

**North American Devices (20-100 Amp)**  
**Accessories**  
**Mechanical Interlocks**  
**International Devices (16-125 Amps)**  
**Dimensions**



**Ericson Manufacturing Company** offers a comprehensive range of IEC309 Pin & Sleeve Devices that meet both IEC 309-1 and IEC 309-2 specifications along with UL 1682 and UL 1686 standards for safety.

- Fully interchangeable with other manufacturers who conform to these standards
- Watertight IP67 devices for wet locations
- Splash proof IP44 devices for light industrial environments
- Economy Splash proof IP44 devices that offer a lower cost alternative with many of the same features as our Standard IP44 devices
- Mechanical Interlocks available in both IP67 and IP44 constructions

### ***Watertight IP67 Devices***

- Locking ring and gasket provides positive mechanical lock between male and female devices to prevent intrusion of moisture, dirt and dust
- Shrouded and recessed pins are protected from physical damage
- Recessed contact sleeves protect from accidental encounter with live contacts
- Color-coded devices prevent confusion with voltage ratings
- External cable gland with "onion-ring" neoprene bushing assure watertight integrity

### ***Splash proof IP44 Devices***

- Shrouded and recessed pins are protected from physical damage
- Recessed contact sleeves protect from accidental encounter with live contacts
- Color-coded devices prevent confusion with voltage ratings
- External cable gland with "onion-ring" neoprene bushing assure watertight integrity

### ***Economy Splash proof IP44 Devices***

- Shrouded and recessed pins protected from physical damage
- Recessed contact sleeves protect from accidental encounter with live contacts
- Color-coded devices prevent confusion with voltage ratings
- Cable sleeve cord entry with molded-in markings to make it easy to identify the proper point to cut-off the boot to accommodate your cable diameter

### ***Mechanical Interlocks***

- A disconnect switch and receptacle are combined into a compact device
- Eliminates the making and breaking of plug and receptacle under load

### ***Custom Built Assemblies***

As always you can turn to Ericson Manufacturing Company to engineer a solution to your temporary power application if you do not find a standard catalog item to fit your need. Contact the factory or your local sales representative to find out more.

# IEC 309 Pin & Sleeve Devices

## Performance Ratings: North American Ratings

### ELECTRICAL

|                                                 |                                                                                                                                      |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Insulation Resistance</b>                    | 500V for 1 min. Resistance 5M                                                                                                        |
| <b>Dielectric Voltage Withstand</b>             | 3000V for 1 min.                                                                                                                     |
| <b>Ground Path Current</b>                      | See Table 1                                                                                                                          |
| <b>Endurance, Connect and Disconnect Cycles</b> | See Table 2                                                                                                                          |
| <b>Current Interrupting</b>                     | Certified for current interrupting at full rated current and voltage.                                                                |
| <b>Overload Test</b>                            | Tested for current interrupting at (Power factor 0.75 - 0.80) 150% of the rated current and 100% of the rated voltage for 50 cycles. |
| <b>Temperature Rise</b>                         | Maximum 30° C rise at full rated current (after overload).                                                                           |
| <b>Resistance to Arcing</b>                     | Continuation of overload test for an additional 200 cycles.                                                                          |

### MECHANICAL

|                                                |                                                                                                                                                                                                              |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mold Stress Relief</b>                      | 70°C (158°F) for 7 hours.                                                                                                                                                                                    |
| <b>Humidity</b>                                | 32°C (89.6°F), 93% humidity for 7 days (168 hours).                                                                                                                                                          |
| <b>Cable Secureness</b>                        | See Table 3                                                                                                                                                                                                  |
| <b>Impact</b>                                  | A device is wired with a 90" (2300mm) length of flexible cord and dropped from 30" (760mm) 8 times. The device is then conditioned for 6 hours at -25°C and immediately subjected to a repeated impact test. |
| <b>Crushing</b>                                | 250 lbs for 1 minute. The device is then conditioned for 6 hours at -25°C and immediately subjected to a repeated crushing test.                                                                             |
| <b>Withdrawal Force</b>                        | See Table 4                                                                                                                                                                                                  |
| <b>Strength of Insulating Base and Support</b> | 110% of specified tightening torque on terminal screws.                                                                                                                                                      |
| <b>Polarization Integrity</b>                  | Matching devices will not mate so that the ground is energized, even when polarization feature is removed and 40 lb (180 N) insertion force is applied.                                                      |

### ENVIRONMENTAL

|                                  |                                                                                                                                                                                                                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flammability</b>              | V-2 or better per UL 94 or CSA 22.2 No. 0.6                                                                                                                                                                                                                                                             |
| <b>Ambient Temperature Range</b> | Minimum: -25°C (-13°F) with impact<br>Maximum: 90°C (194°F)                                                                                                                                                                                                                                             |
| <b>Resistance to Corrosion</b>   | Ferrous parts immersed for 10 min. in 10% solution of ammonium chloride at a temperature of 20°C.                                                                                                                                                                                                       |
| <b>Moisture Resistance</b>       | Watertight (IP67): Device immersed for 24 hours in water at a temp. of 25°C, the highest point of the device being 2" (5cm) below the water level.<br>Splashproof (IP44): Device is sprayed with water for 10 minutes and immediately afterwards subjected to splashing water in all directions (360°). |
| <b>UV Resistance</b>             | Exposed plastic materials are UV stabilized.                                                                                                                                                                                                                                                            |

TABLE 1

| Ground Path Current Test |                                  |     |               |                       |
|--------------------------|----------------------------------|-----|---------------|-----------------------|
| Device Rating Amperes    | Minimum Size Grounding Conductor |     | Time, Seconds | Test Current, Amperes |
|                          | AWG                              | mm² |               |                       |
| 20                       | 12                               | 3.3 | 4             | 470                   |
| 30                       | 10                               | 5.3 | 4             | 750                   |
| 60                       | 10                               | 5.3 | 4             | 750                   |
| 100                      | 8                                | 8.4 | 4             | 1180                  |

A test current that far exceeds the device rating, is passed through the mating devices and grounding wires.

TABLE 2

| Endurance Test        |                                               |                |             |
|-----------------------|-----------------------------------------------|----------------|-------------|
| Device Rating Amperes | Cycles with Load at Rated Current and Voltage | No-Load Cycles | Sequence    |
| 20                    | 5000                                          | 0              | -           |
| 30                    | 1000                                          | 1000           | Alternating |
| 60                    | 1000                                          | 1000           | Alternating |
| 100                   | 250                                           | 250            | Alternating |

The test sequence is conducted by using a no-load, followed by a load sequence. The power factor of the load is 0.75 to 0.80.

TABLE 3

| Cable Secureness Test |       |     |        |      |                      |      |
|-----------------------|-------|-----|--------|------|----------------------|------|
| Device Rating Amperes | Force |     | Torque |      | Maximum Displacement |      |
|                       | lb.   | N   | ft-lb. | N•m  | Inches               | mm   |
| 20                    | 30    | 133 | 0.4    | 0.54 | 3/32                 | 2.38 |
| 30                    | 75    | 333 | 0.5    | 0.68 | 3/32                 | 2.38 |
| 60                    | 150   | 667 | 1.0    | 1.4  | 3/32                 | 2.38 |
| 100                   | 150   | 667 | 2.0    | 2.7  | 3/32                 | 2.38 |

The flexible cord or cable is simultaneously twisted and pulled. Values for the applied twisting torque and force of pull are shown in Table 3. In all cases the cord displacement is less than 3/32 inches.

TABLE 4

| Withdrawal Forces Test |                          |    |               |
|------------------------|--------------------------|----|---------------|
| Device Rating Amperes  | Minimum Withdrawal Force |    |               |
|                        | lb.                      | N  | Time, Minutes |
| 20                     | 5                        | 22 | 1             |
| 30                     | 6                        | 27 | 1             |
| 60                     | 15                       | 67 | 1             |
| 100                    | 20                       | 89 | 1             |

The pressure exerted by mating contacts of a plug and connector must be sufficient to prevent unintentional withdrawal during normal use. During the test, any locking rings or retaining means are not to be engaged.

These products are Listed to applicable UL Standards and requirements by Underwriters Laboratories Inc. UL 1682 and UL 1686.

# IEC 309 Pin & Sleeve Devices

## Performance Ratings: North American Ratings

### PLUG

|                          |                            |
|--------------------------|----------------------------|
| Assembly Screws*         | Steel, Electro Zinc Plated |
| Friction Ring*           | Steel, Electro Zinc Plated |
| Gland Cap                | Polycarbonate Blend        |
| Grommet                  | Solid Neoprene             |
| Housing (Front and Back) | Type 6 Nylon               |
| Internal Cord Clamp      | Type 6 Nylon               |
| Locking Ring             | Type 6 Nylon               |
| Pins (Watertight)        | Brass, Nickel plated       |
| Pins (Splashproof)       | Brass                      |
| Sealing Gasket           | Neoprene                   |
| Terminal Screws          | Steel, Nickel Plated       |

### INLET

|                    |                      |
|--------------------|----------------------|
| Housing            | Type 6 Nylon         |
| Locking Ring       | Type 6 Nylon         |
| Mounting Flange    | Type 6 Nylon         |
| Pins (Watertight)  | Brass, Nickel plated |
| Pins (Splashproof) | Brass                |
| Sealing Gasket     | Neoprene             |
| Terminal Screws    | Steel, Nickel Plated |

\* Stainless steel available upon request

### CONNECTOR

|                          |                                  |
|--------------------------|----------------------------------|
| Assembly Screws*         | Steel, Electro Zinc Plated       |
| Cover                    | Type 6 Nylon                     |
| Cover Fastener           | Nickel Plated Brass, or Macrolon |
| Friction Ring*           | Steel, Electro Zinc Plated       |
| Gland Cap                | Polycarbonate Blend              |
| Grommet                  | Solid Neoprene                   |
| Housing (Front and Back) | Type 6 Nylon                     |
| Internal Cord Clamp      | Type 6 Nylon                     |
| Sealing Gasket           | Neoprene                         |
| Sleeve Spring            | Steel, Nickel Plated             |
| Sleeves (Watertight)     | Brass, Nickel Plated             |
| Sleeves (Splashproof)    | Brass                            |
| Terminal Screws          | Steel, Nickel Plated             |

### RECEPTACLE

|                       |                                  |
|-----------------------|----------------------------------|
| Cover                 | Type 6 Nylon                     |
| Cover Fastener        | Nickel Plated Brass, or Macrolon |
| Cover Spring          | Stainless Steel (A2)             |
| Housing               | Type 6 Nylon                     |
| Mounting Flange       | Type 6 Nylon                     |
| Sealing Gasket        | Neoprene                         |
| Sleeve Spring         | Steel, Nickel Plated             |
| Sleeves (Watertight)  | Brass, Nickel Plated             |
| Sleeves (Splashproof) | Brass                            |
| Terminal Screws       | Steel, Nickel Plated             |

Manufacturing pin & sleeve devices, of superior quality, can only be accomplished through the use of high grade materials. That is an important part of the Ericson Pin & Sleeve system - quality products you can depend on.

Male pins and female sleeves are made of high conductivity brass. Contacts used with watertight devices are nickel plated to prevent corrosion. The insulated housing is made from a high impact, nylon material. The non-metallic device, while resistant to most solvents, chemicals and salt water, is also nonconductive, which enhances the safety of the product.

