

Powertite® Series Pin and Sleeve Plugs, Connectors and Receptacles

Applications

- Designed to supply power to portable or fixed electrical equipment such as motor generator units, welders, pumps, compressors, cellular relay stations, and similar apparatus.
- Ideal for use on shipping docks, ports, and other “ship to shore” applications.
- Suitable for use in locations where a weatherproof enclosure is required.
- Rough usage construction.

Features

- Available in 30, 60, 100, 150, 200, and 400 Amp units.
- Available in two grounding styles: Style 1 (shell only) and Style 2 (shell and extra pole).
- Neoprene bushing compressed by cable collar prevents entrance of water. Bushing is highly resistant to hydrocarbon deterioration and is self-extinguishing.
- Locking screw and slot prevents plug cable collar from “backing off.”
- Contacts exert constant pressure along entire contact surface and provide electrical continuity.
- Suitable for use from -40 °F/-40 °C to 225 °F/107 °C.
- Insulating blocks provide greatest dielectric and mechanical strength and lowest arc tracking.
- Positive polarization: only plugs and receptacles of same style, number of poles and ampere rating can be used together.
- Circuit breaking: in 30, 60, 100, and 200 Amp units, any arcing created as line and load terminals disengage is safely confined deep within terminal cavities. Plugs may be withdrawn in an emergency under full rated loads without separate disconnect switches (400 Amp plug is for disconnecting use only; not for current rupturing).
- 30, 60, 100, and 150 Amp Powertite® plugs also suitable for classified locations when used with Appleton EBR, EBRH, JBR, MD2SR, or DBR explosion-proof interlocking receptacles.
- Controlled length contacts ensure that ground makes first and breaks last for added safety.

Standard Materials

- Plug, receptacle, connector and mounting box housings: copperfree (4/10 of 1% max.) aluminum
- Insulating blocks: glass filled polyester

Standard Finishes

- Aluminum plug, receptacle, connector and mounting box housings: epoxy powder coat
- Insulating blocks and contacts: natural finish

Options

- See Illustrated Options

Certifications and Compliances

- UL Standard: UL 1682, UL 1686, UL 50E
- UL Listed: E145916, E145917
- CSA Standard: C22.2 No. 182.1
- CSA Certified: 065179
- NEMA 4X (30, 60, 100, 150, and 200 Amp)
- NEMA Configuration: FB11

Related Products

- For classified location plugs and receptacles, see *Plugs and Receptacles: Hazardous Location*.



30 and 60 Amp



100 and 150 Amp



200 Amp



400 Amp

Classified by UL and Certified by CSA for use in specific combinations with Crouse-Hinds Arktime. Arktime is a registered trademark of Cooper Crouse-Hinds.

Aluminum Mounting Boxes

For Powertite® 30, 60, 100, and 150 Amp Receptacles

30 Amp



| Hub Size (Inches) | AEE | AERH | AERC | AERA |
|-------------------|-------|--------|--------|--------|
| 1/2 | AEE13 | AERH13 | AERC13 | AERA13 |
| 3/4 | AEE23 | AERH23 | AERC23 | AERA23 |
| 1 | AEE33 | AERH33 | AERC33 | AERA33 |

60 and 100 Amp



| Hub Size (Inches) | AEE | AERH | AERC | AERA |
|-------------------|-------|--------|--------|--------|
| 1 | AEE36 | AERH36 | AERC36 | AERA36 |
| 1-1/4 | AEE46 | AERH46 | AERC46 | AERA46 |
| 1-1/2 | AEE56 | AERH56 | AERC56 | AERA56 |

60, 100, and 150 Amp



| Hub Size (Inches) | AJA Back Box and Adapter * | Angle Adapter Only |
|-------------------|----------------------------|--------------------|
| 1 | AJA310 | |
| 1-1/4 | AJA410 | AJA100 |
| 1-1/2 | AJA510 | |
| 2 | AJA610 | |

Replacement Receptacle Mounting Gasket

| Amp | Back Box Type | Part Number |
|--------------|-----------------------|-------------|
| 30 | AEE, AERH, AERC, AERA | 69060871000 |
| 60, 100 | AEE, AERH, AERC, AERA | 69060567000 |
| 60, 100, 150 | AJA | 69009497000 |

* Feed-Thru box furnished with one close-up plug in bottom recessed hub.

