

# Connection Cables - Power

## M12 L-coded Cables

### Features

- Resistant to welding sparks
- Flame retardant, chemical resistant
- 600V cable insulation rating
- TPE (thermoplastic elastomer) jacket for typical industrial applications
- PVC (polyvinyl chloride) jacketed cable for general use and chemical washdown applications, ex. food & beverage industry

| M12 L-coded Cables                 |           |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     |            |                     |
|------------------------------------|-----------|-----------------|----------------------------|-----------|-----------------|----------------------------------------------------------|--------------|----------------------------------------------------------|---------------------|----------------------------------------------------------|---------------------|------------|---------------------|
| Part Number                        | Price     | Number of Wires | Connector                  | Wire Size | Amperage Rating | Cable Jacket/<br>Wire Insulation Material                | Jacket Color | Length<br>m [ft]                                         | Drawing Link        |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0P0200</a> | \$5ec7:   | 5               | Axial male to axial female | 14AWG     | 16A             | Thermoplastic Elastomer (TPE) / Polyvinyl Chloride (PVC) | Yellow       | 2.0 [6.5]                                                | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0P0300</a> | \$5ec8:   |                 |                            |           |                 |                                                          |              | 3.0 [9.8]                                                | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0P0500</a> | \$05ec9:  |                 |                            |           |                 |                                                          |              | 5.0 [16.4]                                               | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0P0750</a> | \$05eca:  |                 |                            |           |                 |                                                          |              | 7.5 [24.6]                                               | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0P1000</a> | \$05ecb:  |                 |                            |           |                 |                                                          |              | 10 [32.8]                                                | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0P1500</a> | \$05ecc:  |                 |                            |           |                 |                                                          |              | 15 [49.2]                                                | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0D0200</a> | \$5ecd:   |                 |                            | 16AWG     | 12A             |                                                          |              | 2.0 [6.5]                                                | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0D0300</a> | \$5ece:   |                 |                            |           |                 |                                                          |              | 3.0 [9.8]                                                | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0D0500</a> | \$;5ecf:  |                 |                            |           |                 |                                                          |              | 5.0 [16.4]                                               | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0D0750</a> | \$05ecg:  |                 |                            |           |                 |                                                          |              | 7.5 [24.6]                                               | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0D1000</a> | \$05ech:  |                 |                            |           |                 |                                                          |              | 10 [32.8]                                                | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4241-U0D1500</a> | \$-05eci: |                 |                            |           |                 |                                                          |              | 15 [49.2]                                                | <a href="#">PDF</a> |                                                          |                     |            |                     |
| <a href="#">7700-P4201-U0P0200</a> | \$-5ecj:  |                 | Axial male to pigtail      | 14AWG     | 16A             |                                                          |              | Thermoplastic Elastomer (TPE) / Polyvinyl Chloride (PVC) | Yellow              | 2.0 [6.5]                                                | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0P0300</a> | \$5eck:   |                 |                            |           |                 |                                                          |              |                                                          |                     | 3.0 [9.8]                                                | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0P0500</a> | \$-5ekl:  |                 |                            |           |                 |                                                          |              |                                                          |                     | 5.0 [16.4]                                               | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0P0750</a> | \$05ecn:  |                 |                            |           |                 |                                                          |              |                                                          |                     | 7.5 [24.6]                                               | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0P1000</a> | \$05eco:  |                 |                            |           |                 |                                                          |              |                                                          |                     | 10 [32.8]                                                | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0P1500</a> | \$05ecp:  |                 |                            |           |                 |                                                          |              |                                                          |                     | 15 [49.2]                                                | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0D0200</a> | \$5ecq:   |                 |                            | 16AWG     | 12A             |                                                          |              |                                                          |                     | 2.0 [6.5]                                                | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0D0300</a> | \$5ecs:   |                 |                            |           |                 |                                                          |              |                                                          |                     | 3.0 [9.8]                                                | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0D0500</a> | \$;5ect:  |                 |                            |           |                 |                                                          |              |                                                          |                     | 5.0 [16.4]                                               | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0D0750</a> | \$5ecu:   |                 |                            |           |                 |                                                          |              |                                                          |                     | 7.5 [24.6]                                               | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0D1000</a> | \$05ecv:  |                 |                            |           |                 |                                                          |              |                                                          |                     | 10 [32.8]                                                | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4201-U0D1500</a> | \$05ecx:  |                 |                            |           |                 |                                                          |              |                                                          |                     | 15 [49.2]                                                | <a href="#">PDF</a> |            |                     |
| <a href="#">7700-P4221-U0P0200</a> | \$5ecy:   |                 | Axial female to pigtail    | 14AWG     | 16A             |                                                          |              |                                                          |                     | Thermoplastic Elastomer (TPE) / Polyvinyl Chloride (PVC) | Yellow              | 2.0 [6.5]  | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0P0300</a> | \$5ecz:   |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 3.0 [9.8]  | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0P0500</a> | \$;5ecj:  |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 5.0 [16.4] | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0P0750</a> | \$;05ecf: |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 7.5 [24.6] | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0P1000</a> | \$05ec_:  |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 10 [32.8]  | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0P1500</a> | \$05ec#:  |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 15 [49.2]  | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0D0200</a> | \$;5ec!:  |                 |                            | 16AWG     | 12A             |                                                          |              |                                                          |                     |                                                          |                     | 2.0 [6.5]  | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0D0300</a> | \$5ec?:   |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 3.0 [9.8]  | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0D0500</a> | \$;5ec,:: |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 5.0 [16.4] | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0D0750</a> | \$5ed0:   |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 7.5 [24.6] | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0D1000</a> | \$05ed1:  |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 10 [32.8]  | <a href="#">PDF</a> |
| <a href="#">7700-P4221-U0D1500</a> | \$05ed2:  |                 |                            |           |                 |                                                          |              |                                                          |                     |                                                          |                     | 15 [49.2]  | <a href="#">PDF</a> |