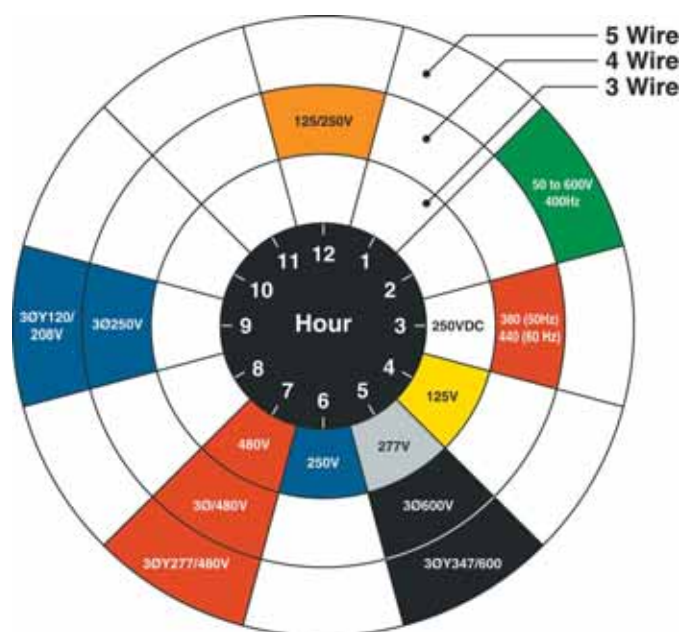
## Application Guide

| Industry                                 | Application                                                                                                                                                                                                                        |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Food Processing                          | Areas where washdowns are common and heavy abuse of connections occur.                                                                                                                                                             |
| Food Service                             | Indoor service where subject to water, chemicals and cleaning agents.                                                                                                                                                              |
| Outdoor Events & Temporary Power Setups  | Concerts, Carnivals, Sporting Events, Street Fairs, Entertainment Districts where outdoor connections are required and subject to rain, snow, mud & critical loads mandate a secure connection such as lighting and sound systems. |
| Chemical Processing                      | Where subject to rough use, water/possible immersion & corrosion.                                                                                                                                                                  |
| Construction Sites                       | Outdoors where subject to severe weather conditions, wet grounds.                                                                                                                                                                  |
| Pulp/Paper Mills                         | Where subject to rough use, water/possible immersion & corrosion.                                                                                                                                                                  |
| Marinas                                  | Where subject to rough use, water/possible immersion & corrosion.                                                                                                                                                                  |
| Plant Maintenance & Repair               | Where subject to rough use, water/possible immersion & corrosion, dust, metal chips, coolants or exposed to vibration and rough handling.                                                                                          |
| Agriculture                              | Outdoor connections for electrically powered equipment such as fans, pumps and heaters.                                                                                                                                            |
| Wastewater Treatment                     | Flood-prone areas, outdoor connections for electrically powered equipment.                                                                                                                                                         |
| Computer Installation/Maintenance/Repair | Connections under raised floors subject to liquid exposure & for critical loads that require a secure connection.                                                                                                                  |
| Machine Build/Repair                     | To mate with or replace factory-wired devices on imported equipment. OEM assembly onto machinery built for export.                                                                                                                 |

# IEC 309 Pin & Sleeve Devices

## Voltage Ratings

CEEtyp Clockface Positions in Accordance with IEC 309-2 and UL 1686

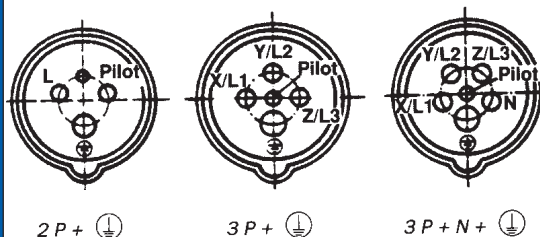


North American Ratings  
Voltage AC (Except where noted)

## ELECTRICAL INTERLOCK

Examples:

60A and 100A North American Rating  
63A and 125A International Rating



Viewed from the front of a socket-outlet

Plugs and receptacles rated 60 amps and above, feature an "electrical interlock" by way of a pilot pin on the plug and female sleeve on the receptacle that is shorter than the main pins. The pilot pin and female sleeve make the contact last; and break the contact first. This sequence turns the power on when the pilot pin and sleeve mate, and turns the power off before the phase contacts are dis-engaged. This prevents making or breaking the circuit under load.

## Catalog Numbering System: Receptacles, Plugs, Connectors, and Inlets

| 4     | 30                                                  | P                            | 7                           | W                               |
|-------|-----------------------------------------------------|------------------------------|-----------------------------|---------------------------------|
| Wires | Amperage Rating<br>North American/<br>International | Device Type                  | Clock Position              | Environmental<br>Classification |
| 3     | 20                                                  | P - Plug                     | Clock position<br>of Female | W - Watertight                  |
| 4     | 30                                                  | C - Connector                | Grounding                   | S - Splashproof                 |
| 5     | 60                                                  | R - Receptacle               | Contact                     | E - Economy                     |
| 7     | 100                                                 | RA - Receptacle<br>Angled    |                             | Splashproof                     |
|       |                                                     | B - Inlet                    |                             |                                 |
|       |                                                     | BA - Inlet Angled            |                             |                                 |
|       |                                                     | MI - Mechanical<br>Interlock |                             |                                 |

International Configuration Devices available with ratings of 16A, 32A, 63A and 125 Amps; Consult factory for additional information.

# IEC 309 Pin & Sleeve Devices

## IP 67

## Watertight Devices

### Retaining Device

Holds the plug in position when it is in proper engagement with a connector or socket-outlet and prevents its unintentional withdrawal.

### Internal Strain Relief with "Swing-Away" Feature

Designed to firmly grip not only the outer cable jacket but also the internal conductors. Eliminates strain on the terminals while providing high pull-out values. "Swing-Away" feature provides easy access to terminal screws. Reliability! Ease of Use!

### Shrouded Pins

Pins are recessed in the nylon housing and protected from deforming due to physical abuse. Eliminates the potential hazard of touching the live contacts while the plug is partially engaged. Safety! Reliability!

### External Cable Gland with "Onion Ring" Neoprene Bushing

The compression type cable gland serves as a secondary method of eliminating strain on the terminals and conductors while assuring watertight performance. Accommodates various cable sizes. Reliability! Ease of Use!

### Electro-Zinc Plated Steel Screws

Corrosion resistant. Captive; no loose parts to handle or misplace. Durability! Ease of Use!

### Locking Ring and Gasket

Protects against intrusion of dirt, dust and moisture when the male and female devices are connected. Reliability!

### Terminal Identification

Ground, neutral and phase terminals are clearly identified for easy recognition and ease of wiring.

### Color Coded

Avoid mismatching. Prevents confusion with regards to voltage ratings. Safety! Ease of Use!

### Spring Loaded Gasketed Covers

Protects against accidental encounter with live contacts. Also, protects against intrusion of dirt, dust and moisture. A bayonet coupling device is used to provide optimum stability and simplify installation. Reliability! Safety!

### High Impact Thermoplastic Housing

The non-metallic device, while abuse and corrosion resistant, is also nonconductive, which enhances the safety of the product. The insulated housing is made from a high impact, nylon material and is UV stabilized. Safety! Durability!

### Staggered Contacts

Oversized ground contact is farthest forward, assuring first make and last break. Neutral is next to prevent the possibility of an "open neutral" condition. Phase contact is farthest making it last to make, first to break. Safety!

### Recessed Contacts

Contact sleeves are recessed in the narrow contact tubes thus, providing a "finger proof" device and protecting against any accidental encounter with live contacts. Safety!

### Retaining Device

Pin & Sleeve devices are provided with a mechanical arrangement which holds a plug or connector in position when it is in proper engagement, and prevents its unintentional withdrawal.

### Double Terminal Screws

Maximum clamping pressure without damaging strands. Double terminal screws create a large area of safe and secure contact between conductor and terminal. Screws are captive, easily accessible and supplied in the open position.

### Solid Brass Pins

Low contact resistance and high conductivity. Long lasting, reliable electrical contact. Reliability!

### Chamfered Terminals

Funnel Entry. Guides and captures all wire strands.

### Split Contact Sleeve with Nickel Plated Steel Springs

Provides optimum insertion/withdrawal force and constant contact pressure. Reliability!

# IEC 309 Pin & Sleeve Devices

## 20 & 30 Amp Watertight Pin & Sleeve Devices

### IP 67

## 20 and 30 Amp Watertight Pin & Sleeve Devices

|      |               |                                                                                                                                                                         |              | Receptacles                                                                       |          | Plugs                                                                             | Connectors                                                                         | Inlets                                                                              |                               |        |
|------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------|--------|
|      |               |                                                                                                                                                                         |              |  |          |  |  |  |                               |        |
| Amps | Poles & Wires | Configuration<br>Recep./ Plug/<br>Conn. Inlet                                                                                                                           | Voltage      | Straight                                                                          | Angled   |                                                                                   |                                                                                    | Angled                                                                              | Back Box <sup>1 &amp; 2</sup> |        |
| 20   | 2P3W          |       | 250VDC       | 320R3W                                                                            | 320RA3W  | 320P3W                                                                            | 320C3W                                                                             | 320BA3W                                                                             |                               |        |
|      | 2P3W          |       | 125          | 320R4W                                                                            | 320RA4W  | 320P4W                                                                            | 320C4W                                                                             | 320BA4W                                                                             |                               |        |
|      | 2P3W          |       | 250          | 320R6W                                                                            | 320RA6W  | 320P6W                                                                            | 320C6W                                                                             | 320BA6W                                                                             |                               |        |
|      | 2P3W          |       | 480          | 320R7W                                                                            | 320RA7W  | 320P7W                                                                            | 320C7W                                                                             | 320BA7W                                                                             |                               |        |
|      | 2P3W          |       | 277          | 320R5W                                                                            | 320RA5W  | 320P5W                                                                            | 320C5W                                                                             | 320BA5W                                                                             |                               |        |
|      | 3P4W          |       | 125/250      | 420R12W                                                                           | 420RA12W | 420P12W                                                                           | 420C12W                                                                            | 420BA12W                                                                            | BB201W                        | BB301W |
|      | 3P4W          |       | 3Ø250        | 420R9W                                                                            | 420RA9W  | 420P9W                                                                            | 420C9W                                                                             | 420BA9W                                                                             | BB201W                        | BB301W |
|      | 3P4W          |     | 3Ø480        | 420R7W                                                                            | 420RA7W  | 420P7W                                                                            | 420C7W                                                                             | 420BA7W                                                                             | BB201W                        | BB301W |
|      | 3P4W          |   | 3Ø600        | 420R5W                                                                            | 420RA5W  | 420P5W                                                                            | 420C5W                                                                             | 420BA5W                                                                             | BB201W                        | BB301W |
|      | 4P5W          |   | 3ØY120/208   | 520R9W                                                                            | 520RA9W  | 520P9W                                                                            | 520C9W                                                                             | 520BA9W                                                                             | BB201W                        | BB301W |
|      | 4P5W          |   | 3ØY277/480   | 520R7W                                                                            | 520RA7W  | 520P7W                                                                            | 520C7W                                                                             | 520BA7W                                                                             | BB201W                        | BB301W |
|      | 4P5W          |   | 3ØY347/600   | 520R5W                                                                            | 520RA5W  | 520P5W                                                                            | 520C5W                                                                             | 520BA5W                                                                             | BB201W                        | BB301W |
| 30   | 2P3W          |   | 250VDC       | 330R3W                                                                            | 330RA3W  | 330P3W                                                                            | 330C3W                                                                             | 330BA3W                                                                             | BB201W                        | BB301W |
|      | 2P3W          |   | 125          | 330R4W                                                                            | 330RA4W  | 330P4W                                                                            | 330C4W                                                                             | 330BA4W                                                                             | BB201W                        | BB301W |
|      | 2P3W          |   | 250          | 330R6W                                                                            | 330RA6W  | 330P6W                                                                            | 330C6W                                                                             | 330BA6W                                                                             | BB201W                        | BB301W |
|      | 2P3W          |   | 480          | 330R7W                                                                            | 330RA7W  | 330P7W                                                                            | 330C7W                                                                             | 330BA7W                                                                             | BB201W                        | BB301W |
|      | 2P3W          |   | 277          | 330R5W                                                                            | 330RA5W  | 330P5W                                                                            | 330C5W                                                                             | 330BA5W                                                                             | BB201W                        | BB301W |
|      | 3P4W          |   | 125/250      | 430R12W                                                                           | 430RA12W | 430P12W                                                                           | 430C12W                                                                            | 430BA12W                                                                            | BB201W                        | BB301W |
|      | 3P4W          |   | 3Ø250        | 430R9W                                                                            | 430RA9W  | 430P9W                                                                            | 430C9W                                                                             | 430BA9W                                                                             | BB201W                        | BB301W |
|      | 3P4W          |   | 3Ø480        | 430R7W                                                                            | 430RA7W  | 430P7W                                                                            | 430C7W                                                                             | 430BA7W                                                                             | BB201W                        | BB301W |
|      | 3P4W          |   | 3Ø600        | 430R5W                                                                            | 430RA5W  | 430P5W                                                                            | 430C5W                                                                             | 430BA5W                                                                             | BB201W                        | BB301W |
|      | 4P5W          |   | 50-600 400Hz | 530R2W                                                                            | 530RA2W  | 530P2W                                                                            | 530C2W                                                                             | 530BA2W                                                                             | BB201W                        | BB301W |
|      | 4P5W          |   | 3ØY120/208   | 530R9W                                                                            | 530RA9W  | 530P9W                                                                            | 530C9W                                                                             | 530BA9W                                                                             | BB201W                        | BB301W |
|      | 4P5W          |   | 3ØY277/480   | 530R7W                                                                            | 530RA7W  | 530P7W                                                                            | 530C7W                                                                             | 530BA7W                                                                             | BB201W                        | BB301W |
|      | 4P5W          |   | 3ØY347/600   | 530R5W                                                                            | 530RA5W  | 530P5W                                                                            | 530C5W                                                                             | 530BA5W                                                                             | BB201W                        | BB301W |

1. Back Box for use with Receptacles only. Select Back Box with Hub Size to fit your application refer to the back boxes & closure caps page in this section.