Powertite® 30, 60, 100, and 150 Amp Mounting Box Dimensions

600 Vac, 250 Vdc, 50-400 Hz

Plugs and Receptacles

AJA Mounting Boxes



| Amp | Hub Size (Inches) | Dimensions in Inches/Millimeters | | |
|-----------------------|-------------------|----------------------------------|-----------|-----------|
| | | A | B † | C |
| 60, 100 and 150 | 1 | 1.13/28.7 | 0.56/14.2 | 8.0/203.2 |
| | 1-1/4 | 1.13/28.7 | 0.56/14.2 | 8.0/203.2 |
| | 1-1/2 | 1.50/38.1 | 0.56/14.2 | 8.0/203.2 |
| | 2 | 1.50/38.1 | 0.56/14.2 | 8.0/203.2 |

PLUGS AND RECEPTACLES: ORDINARY LOCATION

AJA100 Angle Adapter



| Dimensions in Inches/Millimeters | | | | | |
|----------------------------------|------------|------------|------------|-----------|------------|
| A | B | C | D | E | F |
| 5.87/149.0 | 5.18/131.5 | 5.87/149.0 | 5.18/131.5 | 3.50/88.9 | 4.81/122.1 |

† AJA has two hubs. Close-up plug furnished in bottom recessed hub.

Powertite® 30, 60, 100, and 150 Amp Mounting Box Dimensions

600 Vac, 250 Vdc, 50-400 Hz

AERA*, AERC‡ and AERH Mounting Boxes



| Amp | Hub Size (Inches) | Dimensions in Inches/Millimeters | | | | | | | | |
|-----|-------------------|----------------------------------|------------|------------|------------|-----------|-----------|------------|-----------|-----------|
| | | A* | B‡ | C | D | E | F | G | H | J |
| 30 | 1/2 | 0.69/17.5 | 5.31/134.8 | 3.38/85.8 | 3.38/85.8 | 2.50/63.5 | 2.63/66.8 | 4.56/115.8 | 2.72/69.0 | 0.94/23.8 |
| 30 | 3/4 | 0.75/19.0 | 5.31/134.8 | 3.38/85.8 | 3.38/85.8 | 2.50/63.5 | 2.63/66.8 | 4.56/115.8 | 2.72/69.0 | 0.94/23.8 |
| 30 | 1 | 0.81/20.5 | 5.31/134.8 | 3.38/85.8 | 3.38/8.6 | 2.50/63.5 | 2.63/66.8 | 4.56/115.8 | 2.72/69.0 | 0.94/23.8 |
| 60 | 1 | 0.81/20.5 | 6.50/165.1 | 4.25/107.9 | 4.25/107.9 | 3.13/79.5 | 3.50/88.9 | 5.88/149.3 | 3.50/8.9 | 1.38/35.0 |
| 60 | 1-1/4 | 0.94/23.8 | 6.50/165.1 | 4.25/107.9 | 4.25/107.9 | 3.13/79.5 | 3.50/88.9 | 5.88/149.3 | 3.50/88.9 | 1.38/35.0 |
| 60 | 1-1/2 | 1.00/25.4 | 6.50/165.1 | 4.25/107.9 | 4.25/107.9 | 3.13/79.5 | 3.50/88.9 | 5.88/149.3 | 3.50/88.9 | 1.38/35.0 |

AEE Mounting Box



| Amp | Hub Size (Inches) | Dimensions in Inches/Millimeters | | | | | | |
|-----|-------------------|----------------------------------|------------|------------|------------|------------|-----------|-----------|
| | | A | B | C | D | E | F | G |
| 30 | 1/2, 3/4, 1 | 4.12/104.6 | 5.00/127.0 | 3.33/84.5 | 4.25/107.9 | 3.38/85.8 | 1.18/29.9 | 1.10/27.9 |
| 60 | 1, 1-1/4, 1-1/2 | 5.41/137.4 | 6.38/162.0 | 4.23/107.4 | 5.38/136.6 | 4.25/107.9 | 1.50/38.1 | 1.50/38.1 |

* Dimension "A" for AERA only.
‡ Dimension "B" for AERC only.