7700-P4241 series



7700-P4201 series



7700-P4221 series



stay connected

# Connection Cables - Power

## M12 L-coded Cables Specifications

| M12 L-coded Cables Specifications            |                                                                                         |                              |
|----------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------|
| <b>Model</b>                                 | 7000-xxxxx-U0Pxxxx                                                                      | 7000-xxxxx-U0Dxxxx           |
| <b>Type</b>                                  | 5-Wire, 5-Pole                                                                          |                              |
| <b>Max Voltage</b>                           | 63VDC                                                                                   |                              |
| <b>Max Current Per Contact</b>               | 16A                                                                                     | 12A                          |
| <b>Protection Degree</b>                     | IP65 / IP67                                                                             |                              |
| <b>Nut Material</b>                          | Male threads are nickel plated brass;<br>Female threads are nickel plated die cast zinc |                              |
| <b>Cable Jacket/Wire Insulation Material</b> | TPE/PVC                                                                                 |                              |
| <b>Contacts Material</b>                     | Copper Alloy                                                                            |                              |
| <b>Tightening Torque</b>                     | ≤ 0.6 N·m [≤ 0.44 ft·lb]                                                                |                              |
| <b>Conductors Cross Section</b>              | 2.11 mm <sup>2</sup> [14AWG]                                                            | 1.31 mm <sup>2</sup> [16AWG] |
| <b>Ø Outer Cable</b>                         | 10.5 mm [0.415 in]                                                                      | 9.8 mm [0.385 in]            |
| <b>Temperature Range - Stationary Use</b>    | -50 to 105°C [-58 to 221°F]                                                             |                              |
| <b>Temperature Range - Flexible Use</b>      | -20 to 90°C [-4 to 194°F]                                                               |                              |
| <b>Min Bend Radius</b>                       | Stationary use: 5 x cable diameter;<br>Flexible use: 10 x cable diameter                |                              |
| <b>Approvals*</b>                            | cULus, CE                                                                               |                              |

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

# Connection Cables - Power

## M12 L-coded Adapter Cable and T-Coupler

- Use to convert a 7/8-16 connection to M12 L-coded connection



| M12 L-coded to 7/8" Adapter Cable  |         |                 |                                     |          |       |                  |                     |
|------------------------------------|---------|-----------------|-------------------------------------|----------|-------|------------------|---------------------|
| Part Number                        | Price   | Number of Wires | Connectors                          | Jacket   |       | Length<br>m [ft] | Drawing Link        |
|                                    |         |                 |                                     | Material | Color |                  |                     |
| <a href="#">7000-P4541-P040200</a> | \$5ed3: | 5               | M12 axial female to 7/8" axial male | PUR/PP   | Black | 2 [6.5]          | <a href="#">PDF</a> |