2. Can not use angled inlets with back box.

# IEC 309 Pin & Sleeve Devices

## 60 & 100 Amp Watertight Pin & Sleeve Devices

### IP 67

#### 60 and 100 Amp Watertight Pin & Sleeve Devices

|      |               |                                               |            | Receptacles |           | Plugs    | Connectors | Inlets   |          |                               |         |
|------|---------------|-----------------------------------------------|------------|-------------|-----------|----------|------------|----------|----------|-------------------------------|---------|
|      |               |                                               |            |             |           |          |            |          |          |                               |         |
| Amps | Poles & Wires | Configuration<br>Recep./ Plug/<br>Conn. Inlet | Voltage    | Straight    | Angled    |          |            | Straight | Angled   | Back Box <sup>1 &amp; 2</sup> |         |
| 60   | 2P3W          |                                               | 250VDC     | 360R3W      | 360RA3W   | 360P3W   | 360C3W     |          | 360BA3W  | BB601W                        | BB602W  |
|      | 2P3W          |                                               | 125        | 360R4W      | 360RA4W   | 360P4W   | 360C4W     |          | 360BA4W  | BB601W                        | BB602W  |
|      | 2P3W          |                                               | 250        | 360R6W      | 360RA6W   | 360P6W   | 360C6W     |          | 360BA6W  | BB601W                        | BB602W  |
|      | 2P3W          |                                               | 480        | 360R7W      | 360RA7W   | 360P7W   | 360C7W     |          | 360BA7W  | BB601W                        | BB602W  |
|      | 2P3W          |                                               | 277        | 360R5W      | 360RA5W   | 360P5W   | 360C5W     |          | 360BA5W  | BB601W                        | BB602W  |
|      | 3P4W          |                                               | 125/250    | 460R12W     | 460RA12W  | 460P12W  | 460C12W    |          | 460BA12W | BB601W                        | BB602W  |
|      | 3P4W          |                                               | 3Ø250      | 460R9W      | 460RA9W   | 460P9W   | 460C9W     |          | 460BA9W  | BB601W                        | BB602W  |
|      | 3P4W          |                                               | 3Ø480      | 460R7W      | 460RA7W   | 460P7W   | 460C7W     |          | 460BA7W  | BB601W                        | BB602W  |
|      | 3P4W          |                                               | 3Ø600      | 460R5W      | 460RA5W   | 460P5W   | 460C5W     |          | 460BA5W  | BB601W                        | BB602W  |
|      | 4P5W          |                                               | 3ØY120/208 | 560R9W      | 560RA9W   | 560P9W   | 560C9W     |          | 560BA9W  | BB601W                        | BB602W  |
|      | 4P5W          |                                               | 3ØY277/480 | 560R7W      | 560RA7W   | 560P7W   | 560C7W     |          | 560BA7W  | BB601W                        | BB602W  |
|      | 4P5W          |                                               | 3ØY347/600 | 560R5W      | 560RA5W   | 560P5W   | 560C5W     |          | 560BA5W  | BB601W                        | BB602W  |
| 100  | 2P3W          |                                               | 250VDC     | 3100R3W     | 3100RA3W  | 3100P3W  | 3100C3W    | 3100B3W  |          | BB1001W                       | BB1002W |
|      | 2P3W          |                                               | 125        | 3100R4W     | 3100RA4W  | 3100P4W  | 3100C4W    | 3100B4W  |          | BB1001W                       | BB1002W |
|      | 2P3W          |                                               | 250        | 3100R6W     | 3100RA6W  | 3100P6W  | 3100C6W    | 3100B6W  |          | BB1001W                       | BB1002W |
|      | 2P3W          |                                               | 480        | 3100R7W     | 3100RA7W  | 3100P7W  | 3100C7W    | 3100B7W  |          | BB1001W                       | BB1002W |
|      | 2P3W          |                                               | 277        | 3100R5W     | 3100RA5W  | 3100P5W  | 3100C5W    | 3100B5W  |          | BB1001W                       | BB1002W |
|      | 3P4W          |                                               | 125/250    | 4100R12W    | 4100RA12W | 4100P12W | 4100C12W   | 4100B12W |          | BB1001W                       | BB1002W |
|      | 3P4W          |                                               | 3Ø250      | 4100R9W     | 4100RA9W  | 4100P9W  | 4100C9W    | 4100B9W  |          | BB1001W                       | BB1002W |
|      | 3P4W          |                                               | 3Ø480      | 4100R7W     | 4100RA7W  | 4100P7W  | 4100C7W    | 4100B7W  |          | BB1001W                       | BB1002W |
|      | 3P4W          |                                               | 3Ø600      | 4100R5W     | 4100RA5W  | 4100P5W  | 4100C5W    | 4100B5W  |          | BB1001W                       | BB1002W |
|      | 4P5W          |                                               | 3ØY120/208 | 5100R9W     | 5100RA9W  | 5100P9W  | 5100C9W    | 5100B9W  |          | BB1001W                       | BB1002W |
|      | 4P5W          |                                               | 3ØY277/480 | 5100R7W     | 5100RA7W  | 5100P7W  | 5100C7W    | 5100B7W  |          | BB1001W                       | BB1002W |
|      | 4P5W          |                                               | 3ØY347/600 | 5100R5W     | 5100RA5W  | 5100P5W  | 5100C5W    | 5100B5W  |          | BB1001W                       | BB1002W |

1. Back Box for use with Receptacles only. Select Back Box with Hub Size to fit your application refer to the back boxes & closure caps page in this section.
2. Can not use angled inlets with back box.

# IEC 309 Pin & Sleeve Devices

## IP 44 20, 30 and 60 Amp Splashproof Pin & Sleeve Devices with Cable Gland

### IP 44 20, 30 and 60 Amp Splashproof Pin & Sleeve Devices with Cable Gland

|      |               |                                               |              | Receptacles                                                                       |                                                                                   | Plugs                                                                             | Connectors                                                                         | Inlets                                                                              |                                                                                     |                             |        |
|------|---------------|-----------------------------------------------|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|--------|
|      |               |                                               |              |  |  |  |  |  |  |                             |        |
| Amps | Poles & Wires | Configuration<br>Recep./ Plug/<br>Conn. Inlet | Voltage      | Straight                                                                          | Angled                                                                            |                                                                                   |                                                                                    | Straight                                                                            | Angled                                                                              | Back Box <sup>1&amp;2</sup> |        |
| 20   | 2P3W          |                                               | 250VDC       | 320R3S                                                                            | 320RA3S                                                                           | 320P3S                                                                            | 320C3S                                                                             | 320B3S                                                                              |                                                                                     |                             |        |
|      | 2P3W          |                                               | 125          | 320R4S                                                                            | 320RA4S                                                                           | 320P4S                                                                            | 320C4S                                                                             | 320B4S                                                                              |                                                                                     |                             |        |
|      | 2P3W          |                                               | 250          | 320R6S                                                                            | 320RA6S                                                                           | 320P6S                                                                            | 320C6S                                                                             | 320B6S                                                                              |                                                                                     |                             |        |
|      | 2P3W          |                                               | 480          | 320R7S                                                                            | 320RA7S                                                                           | 320P7S                                                                            | 320C7S                                                                             | 320B7S                                                                              |                                                                                     |                             |        |
|      | 2P3W          |                                               | 277          | 320R5S                                                                            | 320RA5S                                                                           | 320P5S                                                                            | 320C5S                                                                             | 320B5S                                                                              |                                                                                     |                             |        |
|      | 3P4W          |                                               | 125/250      | 420R12S                                                                           | 420RA12S                                                                          | 420P12S                                                                           | 420C12S                                                                            | 420B12S                                                                             |                                                                                     | BB201W                      | BB301W |
|      | 3P4W          |                                               | 3Ø250        | 420R9S                                                                            | 420RA9S                                                                           | 420P9S                                                                            | 420C9S                                                                             | 420B9S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 3P4W          |                                               | 3Ø480        | 420R7S                                                                            | 420RA7S                                                                           | 420P7S                                                                            | 420C7S                                                                             | 420B7S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 3P4W          |                                               | 3Ø600        | 420R5S                                                                            | 420RA5S                                                                           | 420P5S                                                                            | 420C5S                                                                             | 420B5S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 4P5W          |                                               | 3ØY120/208   | 520R9S                                                                            | 520RA9S                                                                           | 520P9S                                                                            | 520C9S                                                                             | 520B9S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 4P5W          |                                               | 3ØY277/480   | 520R7S                                                                            | 520RA7S                                                                           | 520P7S                                                                            | 520C7S                                                                             | 520B7S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 4P5W          |                                               | 3ØY347/600   | 520R5S                                                                            | 520RA5S                                                                           | 520P5S                                                                            | 520C5S                                                                             | 520B5S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 6P7W          |                                               | 250          | 720R9S                                                                            |                                                                                   | 720P9S                                                                            | 720C9S                                                                             | 720B9S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 6P7W          |                                               | 480          | 720R7S                                                                            |                                                                                   | 720P7S                                                                            | 720C7S                                                                             | 720B7S                                                                              |                                                                                     | BB201W                      | BB301W |
| 30   | 2P3W          |                                               | 250VDC       | 330R3S                                                                            | 330RA3S                                                                           | 330P3S                                                                            | 330C3S                                                                             | 330B3S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 2P3W          |                                               | 125          | 330R4S                                                                            | 330RA4S                                                                           | 330P4S                                                                            | 330C4S                                                                             | 330B4S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 2P3W          |                                               | 250          | 330R6S                                                                            | 330RA6S                                                                           | 330P6S                                                                            | 330C6S                                                                             | 330B6S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 2P3W          |                                               | 480          | 330R7S                                                                            | 330RA7S                                                                           | 330P7S                                                                            | 330C7S                                                                             | 330B7S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 2P3W          |                                               | 277          | 330R5S                                                                            | 330RA5S                                                                           | 330P5S                                                                            | 330C5S                                                                             | 330B5S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 3P4W          |                                               | 125/250      | 430R12S                                                                           | 430RA12S                                                                          | 430P12S                                                                           | 430C12S                                                                            | 430B12S                                                                             |                                                                                     | BB201W                      | BB301W |
|      | 3P4W          |                                               | 3Ø250        | 430R9S                                                                            | 430RA9S                                                                           | 430P9S                                                                            | 430C9S                                                                             | 430B9S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 3P4W          |                                               | 3Ø480        | 430R7S                                                                            | 430RA7S                                                                           | 430P7S                                                                            | 430C7S                                                                             | 430B7S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 3P4W          |                                               | 3Ø600        | 430R5S                                                                            | 430RA5S                                                                           | 430P5S                                                                            | 430C5S                                                                             | 430B5S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 4P5W          |                                               | 50-600 400Hz | 530R2S                                                                            | 530RA2S                                                                           | 530P2S                                                                            | 530C2S                                                                             | 530B2S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 4P5W          |                                               | 3ØY120/208   | 530R9S                                                                            | 530RA9S                                                                           | 530P9S                                                                            | 530C9S                                                                             | 530B9S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 4P5W          |                                               | 3ØY277/480   | 530R7S                                                                            | 530RA7S                                                                           | 530P7S                                                                            | 530C7S                                                                             | 530B7S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 4P5W          |                                               | 3ØY347/600   | 530R5S                                                                            | 530RA5S                                                                           | 530P5S                                                                            | 530C5S                                                                             | 530B5S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 6P7W          |                                               | 250          | 730R9S                                                                            |                                                                                   | 730P9S                                                                            | 730C9S                                                                             | 730B9S                                                                              |                                                                                     | BB201W                      | BB301W |
|      | 6P7W          |                                               | 480          | 730R7S                                                                            |                                                                                   | 730P7S                                                                            | 730C7S                                                                             | 730B7S                                                                              |                                                                                     | BB201W                      | BB301W |
| 60   | 2P3W          |                                               | 250VDC       | 360R3S                                                                            | 360RA3S                                                                           | 360P3S                                                                            | 360C3S                                                                             |                                                                                     | 360BA3S                                                                             | BB601W                      | BB601W |
|      | 2P3W          |                                               | 125          | 360R4S                                                                            | 360RA4S                                                                           | 360P4S                                                                            | 360C4S                                                                             |                                                                                     | 360BA4S                                                                             | BB601W                      | BB601W |
|      | 2P3W          |                                               | 250          | 360R6S                                                                            | 360RA6S                                                                           | 360P6S                                                                            | 360C6S                                                                             |                                                                                     | 360BA6S                                                                             | BB601W                      | BB601W |
|      | 2P3W          |                                               | 480          | 360R7S                                                                            | 360RA7S                                                                           | 360P7S                                                                            | 360C7S                                                                             |                                                                                     | 360BA7S                                                                             | BB601W                      | BB601W |
|      | 2P3W          |                                               | 277          | 360R5S                                                                            | 360RA5S                                                                           | 360P5S                                                                            | 360C5S                                                                             |                                                                                     | 360BA5S                                                                             | BB601W                      | BB601W |
|      | 3P4W          |                                               | 125/250      | 460R12S                                                                           | 460RA12S                                                                          | 460P12S                                                                           | 460C12S                                                                            |                                                                                     | 460BA12S                                                                            | BB601W                      | BB601W |
|      | 3P4W          |                                               | 3Ø250        | 460R9S                                                                            | 460RA9S                                                                           | 460P9S                                                                            | 460C9S                                                                             |                                                                                     | 460BA9S                                                                             | BB601W                      | BB601W |
|      | 3P4W          |                                               | 3Ø480        | 460R7S                                                                            | 460RA7S                                                                           | 460P7S                                                                            | 460C7S                                                                             |                                                                                     | 460BA7S                                                                             | BB601W                      | BB601W |
|      | 3P4W          |                                               | 3Ø600        | 460R5S                                                                            | 460RA5S                                                                           | 460P5S                                                                            | 460C5S                                                                             |                                                                                     | 460BA5S                                                                             | BB601W                      | BB601W |
|      | 4P5W          |                                               | 50-600 400Hz | 560R2S                                                                            | 560RA2S                                                                           | 560P2S                                                                            | 560C2S                                                                             |                                                                                     | 560BA2S                                                                             | BB601W                      | BB601W |
|      | 4P5W          |                                               | 3ØY120/208   | 560R9S                                                                            | 560RA9S                                                                           | 560P9S                                                                            | 560C9S                                                                             |                                                                                     | 560BA9S                                                                             | BB601W                      | BB601W |
|      | 4P5W          |                                               | 3ØY277/480   | 560R7S                                                                            | 560RA7S                                                                           | 560P7S                                                                            | 560C7S                                                                             |                                                                                     | 560BA7S                                                                             | BB601W                      | BB601W |
|      | 4P5W          |                                               | 3ØY347/600   | 560R5S                                                                            | 560RA5S                                                                           | 560P5S                                                                            | 560C5S                                                                             |                                                                                     | 560BA5S                                                                             | BB601W                      | BB601W |

# IEC 309 Pin & Sleeve Devices

## Economy Splashproof Pin & Sleeve Devices

### IP 44

#### Economy Splashproof Pin & Sleeve Devices with Cable Sleeve

##### Splashproof (IP44) Economy Devices

have been designed for applications that don't require an IP67 rated device, but desire many of the same features. These products feature a cable sleeve cord entry that seals out moisture and contaminants while accommodating a wide range of cable sizes. Molded-in markings make it easy to identify the proper point to cut off the boot to accommodate your cable diameter.