Powertite® 200 and 400 Amp Mounting Boxes and Replacement Interiors

600 Vac, 250 Vdc, 50-400 Hz.

Plugs and Receptacles

PLUGS AND RECEPTACLES: ORDINARY LOCATION

200 Amp Mounting Boxes and Angle Adapter



| Hub Size (Inches) | AJB | AJA | AJAC (Feed-Thru) | AJA200 (Angle Adapter Only) |
|-------------------|--------|--------|------------------|-----------------------------|
| 1-1/2 NPT | — | AJA520 | — | AJA200 |
| 2 NPT | AJB620 | AJA620 | — | AJA200 |
| 2-1/2 NPT | — | AJA720 | AJAC720 | AJA200 |
| 2-3/8 (Slip Hole) | AJB238 | — | — | — |

400 Amp Mounting Box and Angle Adapter



| Hub Size (Inches) | AJAC * | AJA400 (Angle Adapter Only) |
|-------------------|---------|-----------------------------|
| 4 | AJAC400 | AJA400 |

200 Amp Interiors †



| Grounding Style | Wire/Pole | Receptacle | Plug | Receptacle | Plug |
|--------------------------------|-----------|------------|----------|------------|----------|
| Style 1 (Shell Only) | 3W, 3P | ARI20033 | API20033 | — | — |
| | 4W, 4P | ARI20044 | API20044 | — | — |
| Style 2 (Shell and Extra Pole) | 2W, 3P | — | — | ARI20023 | API20023 |
| | 3W, 4P | — | — | ARI20034 | API20034 |

400 Amp Interiors †



| Wire Recess Dia. (Inches) | Grounding Style | Wire/Pole | Receptacle | Plug | Receptacle | Plug |
|---------------------------|--------------------------------|-----------|------------|----------|------------|----------|
| .84 | Style 1 (Shell Only) | 3W, 3P | ARI40033 | API40033 | — | — |
| | | 4W, 4P | ARI40044 | API40044 | — | — |
| | Style 2 (Shell and Extra Pole) | 2W, 3P | — | — | ARI40023 | API40023 |
| | | 3W, 4P | — | — | ARI40034 | API40034 |
| 1.25 | Style 1 (Shell Only) | 3W, 3P | ARI40133 | API40133 | — | — |
| | | 4W, 4P | ARI40144 | API40144 | — | — |
| | Style 2 (Shell and Extra Pole) | 2W, 3P | — | — | ARI40123 | API40123 |
| | | 3W, 4P | — | — | ARI40134 | API40134 |

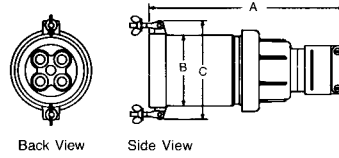
* Has feed-thru 4" tapped openings. Supplied with one 4" to 3" reducer and one 4" close-up plug.

† Pins and sleeves are not sold separately.

Powertite® 200 Amp Connector, Plug and Adapter Dimensions

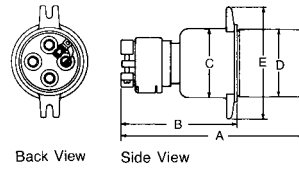
600 Vac, 250 Vdc, 50-400 Hz.

Connector Body



| No. Poles | Dimensions in Inches/Millimeters | | |
|-----------|----------------------------------|------------|------------|
| | A | B | C |
| 3 | 13.00/330.2 | 4.19/106.4 | 5.38/136.6 |
| 4 | 13.00/330.2 | 4.56/115.8 | 5.75/146.0 |

Plug



| No. Poles | Dimensions in Inches/Millimeters | | | | |
|-----------|----------------------------------|------------|------------|-------------|------------|
| | A | B | C | D | E |
| 3 | 11.94/303.2 | 7.81/198.3 | 3.81/96.7 | 3.75/95.2 | 6.44/163.5 |
| 4 | 11.94/303.2 | 7.81/198.3 | 4.19/106.4 | 4.13/104.95 | 6.81/172.9 |

AJA200 Angle Adapter



| Dimensions in Inches/Millimeters | | | | |
|----------------------------------|-----------|-----------|-----------|-----------|
| A | B | C | D | E |
| 8.0/203.2 | 7.0/177.8 | 8.0/203.2 | 7.0/177.8 | 6.0/152.4 |

Plugs and Receptacles

PLUGS AND RECEPTACLES: ORDINARY LOCATION

Powertite® Series Pin and Sleeve Plugs, Connectors and Receptacles

Applications

- Designed to supply power to portable or fixed electrical equipment such as motor generator units, welders, pumps, compressors, cellular relay stations, and similar apparatus.
- Ideal for use on shipping docks, ports, and other “ship to shore” applications.
- Suitable for use in locations where a weatherproof enclosure is required.
- Rough usage construction.