[7000-P4541-P040200](#)

| Adapter Cable M12 L-coded to 7/8" Specifications |                                                                                         |
|--------------------------------------------------|-----------------------------------------------------------------------------------------|
| Type                                             | 5-Wire, 5-Pole                                                                          |
| Max Voltage                                      | 63 VAC/VDC                                                                              |
| Max Current                                      | 12A                                                                                     |
| Connection                                       | Connector 1: M12 L-coded axial female<br>Connector 2: 7/8" axial male                   |
| Tightening Torque                                | M12: 0.6 N·m [0.44 ft·lb];<br>7/8": 1.5 N·m [1.1 ft·lb]                                 |
| Conductors Cross Section                         | 1.5mm <sup>2</sup> [16AWG]                                                              |
| Locking Material                                 | Male threads are nickel plated brass;<br>Female threads are nickel plated die cast zinc |
| Protection Degree                                | IP67                                                                                    |
| Ø Outer Cable                                    | 8.2 mm [0.32 in]                                                                        |
| Min Bend Radius                                  | Stationary use: 5 x cable diameter;<br>Flexible use: 10 x cable diameter                |
| Temperature Range - Stationary Use               | -50 to 80°C [-58 to 176°F]                                                              |
| Temperature Range - Flexible Use                 | -25 to 80°C [-13 to 176°F]                                                              |
| Contact Material                                 | Copper Alloy                                                                            |
| Agency Approvals *                               | NA                                                                                      |

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

## M12 L-coded T-Coupler

| M12 L-coded T-Coupler              |           |                 |                                |                                                              |                     |
|------------------------------------|-----------|-----------------|--------------------------------|--------------------------------------------------------------|---------------------|
| Part Number                        | Price     | Number of Poles | Connectors                     | Wiring                                                       | Drawing Link        |
| <a href="#">7000-P4901-0000000</a> | \$,05ed!: | 5               | Axial male to (2) axial female | 1- 1 - 1<br>2- 2 - 2<br>3- 3 - 3<br>4- 4 - 4<br>FE - FE - FE | <a href="#">PDF</a> |


[7000-P4901-0000000](#)

| M12 L-coded T-Coupler Specifications |                                                                                         |
|--------------------------------------|-----------------------------------------------------------------------------------------|
| Type                                 | 5-Wire, 5-Pole                                                                          |
| Max Voltage                          | 63VDC                                                                                   |
| Max Current                          | 16A                                                                                     |
| Connection                           | M12 L-coded                                                                             |
| Tightening Torque                    | ≤ 0.6 N·m [≤ 0.44 ft·lb]                                                                |
| Locking Material                     | Male threads are nickel plated brass;<br>Female threads are nickel plated die cast zinc |
| Protection Degree                    | IP65 / IP67 / IP68                                                                      |
| Temperature Range                    | -30 to 90°C [-22 to 194°F]                                                              |
| Material                             | Housing (TPU), Contact Carrier (PA), Contact (Brass, gold plated)                       |
| Approvals*                           | cULus, CE                                                                               |

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# Field Wireable Connectors - Power

## M12 L-coded Connectors

### Features

- IP65/IP67 protection rating
- Available with screw or push-lock spring clamp terminal connections



7000-P4591-0000000



7000-P4611-0000000



7000-P4651-0000000



7000-P4661-0000000

### M12 L-coded Connectors Selector Table

| Part Number                        | Price    | Number of Wires, Pins | Connection Type                  | Conductor Wire                         | Terminal Connection    | Cable Ø Range            | Drawing Link        |
|------------------------------------|----------|-----------------------|----------------------------------|----------------------------------------|------------------------|--------------------------|---------------------|
| <a href="#">7000-P4591-0000000</a> | \$5ed?:  | 5-Wire, 5-Pin         | Axial male with male threads     | 1.5–2.5 mm <sup>2</sup><br>[16–14AWG]  | Screw terminal         | 8–13mm<br>[0.31–0.51 in] | <a href="#">PDF</a> |
| <a href="#">7000-P4611-0000000</a> | \$;5ed,: |                       | Axial female with female threads |                                        |                        |                          | <a href="#">PDF</a> |
| <a href="#">7000-P4651-0000000</a> | \$6b0#:  |                       | Axial male with male threads     | 1.5–2.5 mm <sup>2</sup><br>[16–14 AWG] | Push-lock spring clamp | 9–13mm<br>[0.35–0.51 in] | <a href="#">PDF</a> |
| <a href="#">7000-P4661-0000000</a> | \$;6b0!: |                       | Axial female with female threads |                                        |                        |                          | <a href="#">PDF</a> |