##### Other Features Include:

- Retaining Device
- Internal Strain Relief with "Swing-Away" Feature
- Shrouded Pins
- Electro Zinc Plated Steel Screws
- Spring Loaded Gasketed Covers
- Color Coded
- Terminal Identification
- High Impact Thermoplastic Housing
- Staggered Contacts
- Recessed Contacts

| Poles & Wires | Configuration<br>Recep./ Plug/<br>Conn. Inlet | Voltage    | 20 Amp Devices |            | 30 Amp Devices |            | 60 Amp Devices |            |
|---------------|-----------------------------------------------|------------|----------------|------------|----------------|------------|----------------|------------|
|               |                                               |            | Plugs          | Connectors | Plugs          | Connectors | Plugs          | Connectors |
| 2P3W          |                                               | 250VDC     | 320P3E         | 320C3E     | 330P3E         | 330C3E     | 360P3E         | 360C3E     |
| 2P3W          |                                               | 125        | 320P4E         | 320C4E     | 330P4E         | 330C4E     | 360P4E         | 360C4E     |
| 2P3W          |                                               | 250        | 320P6E         | 320C6E     | 330P6E         | 330C6E     | 360P6E         | 360C6E     |
| 2P3W          |                                               | 480        | 320P7E         | 320C7E     | 330P7E         | 330C7E     | 360P7E         | 360C7E     |
| 2P3W          |                                               | 277        | 320P5E         | 320C5E     | 330P5E         | 330C5E     | 360P5E         | 360C5E     |
| 3P4W          |                                               | 125/250    | 420P12E        | 420C12E    | 430P12E        | 430C12E    | 460P12E        | 460C12E    |
| 3P4W          |                                               | 3Ø250      | 420P9E         | 420C9E     | 430P9E         | 430C9E     | 460P9E         | 460C9E     |
| 3P4W          |                                               | 3Ø480      | 420P7E         | 420C7E     | 430P7E         | 430C7E     | 460P7E         | 460C7E     |
| 3P4W          |                                               | 3Ø600      | 420P5E         | 420C5E     | 430P5E         | 430C5E     | 460P5E         | 460C5E     |
| 4P5W          |                                               | 3ØY120/208 | 520P9E         | 520C9E     | 530P9E         | 530C9E     | 560P9E         | 560C9E     |
| 4P5W          |                                               | 3ØY277/480 | 520P7E         | 520C7E     | 530P7E         | 530C7E     | 560P7E         | 560C7E     |
| 4P5W          |                                               | 3ØY347/600 | 520P5E         | 520C5E     | 530P5E         | 530C5E     | 560P5E         | 560C5E     |
| 6P7W          |                                               | 250        | 720P9E         | 720C9E     | 730P9E         | 730C9E     |                |            |
| 6P7W          |                                               | 480        | 720P7E         | 720C7E     | 730P7E         | 730C7E     |                |            |

# IEC 309 Pin & Sleeve Devices

## Mechanical Interlocks

Ericson Mechanical Interlocks combine a disconnect switch and receptacle into one device that eliminates the making and breaking of plug and receptacle under load. The safety mechanism within the enclosure prevents the switch from being turned to the "ON" position until the plug is fully inserted into the receptacle. Once fully engaged, the plug is locked into place when the switch is turned on and cannot be removed until the switch is turned to the "OFF" position. This prevents making or breaking the circuit under load. Ericson mechanical interlocks are also available with optional circuit breaker (see inset photo).

### Mounting screw ports

located outside enclosure gasket to insure integrity of seal.

### Easy Identification

Catalog number, rating and certifications are indicated on the label for easy identification of mating devices.

**Variety** - 20A, 30A, 60A & 100A ratings in watertight (IP67) and Splashproof (IP44) ratings.

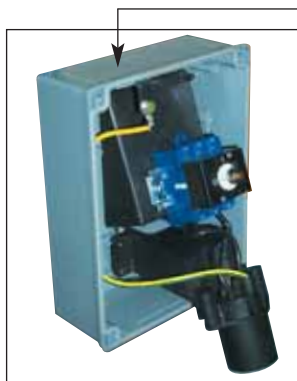
### Watertight NEMA 4X, 12K Enclosure

Ericson's Mechanical Interlocks are gasketed and rated as a Watertight NEMA 4X, 12K enclosure. The nonmetallic enclosure, while abuse and corrosion resistant, is also non-conductive which enhances the safety of the product.



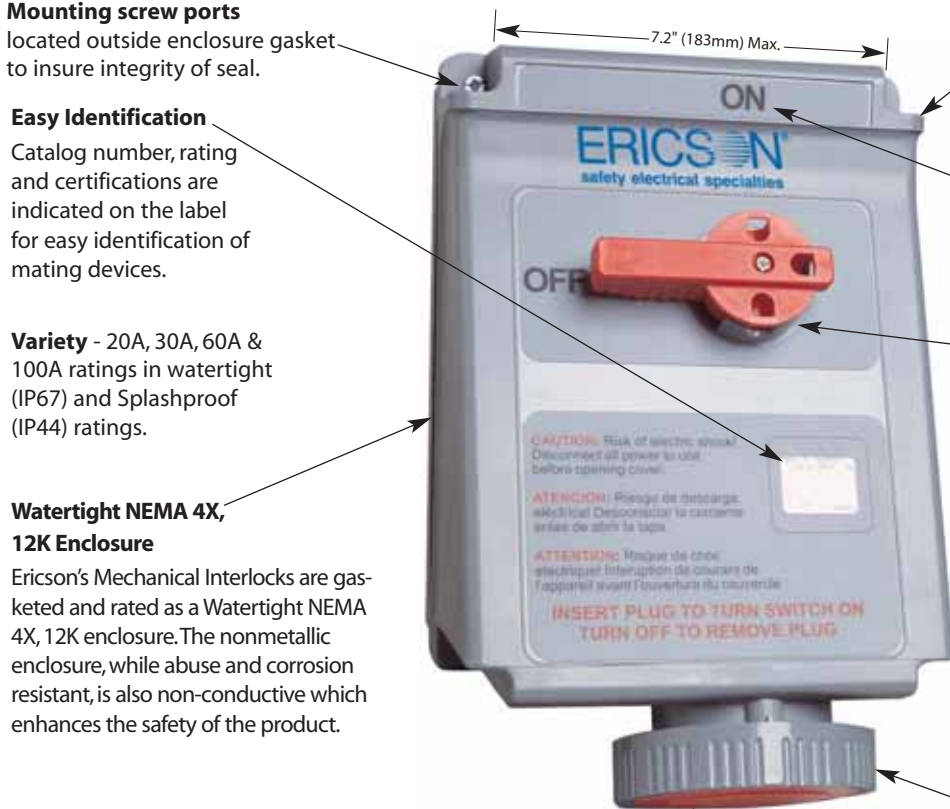
460MI7W-LB Shown

Available with optional circuit breaker in 20, 30, 60, and 100 Amp models.



### A Pre-Molded Offset Dimple

A pre-molded offset dimple (drill point) is provided instead of a conduit entry hole. This allows the installer to choose the size of the conduit to be used, and the location where the conduit will be attached to the enclosure (top, bottom or side entry) without the use of knockout plugs and reducers. Arranging the conduit entry hole at the dimple location will prevent condensation from falling directly on the interior electrical components, such as the switch. It will also allow for more room to pull conductors when wiring.



### Compact Size

All versions and sizes are designed to fit within the web of an 8" column. This compact size allows the use of columns as a mounting location.

### On/Off markings

Clearly visible On/Off markings indicate power status.

### Compliance with OSHA Lockout Requirements

Ericson's Mechanical Interlock's bright red handle can be locked in the "OFF" position as a method of compliance with OSHA lockout requirements. The handle can accept up to a 5/16" padlock shaft.

### Color Coded Receptacle Covers

Receptacle covers are color-coded by voltage in accordance with IEC 309 standard.

### Interchangeability

completely interchangeable with other manufacturers' IEC 309-1 and IEC 309-2 devices.



### Swivel Mount Feet (135°)

Swivel mount feet can be used for installations where irregular or tight fit applications exist.

# IEC 309 Pin & Sleeve Devices

## Mechanical Interlocks - Specifications and Listings

### Specifications & Listings

#### Electrical

|                                |                                                                                                                                           |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Dielectric Voltage Withstand   | 3,000 Volts                                                                                                                               |
| Maximum Working Voltage        | 600 Volts RMS (switch version)<br>480 Volts RMS (circuit breaker version)                                                                 |
| Current Interrupting           | Certified for current interrupting at full rated current and voltage.                                                                     |
| Short Circuit Withstand Rating | Suitable for use on a circuit capable of delivering not more than 10,000 RMS symmetrical amperes at the voltage rating of the receptacle. |
| Operations                     | Mechanical: 10,000 cycles<br>Electrical: 6,000 cycles                                                                                     |

#### Mechanical

|                         |                                                                                                   |
|-------------------------|---------------------------------------------------------------------------------------------------|
| Impact Resistance       | In accordance with UL 746C                                                                        |
| Terminal Identification | In accordance with UL, CSA and international conventions.                                         |
| Product Identification  | Identification, ratings and color code in accordance with UL, CSA and IEC requirements.           |
| Lockout/Tagout          | "ON" and "OFF" lockout/tagout capability at switch handle. Complies with OSHA Reg. 29CFR 1910.147 |
| Mounting                | External adjustable feet.                                                                         |

#### Environmental

|                        |                                                                           |
|------------------------|---------------------------------------------------------------------------|
| Moisture Resistance    | Watertight IP67 (Washdown) - UL Type 4X<br>Splashproof IP44               |
| Flammability           | UL94-5VA & V0 Classifications                                             |
| Operating Temperatures | Maximum Continuous: 60°C (140°F)<br>Minimum Continuous: -40°C (-40°F)     |
| UV Resistance          | UV stabilized material                                                    |
| Chemicals              | Resists most standard industrial hydrocarbons, acids, bases and solvents. |

#### Materials

|                                     |                                                          |
|-------------------------------------|----------------------------------------------------------|
| Enclosure (all exterior components) | UL94-5VA/V0, UV stabilized, impact modified Valox®.      |
| Contact Carrier                     | Molded arc resistant UL94-V0 thermoplastic               |
| Gaskets                             | Neoprene or EPDM                                         |
| Contacts (Watertight IP67)          | Brass, Nickel Plated                                     |
| Contacts (Splashproof IP44)         | Brass                                                    |
| Hardware (screws & springs)         | Steel with zinc-plated blue chromate or nickel plating . |

#### Approvals & Compliances

|                                                  |
|--------------------------------------------------|
| UL 508 (switch version) Motor Disconnect         |
| UL 508 (compact version) Manual Motor Controller |
| UL 231 & UL 489 (circuit breaker version)        |
| UL1682 & 1686                                    |
| CSA C22.2 No. 14, 182.1                          |
| IEC 309-1 & IEC 309-2                            |