Features

- Available in 30, 60, 100, 150, 200, and 400 Amp units.
- Available in two grounding styles: Style 1 (shell only) and Style 2 (shell and extra pole).
- Neoprene bushing compressed by cable collar prevents entrance of water. Bushing is highly resistant to hydrocarbon deterioration and is self-extinguishing.
- Locking screw and slot prevents plug cable collar from “backing off.”
- Contacts exert constant pressure along entire contact surface and provide electrical continuity.
- Suitable for use from -40 °F/-40 °C to 225 °F/107 °C.
- Insulating blocks provide greatest dielectric and mechanical strength and lowest arc tracking.
- Positive polarization: only plugs and receptacles of same style, number of poles and ampere rating can be used together.
- Circuit breaking: in 30, 60, 100, and 200 Amp units, any arcing created as line and load terminals disengage is safely confined deep within terminal cavities. Plugs may be withdrawn in an emergency under full rated loads without separate disconnect switches (400 Amp plug is for disconnecting use only; not for current rupturing).
- 30, 60, 100, and 150 Amp Powertite® plugs also suitable for classified locations when used with Appleton EBR, EBRH, JBR, MD2SR, or DBR explosion-proof interlocking receptacles.
- Controlled length contacts ensure that ground makes first and breaks last for added safety.

Standard Materials

- Plug, receptacle, connector and mounting box housings: copperfree (4/10 of 1% max.) aluminum
- Insulating blocks: glass filled polyester

Standard Finishes

- Aluminum plug, receptacle, connector and mounting box housings: epoxy powder coat
- Insulating blocks and contacts: natural finish

Options

- See Illustrated Options

Certifications and Compliances

- UL Standard: UL 1682, UL 1686, UL 50E
- UL Listed: E145916, E145917
- CSA Standard: C22.2 No. 182.1
- CSA Certified: 065179
- NEMA 4X (30, 60, 100, 150, and 200 Amp)
- NEMA Configuration: FB11

Related Products

- For classified location plugs and receptacles, see *Plugs and Receptacles: Hazardous Location*.



30 and 60 Amp



100 and 150 Amp



200 Amp



400 Amp

Classified by UL and Certified by CSA for use in specific combinations with Crouse-Hinds Arktime. Arktime is a registered trademark of Cooper Crouse-Hinds.

Aluminum Mounting Boxes

For Powertite® 30, 60, 100, and 150 Amp Receptacles

30 Amp



| Hub Size (Inches) | AEE | AERH | AERC | AERA |
|-------------------|-------|--------|--------|--------|
| 1/2 | AEE13 | AERH13 | AERC13 | AERA13 |
| 3/4 | AEE23 | AERH23 | AERC23 | AERA23 |
| 1 | AEE33 | AERH33 | AERC33 | AERA33 |

60 and 100 Amp



| Hub Size (Inches) | AEE | AERH | AERC | AERA |
|-------------------|-------|--------|--------|--------|
| 1 | AEE36 | AERH36 | AERC36 | AERA36 |
| 1-1/4 | AEE46 | AERH46 | AERC46 | AERA46 |
| 1-1/2 | AEE56 | AERH56 | AERC56 | AERA56 |

60, 100, and 150 Amp



| Hub Size (Inches) | AJA Back Box and Adapter * | Angle Adapter Only |
|-------------------|----------------------------|--------------------|
| 1 | AJA310 | |
| 1-1/4 | AJA410 | AJA100 |
| 1-1/2 | AJA510 | |
| 2 | AJA610 | |

Replacement Receptacle Mounting Gasket

| Amp | Back Box Type | Part Number |
|--------------|-----------------------|-------------|
| 30 | AEE, AERH, AERC, AERA | 69060871000 |
| 60, 100 | AEE, AERH, AERC, AERA | 69060567000 |
| 60, 100, 150 | AJA | 69009497000 |

* Feed-Thru box furnished with one close-up plug in bottom recessed hub.