### M12 L-coded Connector Specifications

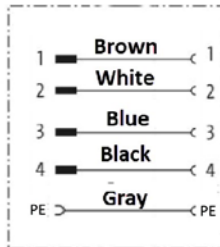
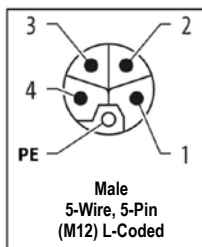
|                                      |                                                                                                                |                                                                                                                              |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Coding</b>                        | L-coded                                                                                                        |                                                                                                                              |
| <b>Model</b>                         | P4591, P4611                                                                                                   | P4651, P4661                                                                                                                 |
| <b>Max. Voltage</b>                  | 63V                                                                                                            |                                                                                                                              |
| <b>Max. Current per Contact</b>      | 16A                                                                                                            |                                                                                                                              |
| <b>Protection Degree</b>             | IP67                                                                                                           | IP65                                                                                                                         |
| <b>Temperature Range</b>             | -40 to 85°C [-40 to 185°F]                                                                                     |                                                                                                                              |
| <b>Wire Connection</b>               | Screw terminal; M2.5x0.45 mm <sup>2</sup> , torque to 40 N·m [29.5 ft-lb]                                      | Push-lock spring clamp<br>0.6 N·m [0.44 ft-lb]                                                                               |
| <b>Wire Connection Cross Section</b> | 1.5 mm <sup>2</sup> [16AWG] (with wire end ferrule);<br>2.5 mm <sup>2</sup> [14AWG] (without wire end ferrule) | 0.75–2.5 mm <sup>2</sup> [18–14AWG] (with wire end ferrule)<br>1.5–2.5 mm <sup>2</sup> [16–14AWG] (without wire end ferrule) |
| <b>Housing Material</b>              | Polyamide (PA)                                                                                                 | Nickel-plated brass (NPB)                                                                                                    |
| <b>Locking Material</b>              | Male threads are nickel plated brass;<br>Female threads are nickel plated die cast zinc                        | Brass                                                                                                                        |
| <b>Weight</b>                        | P4591 0.95 oz [27g]   P4611 1.94 oz [55g]                                                                      | P4651 2.6 oz [73.70 g]   P4661 3.25 oz [92.13 g]                                                                             |
| <b>Approvals*</b>                    | cURus                                                                                                          | cULus                                                                                                                        |

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

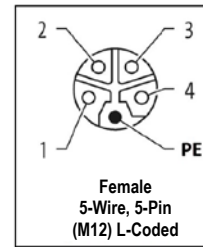
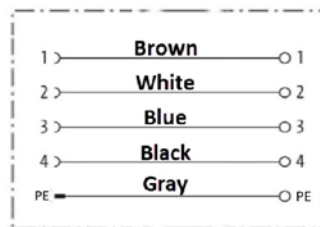
## Pin Assignments

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

Part Numbers: [7000-P4591-0000000](#) and  
[7000-P4651-0000000](#)

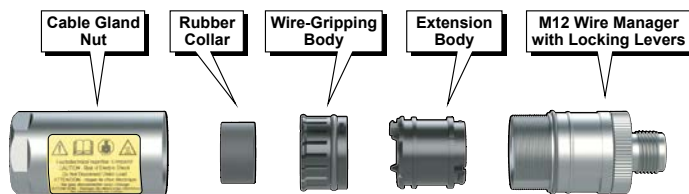


Part Numbers: [7000-P4611-0000000](#) and  
[7000-P4661-0000000](#)



# Field Wireable Connectors - Power

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



- 1** Using a small screwdriver, push on the plastic M12 end to unseat the wire manager.
- 2** Continue pushing until the wire manager is fully extended.
- 3** Prepare the M12 wire manager using a small screwdriver or fingernail to pry open each locking lever.
- 4** Before stripping cable jacket, install cable gland nut, rubber collar, wire-gripping body, and extension body on cable.
- 5** Remove 39mm of outer jacket from cable and strip 7mm of insulation from individual wires.
- 6** Insert individual wires into the M12 wire manager and close locking levers.
- 7** Fully seat the M12 wire manager.
- 8** Align wire gripper components with key locations and snap together. Slide rubber collar into wire gripper and thread cable gland nut onto M12 wire manager.
- 9** Hand-tighten or use 21mm wrench to tighten cable gland nut to secure M12 wire manager.
- 10** Assembly complete.