# IEC 309 Pin & Sleeve Devices

## Mechanical Interlocks - IP67 Watertight

### Selection Guide - IP67 Mechanical Interlocks without circuit breakers



| Poles & Wires | Configuration<br>Recept Conn. Plug Inlet                                                                                                                                | Voltage      | Horsepower<br>Rating<br>20A & 30A Only | 20 Amps    | 30 Amps    | 60 Amps    | 100 Amps    | Horsepower<br>Rating<br>60A & 100A Only |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------|------------|------------|------------|-------------|-----------------------------------------|
| 2P3W          |       | 120          | 2                                      | 320MI4W-L  | 330MI4W-L  | 360MI4W-L  | 3100MI4W-L  | 3                                       |
| 2P3W          |       | 240          | 5                                      | 320MI6W-L  | 330MI6W-L  | 360MI6W-L  | 3100MI6W-L  | 7.5                                     |
| 2P3W          |       | 480          | 10                                     | 320MI7W-L  | 330MI7W-L  | 360MI7W-L  | 3100MI7W-L  | 15                                      |
|               |                                                                                                                                                                         |              |                                        |            |            |            |             |                                         |
| 3P4W          |       | 120/240      | 2 @ 120<br>5 @ 240                     | 420MI12W-L | 430MI12W-L | 460MI12W-L | 4100MI12W-L | 3 @ 120<br>7.5 @ 240                    |
| 3P4W          |       | 3Ø 240       | 10                                     | 420MI9W-L  | 430MI9W-L  | 460MI9W-L  | 4100MI9W-L  | 15                                      |
| 3P4W          |       | 3Ø 480       | 20                                     | 420MI7W-L  | 430MI7W-L  | 460MI7W-L  | 4100MI7W-L  | 25                                      |
| 3P4W          |       | 3Ø 600       | 25                                     | 420MI5W-L  | 430MI5W-L  | 460MI5W-L  | 4100MI5W-L  | 30                                      |
|               |                                                                                                                                                                         |              |                                        |            |            |            |             |                                         |
| 4P5W          |       | 3Ø Y 120/208 | 10                                     | 520MI9W-L  | 530MI9W-L  | 560MI9W-L  | 5100MI9W-L  | 15                                      |
| 4P5W          |     | 3Ø Y 277/480 | 20                                     | 520MI7W-L  | 530MI7W-L  | 560MI7W-L  | 5100MI7W-L  | 25                                      |
| 4P5W          |   | 3Ø Y 347/600 | 25                                     | 520MI5W-L  | 530MI5W-L  | 560MI5W-L  | 5100MI5W-L  | 30                                      |

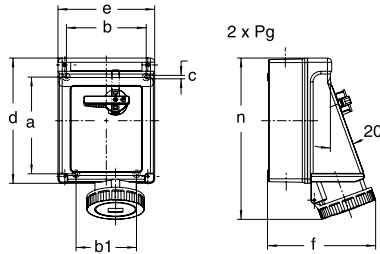
#### Notes:

1. Also available in IP44 splashproof models - contact factory for availability
2. Also available with circuit breakers - contact factory for availability

# IEC 309 Pin & Sleeve Devices

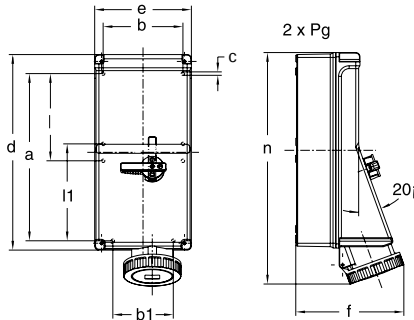
## Mechanical Interlocks - Dimensions

### 20A, 30A & 60A IP67 Watertight Models:



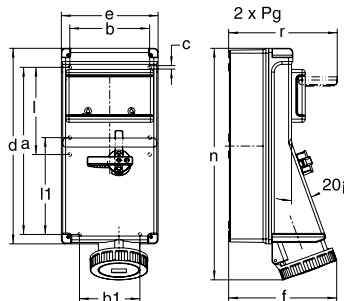
| Amps<br>N.A. | Poles<br>and<br>Wires | Int'l | Dimensions |      | a    | b    | b1   | c    | d    | e    | NEMA 4X |       | NEMA 4X |      |
|--------------|-----------------------|-------|------------|------|------|------|------|------|------|------|---------|-------|---------|------|
|              |                       |       |            |      |      |      |      |      |      |      | IP44    | IP67  | IP44    | IP67 |
| f            | f                     | n     | n          |      |      |      |      |      |      |      |         |       |         |      |
| 20           | 16                    | 2P3W  | inch       | 7.20 | 5.94 | 4.49 | 0.26 | 9.33 | 7.20 | 7.17 | 7.60    | 10.55 | 10.63   |      |
|              |                       |       | mm         | 183  | 151  | 114  | 6.5  | 237  | 183  | 182  | 193     | 268   | 270     |      |
| 20           | 16                    | 3P4W  | inch       | 7.20 | 5.94 | 4.49 | 0.26 | 9.33 | 7.20 | 7.36 | 7.64    | 10.63 | 10.71   |      |
|              |                       |       | mm         | 183  | 151  | 114  | 6.5  | 237  | 183  | 187  | 194     | 270   | 272     |      |
| 20           | 16                    | 4P5W  | inch       | 7.20 | 5.94 | 4.49 | 0.26 | 9.33 | 7.20 | 7.24 | 7.72    | 10.75 | 10.91   |      |
|              |                       |       | mm         | 183  | 151  | 114  | 6.5  | 237  | 183  | 184  | 196     | 273   | 277     |      |
| 30           | 32                    | 2P3W  | inch       | 7.20 | 5.94 | 4.49 | 0.26 | 9.33 | 7.20 | 7.36 | 7.91    | 11.10 | 11.22   |      |
|              |                       |       | mm         | 183  | 151  | 114  | 6.5  | 237  | 183  | 187  | 201     | 282   | 285     |      |
| 30           | 32                    | 3P4W  | inch       | 7.20 | 5.94 | 4.49 | 0.26 | 9.33 | 7.20 | 7.36 | 7.91    | 11.10 | 11.22   |      |
|              |                       |       | mm         | 183  | 151  | 114  | 6.5  | 237  | 183  | 187  | 201     | 282   | 285     |      |
| 30           | 32                    | 4P5W  | inch       | 7.20 | 5.94 | 4.49 | 0.26 | 9.33 | 7.20 | 7.44 | 7.91    | 11.18 | 11.38   |      |
|              |                       |       | mm         | 183  | 151  | 114  | 6.5  | 237  | 183  | 189  | 201     | 284   | 289     |      |
| 60           | 63                    | 2P3W  | inch       | 7.20 | 5.94 | 4.49 | 0.26 | 9.33 | 7.20 | 7.72 | 8.23    | 11.89 | 12.17   |      |
|              |                       |       | mm         | 183  | 151  | 114  | 6.5  | 237  | 183  | 196  | 209     | 302   | 309     |      |
| 60           | 63                    | 3P4W  | inch       | 7.20 | 5.94 | 4.49 | 0.26 | 9.33 | 7.20 | 7.72 | 8.23    | 11.89 | 12.17   |      |
|              |                       |       | mm         | 183  | 151  | 114  | 6.5  | 237  | 183  | 196  | 209     | 302   | 309     |      |
| 60           | 63                    | 4P5W  | inch       | 7.20 | 5.94 | 4.49 | 0.26 | 9.33 | 7.20 | 7.72 | 8.23    | 11.89 | 12.17   |      |
|              |                       |       | mm         | 183  | 151  | 114  | 6.5  | 237  | 183  | 196  | 209     | 302   | 309     |      |

### 100A IP67 Watertight Models:



| Amps<br>N.A. | Poles<br>and<br>Wires | Int'l | Dimensions |       | a    | b    | b1   | c     | d    | e    | NEMA 4X |      | NEMA 4X |      |
|--------------|-----------------------|-------|------------|-------|------|------|------|-------|------|------|---------|------|---------|------|
|              |                       |       |            |       |      |      |      |       |      |      | IP44    | IP67 | IP44    | IP67 |
| f            | f                     | n     | n          |       |      |      |      |       |      |      |         |      |         |      |
| 100          | 125                   | 2P3W  | inch       | 12.44 | 5.94 | 4.96 | 0.26 | 14.57 | 7.20 | 9.57 |         |      | 17.72   |      |
|              |                       |       | mm         | 316   | 151  | 126  | 6.5  | 370   | 183  | 243  |         |      | 450     |      |
| 100          | 125                   | 3P4W  | inch       | 12.44 | 5.94 | 4.96 | 0.26 | 14.57 | 7.20 | 9.57 |         |      | 17.72   |      |
|              |                       |       | mm         | 316   | 151  | 126  | 6.5  | 370   | 183  | 243  |         |      | 450     |      |
| 100          | 125                   | 4P5W  | inch       | 12.44 | 5.94 | 4.96 | 0.26 | 14.57 | 7.20 | 9.57 |         |      | 17.72   |      |
|              |                       |       | mm         | 316   | 151  | 126  | 6.5  | 370   | 183  | 243  |         |      | 450     |      |

### 20A, 30A, 60A IP67 Watertight Models with Circuit Breakers:



| Amps<br>N.A. | Poles<br>and<br>Wires | Int'l | Dimensions | NEMA 4X   |      |      |      |       |      |      |      | NEMA 4X   |      |       |       |      |
|--------------|-----------------------|-------|------------|-----------|------|------|------|-------|------|------|------|-----------|------|-------|-------|------|
|              |                       |       |            | IP44 IP67 |      |      |      |       |      |      |      | IP44 IP67 |      |       |       |      |
|              |                       |       |            | a         | b    | b1   | c    | d     | e    | f    | f    | l         | l    | n     | n     | r    |
| 20           | 16                    | 2P3W  | inch       | 12.44     | 5.94 | 4.49 | 0.26 | 14.57 | 7.20 | 7.17 | 7.60 | 6.50      | 7.20 | 15.79 | 15.91 | 8.11 |
|              |                       |       | mm         | 316       | 151  | 114  | 6.5  | 370   | 183  | 182  | 193  | 165       | 183  | 401   | 404   | 206  |
| 20           | 16                    | 3P4W  | inch       | 12.44     | 5.94 | 4.49 | 0.26 | 14.57 | 7.20 | 7.36 | 7.64 | 6.50      | 7.20 | 15.91 | 15.94 | 8.11 |
|              |                       |       | mm         | 316       | 151  | 114  | 6.5  | 370   | 183  | 187  | 194  | 165       | 183  | 404   | 405   | 206  |
| 20           | 16                    | 4P5W  | inch       | 12.44     | 5.94 | 4.49 | 0.26 | 14.57 | 7.20 | 7.24 | 7.72 | 6.50      | 7.20 | 15.94 | 16.14 | 8.11 |
|              |                       |       | mm         | 316       | 151  | 114  | 6.5  | 370   | 183  | 184  | 196  | 165       | 183  | 405   | 410   | 206  |
| 30           | 32                    | 2P3W  | inch       | 12.44     | 5.94 | 4.49 | 0.26 | 14.57 | 7.20 | 7.36 | 7.91 | 6.50      | 7.20 | 16.34 | 16.46 | 8.11 |
|              |                       |       | mm         | 316       | 151  | 114  | 6.5  | 370   | 183  | 187  | 201  | 165       | 183  | 415   | 418   | 206  |
| 30           | 32                    | 3P4W  | inch       | 12.44     | 5.94 | 4.49 | 0.26 | 14.57 | 7.20 | 7.36 | 7.91 | 6.50      | 7.20 | 16.34 | 16.46 | 8.11 |
|              |                       |       | mm         | 316       | 151  | 114  | 6.5  | 370   | 183  | 187  | 201  | 165       | 183  | 415   | 418   | 206  |
| 30           | 32                    | 4P5W  | inch       | 12.44     | 5.94 | 4.49 | 0.26 | 14.57 | 7.20 | 7.44 | 7.91 | 6.50      | 7.20 | 16.42 | 16.46 | 8.11 |
|              |                       |       | mm         | 316       | 151  | 114  | 6.5  | 370   | 183  | 189  | 201  | 165       | 183  | 417   | 418   | 206  |
| 60           | 63                    | 2P3W  | inch       | 12.44     | 5.94 | 4.49 | 0.26 | 14.57 | 7.20 | 7.72 | 8.23 | 6.50      | 7.20 | 17.01 | 17.44 | 8.11 |
|              |                       |       | mm         | 316       | 151  | 114  | 6.5  | 370   | 183  | 196  | 209  | 165       | 183  | 432   | 443   | 206  |
| 60           | 63                    | 3P4W  | inch       | 12.44     | 5.94 | 4.49 | 0.26 | 14.57 | 7.20 | 7.72 | 8.23 | 6.50      | 7.20 | 17.01 | 17.44 | 8.11 |
|              |                       |       | mm         | 316       | 151  | 114  | 6.5  | 370   | 183  | 196  | 209  | 165       | 183  | 432   | 443   | 206  |
| 60           | 63                    | 4P5W  | inch       | 12.44     | 5.94 | 4.49 | 0.26 | 14.57 | 7.20 | 7.72 | 8.23 | 6.50      | 7.20 | 17.01 | 17.44 | 8.11 |
|              |                       |       | mm         | 316       | 151  | 114  | 6.5  | 370   | 183  | 196  | 209  | 165       | 183  | 432   | 443   | 206  |

# IEC 309 Pin & Sleeve Devices

## Back Boxes & Closure Caps

**Back Boxes** for use with Ericson watertight and splashproof receptacles

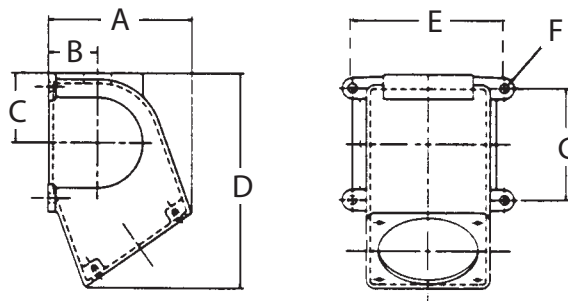


| Cat. No. | Description                                                 | Hub Size         | Dimensions (Inches) |      |      |      |      |      |      | Cubic Inch Capacity |
|----------|-------------------------------------------------------------|------------------|---------------------|------|------|------|------|------|------|---------------------|
|          |                                                             |                  | A                   | B    | C    | D    | E    | F    | G    |                     |
| BB201W   | 20° Angle for 20A, 4 and 5 wire receps. and all 30A receps. | $\frac{3}{4}$ "  | 3.34                | 0.97 | 1.12 | 4.12 | 4.00 | 0.25 | 2.38 | 20.4                |
| BB301W   |                                                             | 1"               |                     |      |      |      |      |      |      |                     |
| BB601W   | 20° Angle for all 60A receptacles                           | $1\frac{1}{4}$ " | 4.41                | 1.41 | 2.09 | 5.63 | 5.00 | 0.28 | 3.00 | 59.7                |
| BB602W   |                                                             | $1\frac{1}{2}$ " |                     |      |      |      |      |      |      |                     |
| BB1001W  | 20° Angle for all 100A receptacles                          | $1\frac{1}{2}$ " | 5.18                | 1.78 | 2.50 | 7.71 | 5.50 | 0.34 | 4.00 | 96.6                |
| BB1002W  |                                                             | 2"               |                     |      |      |      |      |      |      |                     |

**NOTE:** For availability of straight back boxes, please contact the factory.

### Cast Aluminum Junction Boxes for Watertight and Splashproof Receptacles

Epoxy-coated junction boxes are corrosion resistant and designed to pass the 500-hour salt spray test, UL hosedown and external icing test.