Powertite® 30, 60, 100, and 150 Amp Mounting Box Dimensions

600 Vac, 250 Vdc, 50-400 Hz

Plugs and Receptacles

AJA Mounting Boxes



| Amp | Hub Size (Inches) | Dimensions in Inches/Millimeters | | |
|-----------------------|-------------------|----------------------------------|-----------|-----------|
| | | A | B † | C |
| 60, 100 and 150 | 1 | 1.13/28.7 | 0.56/14.2 | 8.0/203.2 |
| | 1-1/4 | 1.13/28.7 | 0.56/14.2 | 8.0/203.2 |
| | 1-1/2 | 1.50/38.1 | 0.56/14.2 | 8.0/203.2 |
| | 2 | 1.50/38.1 | 0.56/14.2 | 8.0/203.2 |

PLUGS AND RECEPTACLES: ORDINARY LOCATION

AJA100 Angle Adapter



| Dimensions in Inches/Millimeters | | | | | |
|----------------------------------|------------|------------|------------|-----------|------------|
| A | B | C | D | E | F |
| 5.87/149.0 | 5.18/131.5 | 5.87/149.0 | 5.18/131.5 | 3.50/88.9 | 4.81/122.1 |

† AJA has two hubs. Close-up plug furnished in bottom recessed hub.

Powertite® 30, 60, 100, and 150 Amp Mounting Box Dimensions

600 Vac, 250 Vdc, 50-400 Hz

AERA*, AERC‡ and AERH Mounting Boxes



| Amp | Hub Size (Inches) | Dimensions in Inches/Millimeters | | | | | | | | |
|-----|-------------------|----------------------------------|------------|------------|------------|-----------|-----------|------------|-----------|-----------|
| | | A* | B‡ | C | D | E | F | G | H | J |
| 30 | 1/2 | 0.69/17.5 | 5.31/134.8 | 3.38/85.8 | 3.38/85.8 | 2.50/63.5 | 2.63/66.8 | 4.56/115.8 | 2.72/69.0 | 0.94/23.8 |
| 30 | 3/4 | 0.75/19.0 | 5.31/134.8 | 3.38/85.8 | 3.38/85.8 | 2.50/63.5 | 2.63/66.8 | 4.56/115.8 | 2.72/69.0 | 0.94/23.8 |
| 30 | 1 | 0.81/20.5 | 5.31/134.8 | 3.38/85.8 | 3.38/8.6 | 2.50/63.5 | 2.63/66.8 | 4.56/115.8 | 2.72/69.0 | 0.94/23.8 |
| 60 | 1 | 0.81/20.5 | 6.50/165.1 | 4.25/107.9 | 4.25/107.9 | 3.13/79.5 | 3.50/88.9 | 5.88/149.3 | 3.50/88.9 | 1.38/35.0 |
| 60 | 1-1/4 | 0.94/23.8 | 6.50/165.1 | 4.25/107.9 | 4.25/107.9 | 3.13/79.5 | 3.50/88.9 | 5.88/149.3 | 3.50/88.9 | 1.38/35.0 |
| 60 | 1-1/2 | 1.00/25.4 | 6.50/165.1 | 4.25/107.9 | 4.25/107.9 | 3.13/79.5 | 3.50/88.9 | 5.88/149.3 | 3.50/88.9 | 1.38/35.0 |

AEE Mounting Box



| Amp | Hub Size (Inches) | Dimensions in Inches/Millimeters | | | | | | |
|-----|-------------------|----------------------------------|------------|------------|------------|------------|-----------|-----------|
| | | A | B | C | D | E | F | G |
| 30 | 1/2, 3/4, 1 | 4.12/104.6 | 5.00/127.0 | 3.33/84.5 | 4.25/107.9 | 3.38/85.8 | 1.18/29.9 | 1.10/27.9 |
| 60 | 1, 1-1/4, 1-1/2 | 5.41/137.4 | 6.38/162.0 | 4.23/107.4 | 5.38/136.6 | 4.25/107.9 | 1.50/38.1 | 1.50/38.1 |

* Dimension "A" for AERA only.
‡ Dimension "B" for AERC only.

