | PVC/PVC or PUR/PP or PUR/PVC                               |  |  | PUR/PP  | PUR/PP or PUR/TPE            |
| Contacts Material                                   | Copper Alloy  |                  |  |  |  |   |                              |
| Tightening Torque                                   | ≤ 0.6 N·m [≤ 0.44 ft·lb]  |                  |  |  |  |   |                              |
| Conductors Cross Section                            | 0.34 mm <sup>2</sup> [22AWG]  |                  |  |  |  | 0.25 mm <sup>2</sup> [24AWG]  | 0.14 mm <sup>2</sup> [26AWG] |
| Ø Outer Cable For PUR/PVC or PVC/PVC or PUR-PVC/PVC | 4.6 mm [0.18 in]  | 5.0 mm [0.20 in] | PVC/PVC<br>4.6 mm [0.18 in]<br>PUR/PVC<br>4.9 mm [0.19 in] | PVC/PVC<br>5.0 mm [0.20 in]<br>PUR/PVC/PVC<br>5.2 mm [0.20 in] | PVC/PVC<br>5.2 mm [0.20 in]<br>PUR-PVC/PVC<br>5.9 mm [0.23 in] | N/A   |                              |
| Ø Outer Cable For PUR/PP or PUR/TPE                 | 4.1 mm [0.16 in]  | N/A              | 4.1 mm [0.16 in]   | 4.5mm [0.18 in]  | 4.8 mm [0.19 in]   | 5.8 mm [0.23 in]  | 6.0 mm [0.24 in]             |
| Temperature Range - Stationary Use                  | PUR/PP -40 to 80°C [-40 to 176°F],<br>PUR/PVC or PVC/PVC -30 to 80°C [-22 to 176°F] |                  |  |  |  | PUR/PP -40 to 80C [-40 to 176F]<br>PUR/TPE -25 to 80C [-13 to 176F] |                              |
| Temperature Range - Flexible Use                    | PUR/PP -25 to 80°C [-13 to 176°F];<br>PVC/PVC or PUR/PVC -5 to 80°C [23 to 176°F]   |                  |  |  |  | PUR/PP and PUR/TPE<br>-25 to 80°C [-13 to 176°F]                    |                              |
| Min Bend Radius                                     | Stationary use: 5 x cable diameter;<br>Flexible use: 10 x cable diameter            |                  |  |  |  |   |                              |
| Approvals*  | CE, cCSAus  |                  |  | cULus, UKCA, cCSAus  |  |   |                              |

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

## Contact Diagrams



## Wiring Diagrams