**Watertight Closure Caps** for use with watertight male plugs and inlets



| Cat. No. | Poles and Wires | Amperage Rating | Standard Pkg. Quantity |
|----------|-----------------|-----------------|------------------------|
| PC320    | 3 Wire          | 20              | 5                      |
| PC3430   |                 | 30              | 5                      |
| PC60     |                 | 60              | 2                      |
| PC100    |                 | 100             | 2                      |
| PC420    | 4 Wire          | 20              | 5                      |
| PC3430   |                 | 30              | 5                      |
| PC60     |                 | 60              | 2                      |
| PC100    |                 | 100             | 2                      |
| PC520    | 5 Wire          | 20              | 5                      |
| PC530    |                 | 30              | 5                      |
| PC60     |                 | 60              | 2                      |
| PC100    |                 | 100             | 2                      |

# IEC 309 Pin & Sleeve Devices

## Performance Specifications - International Ratings

### ELECTRICAL

**Insulation Resistance** 500V for 1 min. Resistance 5 M  
Per IEC 309-1, Clause 19

**Dielectric Strength** 3000V for 1 min.  
Per IEC 309-1, Clause 19

**Norm. Operation, Connect & Disconnect Cycles** See Table 1  
Per IEC 309-1, Clause 21

**Breaking Capacity** Tested at 110 % of the rated operating  
Per IEC 309-1, Clause 20 voltage and 125% of the rated current.

**Temperature Rise** Maximum 50 K rise at full rated current.  
Per IEC 309-1, Clause 22

### MECHANICAL

**Cable Secureness** See Table 2  
Per IEC 309, Clause 23

**Impact** A device is wired with a 2.25m length of flexible cord and dropped from a height of 75 cm, 8 times. The device is then tested for applicable degrees of protection against moisture.

### ENVIRONMENTAL

**Flammability** Self-extinguishing  
Per IEC 309-1, Clause 27

**Ambient Temperature Range** Minimum: -25°C with impact  
Maximum: 90°C

**Moisture Resistance** Watertight (IP67): Device immersed for 24 hours in water at a temp. of 25°C, the highest point of the device being 5cm (2") below the water level.  
Splashproof (IP44): Device is sprayed with water for 10 minutes and immediately afterwards subjected to splashing water in all directions (360°).

**UV Resistance** Exposed plastic materials are UV stabilized.

TABLE 1

| Connect and Disconnect Cycles |                                               |                |             |
|-------------------------------|-----------------------------------------------|----------------|-------------|
| Device Rating Amperes         | Cycles with Load at Rated Current and Voltage | No-Load Cycles | Sequence    |
| 16                            | 5000 p.f of 0.6                               | 0              | -           |
| 32                            | 1000 p.f of 0.6                               | 1000           | Alternating |
| 63                            | 1000 p.f of 0.6                               | 1000           | Alternating |
| 125                           | 250 p.f of 0.7                                | 250            | Alternating |

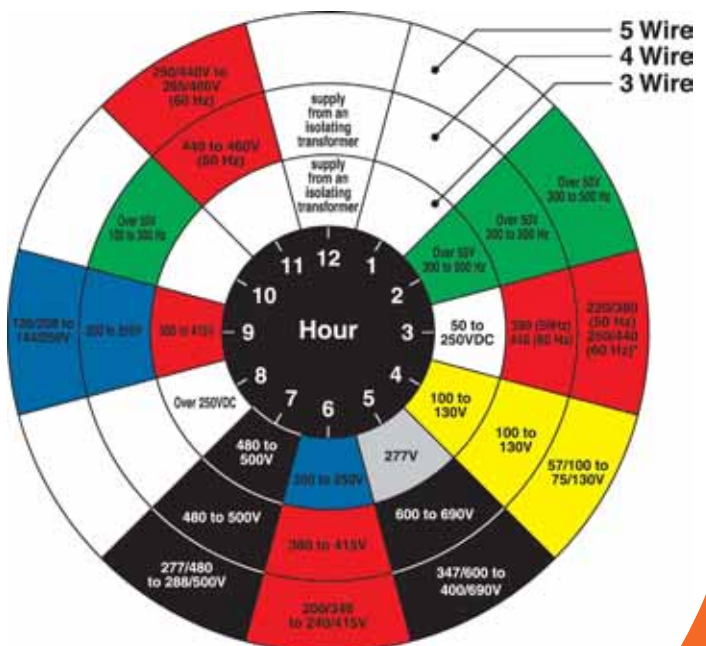
The test sequence is conducted by using a no-load, followed by a load sequence.

TABLE 2

| Cable Secureness Test |       |        |                      |
|-----------------------|-------|--------|----------------------|
| Device Rating Amperes | Force | Torque | Maximum Displacement |
|                       | N     | N·m    | mm                   |
| 16                    | 80    | 0.350  | 2                    |
| 32                    | 100   | 0.425  | 2                    |
| 63                    | 120   | 0.8    | 2                    |
| 125                   | 200   | 1.5    | 2                    |

The flexible cord or cable is twisted and pulled. Values for the applied twisting torque and force of pull are shown in Table 2. In all cases the cord displacement is less than 2mm.

CEEtyp Clockface Positions in Accordance with IEC 309-2 and UL 1686



International Rating  
Voltage AC (Except where noted)

# IEC 309 Pin & Sleeve Devices

## IP 67 Watertight Devices

### IP 67 Watertight Devices

| Amps | Poles & Wires | Voltage             | Plugs                                                                             | Connectors                                                                        | Inlets                                                                            |                                                                                    | Receptacles                                                                         |                                                                                     |
|------|---------------|---------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|      |               |                     |  |  |  |  |  |  |
|      |               |                     |                                                                                   |                                                                                   | Straight                                                                          | Angled                                                                             | Straight                                                                            | Angled                                                                              |
| 16   | 2P3W          | 100-130             | 316P4W                                                                            | 316C4W                                                                            |                                                                                   | 316BA4W                                                                            | 316R4W                                                                              | 316RA4W                                                                             |
|      | 2P3W          | 220-240             | 316P6W                                                                            | 316C6W                                                                            |                                                                                   | 316BA6W                                                                            | 316R6W                                                                              | 316RA6W                                                                             |
|      | 2P3W          | 380-415             | 316P9W                                                                            | 316C9W                                                                            |                                                                                   | 316BA9W                                                                            | 316R9W                                                                              | 316RA9W                                                                             |
|      | 3P4W          | 380-415<br>220-380  | 416P6W                                                                            | 416C6W                                                                            |                                                                                   | 416BA6W                                                                            | 416R6W                                                                              | 416RA6W                                                                             |
|      | 4P5W          | 240-415             | 516P6W                                                                            | 516C6W                                                                            |                                                                                   | 516BA6W                                                                            | 516R6W                                                                              | 516RA6W                                                                             |
| 32   | 2P3W          | 100-130             | 332P4W                                                                            | 332C4W                                                                            |                                                                                   | 332BA4W                                                                            | 332R4W                                                                              | 332RA4W                                                                             |
|      | 2P3W          | 220-240             | 332P6W                                                                            | 332C6W                                                                            |                                                                                   | 332BA6W                                                                            | 332R6W                                                                              | 332RA6W                                                                             |
|      | 2P3W          | 380-415<br>380/50HZ | 332P9W                                                                            | 332C9W                                                                            |                                                                                   | 332BA9W                                                                            | 332R9W                                                                              | 332RA9W                                                                             |
|      | 3P4W          | 440/60HZ            | 432P3W                                                                            | 432C3W                                                                            |                                                                                   | 432BA3W                                                                            | 432R3W                                                                              |                                                                                     |
|      | 3P4W          | 380-415<br>220-380  | 432P6W                                                                            | 432C6W                                                                            |                                                                                   | 432BA6W                                                                            | 432R6W                                                                              | 432RA6W                                                                             |
|      | 4P5W          | 240-415             | 532P6W                                                                            | 532C6W                                                                            |                                                                                   | 532BA6W                                                                            | 532R6W                                                                              | 532RA6W                                                                             |
| 63   | 2P3W          | 100-130             | 363P4W                                                                            | 363C4W                                                                            |                                                                                   | 363BA4W                                                                            | 363R4W                                                                              | 363RA4W                                                                             |
|      | 2P3W          | 220-240             | 363P6W                                                                            | 363C6W                                                                            |                                                                                   | 363BA6W                                                                            | 363R6W                                                                              | 363RA6W                                                                             |
|      | 2P3W          | 380-415             | 363P9W                                                                            | 363C9W                                                                            |                                                                                   | 363BA9W                                                                            | 363R9W                                                                              | 363RA9W                                                                             |
|      | 3P4W          | 380-415<br>220-380  | 463P6W                                                                            | 463C6W                                                                            |                                                                                   | 463BA6W                                                                            | 463R6W                                                                              | 463RA6W                                                                             |
|      | 4P5W          | 240-415             | 563P6W                                                                            | 563C6W                                                                            |                                                                                   | 563BA6W                                                                            | 563R6W                                                                              | 563RA6W                                                                             |
| 125  | 2P3W          | 100-130             | 3125P4W                                                                           | 3125C4W                                                                           | 3125B4W                                                                           |                                                                                    | 3125R4W                                                                             | 3125RA4W                                                                            |
|      | 2P3W          | 220-240             | 3125P6W                                                                           | 3125C6W                                                                           | 3125B6W                                                                           |                                                                                    | 3125R6W                                                                             | 3125RA6W                                                                            |
|      | 2P3W          | 380-415             | 3125P9W                                                                           | 3125C9W                                                                           | 3125B9W                                                                           |                                                                                    | 3125R9W                                                                             | 3125RA9W                                                                            |
|      | 3P4W          | 380-415<br>220-380  | 4125P6W                                                                           | 4125C6W                                                                           | 4125B6W                                                                           |                                                                                    | 4125R6W                                                                             | 4125RA6W                                                                            |
|      | 4P5W          | 240-415             | 5125P6W                                                                           | 5125C6W                                                                           | 5125B6W                                                                           |                                                                                    | 5125R6W                                                                             | 5125RA6W                                                                            |