Powertite® 200 and 400 Amp Mounting Boxes and Replacement Interiors

600 Vac, 250 Vdc, 50-400 Hz.

Plugs and Receptacles

PLUGS AND RECEPTACLES: ORDINARY LOCATION

200 Amp Mounting Boxes and Angle Adapter



| Hub Size (Inches) | AJB | AJA | AJAC (Feed-Thru) | AJA200 (Angle Adapter Only) |
|-------------------|--------|--------|------------------|-----------------------------|
| 1-1/2 NPT | — | AJA520 | — | AJA200 |
| 2 NPT | AJB620 | AJA620 | — | AJA200 |
| 2-1/2 NPT | — | AJA720 | AJAC720 | AJA200 |
| 2-3/8 (Slip Hole) | AJB238 | — | — | — |

400 Amp Mounting Box and Angle Adapter



| Hub Size (Inches) | AJAC * | AJA400 (Angle Adapter Only) |
|-------------------|---------|-----------------------------|
| 4 | AJAC400 | AJA400 |

200 Amp Interiors †



| Grounding Style | Wire/Pole | Receptacle | Plug | Receptacle | Plug |
|--------------------------------|-----------|------------|----------|------------|----------|
| Style 1 (Shell Only) | 3W, 3P | ARI20033 | API20033 | — | — |
| | 4W, 4P | ARI20044 | API20044 | — | — |
| Style 2 (Shell and Extra Pole) | 2W, 3P | — | — | ARI20023 | API20023 |
| | 3W, 4P | — | — | ARI20034 | API20034 |

400 Amp Interiors †



| Wire Recess Dia. (Inches) | Grounding Style | Wire/Pole | Receptacle | Plug | Receptacle | Plug |
|---------------------------|--------------------------------|-----------|------------|----------|------------|----------|
| .84 | Style 1 (Shell Only) | 3W, 3P | ARI40033 | API40033 | — | — |
| | | 4W, 4P | ARI40044 | API40044 | — | — |
| | Style 2 (Shell and Extra Pole) | 2W, 3P | — | — | ARI40023 | API40023 |
| | | 3W, 4P | — | — | ARI40034 | API40034 |
| 1.25 | Style 1 (Shell Only) | 3W, 3P | ARI40133 | API40133 | — | — |
| | | 4W, 4P | ARI40144 | API40144 | — | — |
| | Style 2 (Shell and Extra Pole) | 2W, 3P | — | — | ARI40123 | API40123 |
| | | 3W, 4P | — | — | ARI40134 | API40134 |

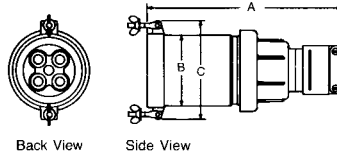
* Has feed-thru 4" tapped openings. Supplied with one 4" to 3" reducer and one 4" close-up plug.

† Pins and sleeves are not sold separately.

Powertite® 200 Amp Connector, Plug and Adapter Dimensions

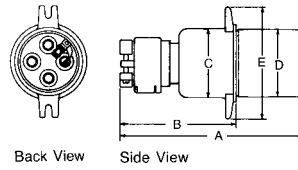
600 Vac, 250 Vdc, 50-400 Hz.

Connector Body



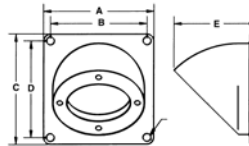
| No. Poles | Dimensions in Inches/Millimeters | | |
|-----------|----------------------------------|------------|------------|
| | A | B | C |
| 3 | 13.00/330.2 | 4.19/106.4 | 5.38/136.6 |
| 4 | 13.00/330.2 | 4.56/115.8 | 5.75/146.0 |

Plug



| No. Poles | Dimensions in Inches/Millimeters | | | | |
|-----------|----------------------------------|------------|------------|-------------|------------|
| | A | B | C | D | E |
| 3 | 11.94/303.2 | 7.81/198.3 | 3.81/96.7 | 3.75/95.2 | 6.44/163.5 |
| 4 | 11.94/303.2 | 7.81/198.3 | 4.19/106.4 | 4.13/104.95 | 6.81/172.9 |

AJA200 Angle Adapter



| Dimensions in Inches/Millimeters | | | | |
|----------------------------------|-----------|-----------|-----------|-----------|
| A | B | C | D | E |
| 8.0/203.2 | 7.0/177.8 | 8.0/203.2 | 7.0/177.8 | 6.0/152.4 |

Plugs and Receptacles

PLUGS AND RECEPTACLES: ORDINARY LOCATION