# IEC 309 Pin & Sleeve Devices

## Devices with Cable Glands

### IP 44 Devices (with Cable Glands)

| Amps | Poles & Wires | Voltage            | Plugs                                                                             | Connectors                                                                        | Inlets                                                                             |                                                                                     | Receptacles                                                                         |                                                                                     |
|------|---------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|      |               |                    |  |  |  |  |  |  |
|      |               |                    |                                                                                   |                                                                                   | Straight                                                                           | Angled                                                                              | Straight                                                                            | Angled                                                                              |
| 16   | 2P3W          | 100-130            | 316P4S                                                                            | 316C4S                                                                            | 316B4S                                                                             |                                                                                     | 316R4S                                                                              | 316RA4S                                                                             |
|      | 2P3W          | 220-240            | 316P6S                                                                            | 316C6S                                                                            | 316B6S                                                                             |                                                                                     | 316R6S                                                                              | 316RA6S                                                                             |
|      | 2P3W          | 380-415            | 316P9S                                                                            | 316C9S                                                                            | 316B9S                                                                             |                                                                                     | 316R9S                                                                              | 316RA9S                                                                             |
|      | 3P4W          | 380-415<br>220-380 | 416P6S                                                                            | 416C6S                                                                            | 416B6S                                                                             |                                                                                     | 416R6S                                                                              | 416RA6S                                                                             |
|      | 4P5W          | 240-415            | 516P6S                                                                            | 516C6S                                                                            | 516B6S                                                                             |                                                                                     | 516R6S                                                                              | 516RA6S                                                                             |
| 32   | 2P3W          | 100-130            | 332P4S                                                                            | 332C4S                                                                            | 332B4S                                                                             |                                                                                     | 332R4S                                                                              | 332RA4S                                                                             |
|      | 2P3W          | 220-240            | 332P6S                                                                            | 332C6S                                                                            | 332B6S                                                                             |                                                                                     | 332R6S                                                                              | 332RA6S                                                                             |
|      | 2P3W          | 380-415            | 332P9S                                                                            | 332C9S                                                                            | 332B96                                                                             |                                                                                     | 332R9S                                                                              | 332RA9S                                                                             |
|      | 3P4W          | 380-415<br>220-380 | 432P3S                                                                            | 432C6S                                                                            | 432B6S                                                                             |                                                                                     | 432R6S                                                                              | 432RA6S                                                                             |
|      | 4P5W          | 240-415            | 532P6S                                                                            | 532C6S                                                                            | 532B6S                                                                             |                                                                                     | 532R6S                                                                              | 532RA6S                                                                             |
| 63   | 2P3W          | 100-130            | 363P4S                                                                            | 363C4S                                                                            |                                                                                    | 363BA4S                                                                             | 363R4S                                                                              | 363RA4S                                                                             |
|      | 2P3W          | 220-240            | 363P6S                                                                            | 363C6S                                                                            |                                                                                    | 363BA6S                                                                             | 363R6S                                                                              | 363RA6S                                                                             |
|      | 2P3W          | 380-415            | 363P9S                                                                            | 363C9S                                                                            |                                                                                    | 363BA9S                                                                             | 363R9S                                                                              | 363RA9S                                                                             |
|      | 3P4W          | 380-415<br>220-380 | 463P6S                                                                            | 463C6S                                                                            |                                                                                    | 463BA6S                                                                             | 463R6S                                                                              | 463RA6S                                                                             |
|      | 4P5W          | 240-415            | 563P6S                                                                            | 563C6S                                                                            |                                                                                    | 563BA6S                                                                             | 563R6S                                                                              | 563RA6S                                                                             |

# IEC 309 Pin & Sleeve Devices

## IP 44 Devices with Cable Sleeve

### IP 44

Devices (with Cable Sleeve)



| Amps | Poles & Wires | Voltage            | Plugs  | Connectors |
|------|---------------|--------------------|--------|------------|
| 16   | 2P3W          | 100-130            | 316P4E | 316C4E     |
|      | 2P3W          | 220-240            | 316P6E | 316C6E     |
|      | 2P3W          | 380-415            | 316P9E | 316C9E     |
|      | 3P4W          | 380-415<br>220-380 | 416P6E | 416C6E     |
|      | 4P5W          | 240-415            | 516P6E | 516C6E     |
| 32   | 2P3W          | 100-130            | 332P4E | 332C4E     |
|      | 2P3W          | 220-240            | 332P6E | 332C6E     |
|      | 2P3W          | 380-415            | 332P9E | 332C9E     |
|      | 3P4W          | 380-415<br>220-380 | 432P6E | 432C6E     |
|      | 4P5W          | 240-415            | 532P6E | 532C6E     |
| 63   | 2P3W          | 100-130            | 363P4E | 363C4E     |
|      | 2P3W          | 220-240            | 363P6E | 363C6E     |
|      | 2P3W          | 380-415            | 363P9E | 363C9E     |
|      | 3P4W          | 380-415<br>220-380 | 463P6E | 463C6E     |
|      | 4P5W          | 240-415            | 563P6E | 563C6E     |

# IEC 309 Pin & Sleeve Devices

## IP Rating System

**TABLE 1** - CHARACTERISTICS DEFINED BY THE CEI 70-1 - IEC 529 - IEC 144 - UTE C 20-010 - DIN 40050 STANDARDS

| First Digit - Protection against persons - touching and ingress of solid foreign objects |                                                                                     |                                                                                                                     | Second Digit - Protection against the penetration of liquids |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                          |                                                                                     |                                                                                                                     | IP_0                                                         | IP_1                                                                              | IP_2                                                                              | IP_3                                                                                | IP_4                                                                                | IP_5                                                                                | IP_6                                                                                | IP_7                                                                                | IP_8                                                                                |
|                                                                                          |                                                                                     |                                                                                                                     |                                                              |  |  |  |  |  |  |  |  |
| Non protected                                                                            |                                                                                     |                                                                                                                     |                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                                                                          |                                                                                     |                                                                                                                     |                                                              | ☹                                                                                 |                                                                                   | ☹                                                                                   | ☹                                                                                   | ☹                                                                                   |                                                                                     | ☹                                                                                   |                                                                                     |
| IP 0_                                                                                    |                                                                                     | Without protection                                                                                                  | IP 00                                                        |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| IP 1_                                                                                    |    | Protection against touching with the hand and solid objects greater than 50mm dia.                                  | IP 10                                                        | IP 11                                                                             | IP 12                                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| IP 2_                                                                                    |    | Protection against touching with the finger and solid objects greater than 12mm dia.                                | IP 20                                                        | IP 21                                                                             | IP 22                                                                             | IP 23                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| IP 3_                                                                                    |   | Protection against touching with tools, wires, etc. more than 2.5mm thick and solid objects greater than 2.5mm dia. | IP 30                                                        | IP 31                                                                             | IP 32                                                                             | IP 33                                                                               | IP 34                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| IP 4_                                                                                    |  | Protection against touching with tools, wires, etc. more than 1mm thick and solid objects greater than 1mm dia.     | IP 40                                                        | IP 41                                                                             | IP 42                                                                             | IP 43                                                                               | IP 44                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| IP 5_                                                                                    |  | Unlimited protection against contact with live parts and damaging deposits of dust                                  | IP 50                                                        |                                                                                   |                                                                                   |                                                                                     | IP 54                                                                               | IP 55                                                                               |                                                                                     |                                                                                     |                                                                                     |
| IP 6_                                                                                    |  | Unlimited protection against contact with live parts and any penetration of dust                                    | IP 60                                                        |                                                                                   |                                                                                   |                                                                                     |                                                                                     | IP 65                                                                               | IP 66                                                                               | IP 67                                                                               | IP 68                                                                               |

In some countries a third digit (for mechanical security) is added.

**TABLE 2**

| Designation | Intended Use and Description                                                                                                                                                                                             | Construction Requirements |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 3           | Outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust and damage from external ice formation.                                                                                      | Splashproof (IP44)        |
| 4           | Indoor and outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose-directed water and damage from external ice formation.                                         | Watertight (IP67)         |
| 4X          | Indoor and outdoor use primarily to provide a degree of protection against corrosion, windblown splashing water, hose-directed water and damage from external ice formation.                                             | Watertight (IP67)         |
| 6           | Indoor and outdoor use primarily to provide a degree of protection against hose-directed water, and the entry of water during occasional temporary submersion at a limited depth and damage from external ice formation. | Watertight (IP67)         |
| 12, 12K     | Indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non-corrosive liquids.                                                                                       | Splashproof (IP44)        |

This information is provided only as a general guide. No specific recommendation is intended. As each application may vary, testing should be conducted by the user in the intended environment.

# IEC 309 Pin & Sleeve Devices

## Useful Tables

**TABLE 1** Cable and Conductor Strip Length

| Device Rating                |      |       |         |        |         |
|------------------------------|------|-------|---------|--------|---------|
| North American               |      | 20A   | 30A     | 60A    | 100A    |
| International                |      | 16A   | 32A     | 63A    | 125A    |
| Outer Jacket Strip Length    | inch | 2     | 2 11/42 | 3      | 4       |
|                              | mm   | 50    | 63      | 76     | 102     |
| Conductor Strip Length       | inch | 11/42 | 11/42   | 31/44  | 1 11/48 |
|                              | mm   | 12    | 12      | 19     | 28      |
| Pilot Conductor Strip Length | inch |       |         | 71/416 | 51/48   |
|                              | mm   |       |         | 11     | 16      |

**TABLE 2** Maximum Torque applied to terminal screws

| Device Rating         |           |     |     |      |      |
|-----------------------|-----------|-----|-----|------|------|
| North American        |           | 20A | 30A | 60A  | 100A |
| International         |           | 16A | 32A | 63A  | 125A |
| Torque Terminal Screw | lb. - in. | 7.1 | 7.1 | 17.6 | 35.3 |
|                       | N - m     | 0.8 | 0.8 | 2    | 4    |
| Torque Pilot Screw    | lb. - in. |     |     | 7.1  | 7.1  |
|                       | N - m     |     |     | 0.8  | 0.8  |

**TABLE 4** Metric and AWG/MCM conductor size equivalents

| Conductor Size  |         | Test Range (A) |
|-----------------|---------|----------------|
| mm <sup>2</sup> | AWG/MCM |                |
| 1,0             | 18      | 0-8            |
| 1,5             | 16      | 8-12           |
| 2,5             | 14      | 12-15          |
| 2,5             | 12      | 15-20          |
| 4,0             | 10      | 20-25          |
| 6,0             | 10      | 25-32          |
| 10              | 8       | 32-50          |
| 16              | 6       | 50-65          |
| 25              | 4       | 65-85          |
| 35              | 3       | 85-100         |
| 35              | 2       | 100-115        |
| 50              | 1       | 115-130        |
| 50              | 1/0     | 130-150        |
| 70              | 2/0     | 150-175        |
| 95              | 3/0     | 175-200        |
| 95              | 4/0     | 200-225        |
| 120             | 250     | 225-250        |
| 150             | 300     | 250-275        |
| 185             | 350     | 275-300        |
| 185             | 400     | 300-350        |
| 240             | 500     | 350-400        |

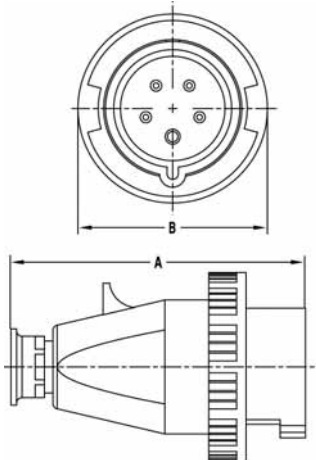
**TABLE 3** Cable and Conductor Range

| Amps |      | Poles & Wires | From |        | To  |        | Cord Grip Range |                  |               |                   |               |
|------|------|---------------|------|--------|-----|--------|-----------------|------------------|---------------|-------------------|---------------|
|      |      |               |      |        |     |        |                 | With Cable Gland |               | With Cable Sleeve |               |
|      |      |               |      |        |     |        |                 | North American   | International | North American    | International |
| 16   | 20   | 2P3W          | 16   | S      | 10  | S      | inch            | 0.275 - 0.530    | 0.275 - 0.530 | 0.275 - 0.675     | 0.275 - 0.675 |
|      |      |               |      |        |     |        | mm              | 7 - 13.5         | 7 - 13.5      | 7 - 17            | 7 - 17        |
|      |      | 3P4W          | 16   | S      | 10  | S      | inch            | .395 - .825      | 0.275 - 0.630 | 0.315 - 0.800     | 0.315 - 0.800 |
| 30   | 32   |               |      |        |     |        | mm              | 10 - 21          | 7 - 16        | 8 - 20            | 8 - 20        |
|      |      | 4P5W          | 16   | S      | 10  | S      | inch            | .395 - .825      | 0.275 - 0.630 | 0.315 - 0.800     | 0.315 - 0.800 |
|      |      |               |      |        |     |        | mm              | 10 - 21          | 7 - 16        | 8 - 20            | 8 - 20        |
| 60*  | 63*  | 2P3W          | 12   | S      | 8   | S      | inch            | .395 - .825      | .395 - .825   | 0.590 - 0.950     | 0.435 - 0.950 |
|      |      |               |      |        |     |        | mm              | 10 - 21          | 10 - 21       | 15 - 24           | 11 - 24       |
|      |      | 3P4W          | 12   | S      | 8   | S      | inch            | 0.650 - 1.10     | .395 - .825   | 0.590 - 0.950     | 0.435 - 0.950 |
| 100* | 125* |               |      |        |     |        | mm              | 16.5 - 28        | 10 - 21       | 15 - 24           | 11 - 24       |
|      |      | 4P5W          | 12   | S      | 8   | S      | inch            | 0.650 - 1.10     | .395 - .825   | 0.590 - 0.950     | 0.435 - 0.950 |
|      |      |               |      |        |     |        | mm              | 16.5 - 28        | 10 - 21       | 15 - 24           | 11 - 24       |
| 60*  | 63*  | 2P3W          | 8    | S      | 4   | S or W | inch            | .650 - 1.50      | .650 - 1.50   | 0.635 - 1.30      | 0.600 - 1.30  |
|      |      |               |      |        |     |        | mm              | 16.5 - 38        | 16.5 - 38     | 16 - 33           | 15 - 33       |
|      |      | 3P4W          | 8    | S      | 4   | S or W | inch            | .650 - 1.50      | .650 - 1.50   | 0.635 - 1.30      | 0.600 - 1.30  |
| 100* | 125* |               |      |        |     |        | mm              | 16.5 - 38        | 16.5 - 38     | 16 - 33           | 15 - 33       |
|      |      | 4P5W          | 8    | S      | 4   | S or W | inch            | .650 - 1.50      | .650 - 1.50   | 0.635 - 1.30      | 0.600 - 1.30  |
|      |      |               |      |        |     |        | mm              | 16.5 - 38        | 16.5 - 38     | 16 - 33           | 15 - 33       |
| 100* | 125* | 2P3W          | 6    | S or W | 2/0 | S or W | inch            | .950 - 1.90      | .950 - 1.90   |                   |               |
|      |      |               |      |        |     |        | mm              | 24 - 48          | 24 - 48       |                   |               |
|      |      | 3P4W          | 6    | S or W | 2/0 | S or W | inch            | .950 - 1.90      | .950 - 1.90   |                   |               |
| 100* | 125* |               |      |        |     |        | mm              | 24 - 48          | 24 - 48       |                   |               |
|      |      | 4P5W          | 6    | S or W | 2/0 | S or W | inch            | .950 - 1.90      | .950 - 1.90   |                   |               |
|      |      |               |      |        |     |        | mm              | 24 - 48          | 24 - 48       |                   |               |

\* Pilot conductor 16 to 8 AWG

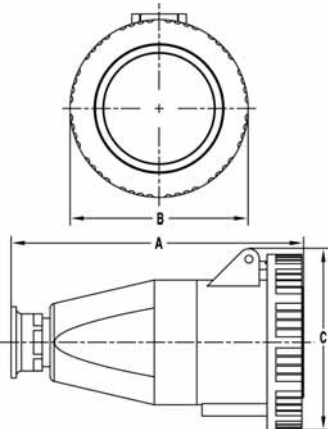
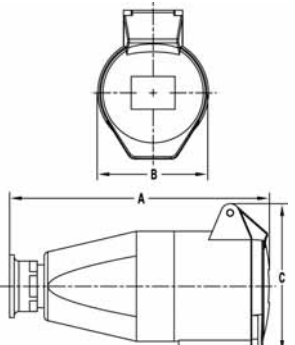
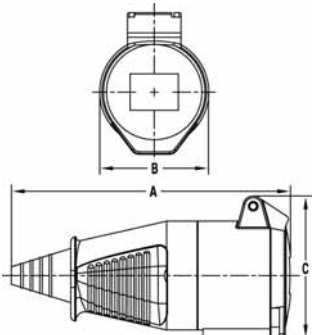
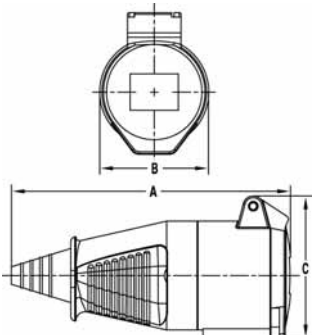
# IEC 309 Pin & Sleeve Devices

## Approximate Dimensions

| <b>WATERTIGHT PLUGS (IP67)</b>                                                    |  | <b>Amps</b> |              | <b>Type</b>    | <b>Dimensions</b> |          | <b>Cord Grip Range</b> |                      |
|-----------------------------------------------------------------------------------|--|-------------|--------------|----------------|-------------------|----------|------------------------|----------------------|
|                                                                                   |  | <b>N.A.</b> | <b>Intl.</b> |                | <b>A</b>          | <b>B</b> | <b>N. American</b>     | <b>International</b> |
|  |  | 20          | 16           | 3 Wire         | inch 4.96         | 2.83     | 0.275 - 0.530          | 0.275 - 0.530        |
|                                                                                   |  |             |              |                | mm 126            | 72       | 7.0 - 13.5             | 7.0 - 13.5           |
|                                                                                   |  | 20          | 16           | 4 Wire         | inch 5.20         | 3.19     | 0.395 - 0.825          | 0.275 - 0.630        |
|                                                                                   |  |             |              |                | mm 132            | 81       | 10.0 - 21.0            | 7.0 - 16.0           |
|                                                                                   |  | 20          | 16           | 5 Wire         | inch 5.20         | 3.46     | 0.395 - 0.825          | 0.275 - 0.630        |
|                                                                                   |  |             |              |                | mm 132            | 88       | 10.0 - 21.0            | 7.0 - 16.0           |
|                                                                                   |  | 30          | 32           | 3 Wire         | inch 6.14         | 3.78     | 0.395 - 0.825          | 0.395 - 0.825        |
|                                                                                   |  |             |              |                | mm 156            | 96       | 10.0 - 21.0            | 10.0 - 21.0          |
|                                                                                   |  | 30          | 32           | 4 Wire         | inch 6.14         | 3.78     | 0.650 - 1.10           | 0.395 - 0.825        |
|                                                                                   |  |             |              |                | mm 156            | 96       | 16.5 - 28.0            | 10.0 - 21.0          |
|                                                                                   |  | 30          | 32           | 5 Wire         | inch 6.14         | 4.06     | 0.650 - 1.10           | 0.395 - 0.825        |
|                                                                                   |  |             |              |                | mm 156            | 103      | 16.5 - 28.0            | 10.0 - 21.0          |
| <b>SPLASHPROOF PLUGS (IP44)</b><br>(with cable gland)                             |  | 60          | 63           | 3, 4, & 5 Wire | inch 9.57         | 4.33     | 0.650 - 1.50           | 0.650 - 1.50         |
|                                                                                   |  |             |              |                | mm 243            | 110      | 16.5 - 38.0            | 16.5 - 38.0          |
|                                                                                   |  | 100         | 125          | 3, 4, & 5 Wire | inch 12.40        | 5.12     | 0.950 - 1.90           | 0.950 - 1.90         |
|                                                                                   |  |             |              |                | mm 315            | 130      | 24.0 - 48.0            | 24.0 - 48.0          |
|                                                                                   |  | <b>Amps</b> |              | <b>Type</b>    | <b>Dimensions</b> |          | <b>Cord Grip Range</b> |                      |
|                                                                                   |  | <b>N.A.</b> | <b>Intl.</b> |                | <b>A</b>          | <b>B</b> | <b>N. American</b>     | <b>International</b> |
|                                                                                   |  | 20          | 16           | 3 Wire         | inch 4.84         | 2.36     | 0.275 - 0.530          | 0.275 - 0.530        |
|                                                                                   |  |             |              |                | mm 123            | 60       | 7.0 - 13.5             | 7.0 - 13.5           |
|                                                                                   |  | 20          | 16           | 4 Wire         | inch 5.16         | 2.68     | 0.395 - 0.825          | 0.275 - 0.630        |
|                                                                                   |  |             |              |                | mm 131            | 68       | 10.0 - 21.0            | 7.0 - 16.0           |
|                                                                                   |  | 20          | 16           | 5 & 7 Wire     | inch 5.16         | 2.95     | 0.395 - 0.825          | 0.275 - 0.630        |
|                                                                                   |  |             |              |                | mm 131            | 75       | 10.0 - 21.0            | 7.0 - 16.0           |
|                                                                                   |  | 30          | 32           | 3 Wire         | inch 6.10         | 3.11     | 0.395 - 0.825          | 0.395 - 0.825        |
|                                                                                   |  |             |              |                | mm 155            | 79       | 10.0 - 21.0            | 10.0 - 21.0          |
|                                                                                   |  | 30          | 32           | 4 Wire         | inch 6.10         | 3.11     | 0.650 - 1.10           | 0.395 - 0.825        |
|                                                                                   |  |             |              |                | mm 155            | 79       | 16.5 - 28.0            | 10.0 - 21.0          |
|                                                                                   |  | 30          | 32           | 5 & 7 Wire     | inch 6.10         | 3.46     | 0.650 - 1.10           | 0.395 - 0.825        |
|                                                                                   |  |             |              |                | mm 155            | 88       | 16.5 - 28.0            | 10.0 - 21.0          |
|                                                                                   |  | 60          | 63           | 3, 4, & 5 Wire | inch 9.45         | 3.82     | 0.650 - 1.50           | 0.650 - 1.50         |
|                                                                                   |  |             |              |                | mm 240            | 97       | 16.5 - 38.0            | 16.5 - 38.0          |
| <b>SPLASHPROOF PLUGS (IP44)</b><br>(with cable sleeve)                            |  | <b>Amps</b> |              | <b>Type</b>    | <b>Dimensions</b> |          | <b>Cord Grip Range</b> |                      |
|                                                                                   |  | <b>N.A.</b> | <b>Intl.</b> |                | <b>A</b>          | <b>B</b> | <b>N. American</b>     | <b>International</b> |
|                                                                                   |  | 20          | 16           | 3 Wire         | inch 5.63         | 2.36     | 0.275 - 0.675          | 0.275 - 0.675        |
|                                                                                   |  |             |              |                | mm 143            | 60       | 7.0 - 17.0             | 7.0 - 17.0           |
|                                                                                   |  | 20          | 16           | 4 Wire         | inch 5.79         | 2.68     | 0.315 - 0.800          | 0.315 - 0.800        |
|                                                                                   |  |             |              |                | mm 147            | 68       | 8.0 - 20.0             | 8.0 - 20.0           |
|                                                                                   |  | 20          | 16           | 5 & 7 Wire     | inch 6.02         | 2.95     | 0.315 - 0.800          | 0.315 - 0.800        |
|                                                                                   |  |             |              |                | mm 153            | 75       | 8.0 - 20.0             | 8.0 - 20.0           |
|                                                                                   |  | 30          | 32           | 3 Wire         | inch 7.13         | 3.11     | 0.590 - 0.950          | 0.435 - 0.950        |
|                                                                                   |  |             |              |                | mm 181            | 79       | 15.0 - 24.0            | 11.0 - 24.0          |
|                                                                                   |  | 30          | 32           | 4 Wire         | inch 7.13         | 3.11     | 0.590 - 0.950          | 0.435 - 0.95         |
|                                                                                   |  |             |              |                | mm 181            | 79       | 15.0 - 24.0            | 11.0 - 24.0          |
|                                                                                   |  | 30          | 32           | 5 & 7 Wire     | inch 7.13         | 3.46     | 0.590 - 0.950          | 0.435 - 0.95         |
|                                                                                   |  |             |              |                | mm 181            | 88       | 15.0 - 24.0            | 11.0 - 24.0          |
|                                                                                   |  | 60          | 63           | 3, 4, & 5 Wire | inch 9.92         | 3.82     | 0.635 - 1.30           | 0.600 - 1.30         |
|                                                                                   |  |             |              |                | mm 252            | 97       | 16.0 - 33.0            | 15.0 - 33.0          |

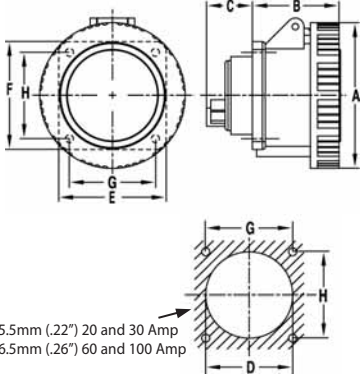
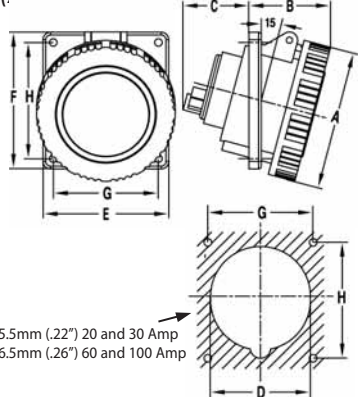
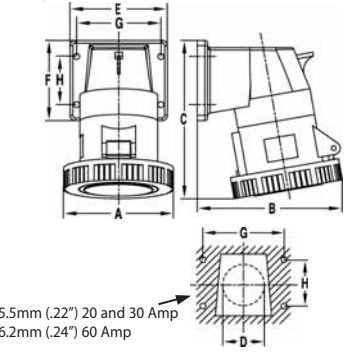
# IEC 309 Pin & Sleeve Devices

## Approximate Dimensions

| WATERTIGHT CONNECTORS (IP67)                                                        | Amps |       | Type           | Dimensions |      |      | Cord Grip Range |               |
|-------------------------------------------------------------------------------------|------|-------|----------------|------------|------|------|-----------------|---------------|
|                                                                                     | N.A. | Intl. |                | A          | B    | C    | N. American     | International |
|                                                                                     |      |       |                |            |      |      |                 |               |
|    | 20   | 16    | 3 Wire         | inch 5.35  | 2.83 | 3.07 | 0.275 - 0.530   | 0.275 - 0.530 |
|                                                                                     |      |       |                | mm 136     | 72   | 78   | 7.0 - 13.5      | 7.0 - 13.5    |
|                                                                                     | 20   | 16    | 4 Wire         | inch 5.63  | 3.19 | 3.35 | 0.395 - 0.825   | 0.275 - 0.630 |
|                                                                                     |      |       |                | mm 143     | 81   | 85   | 10.0 - 21.0     | 7.0 - 16.0    |
|                                                                                     | 20   | 16    | 5 Wire         | inch 5.63  | 3.46 | 3.58 | 0.395 - 0.825   | 0.275 - 0.630 |
|                                                                                     |      |       |                | mm 143     | 88   | 91   | 10.0 - 21.0     | 7.0 - 16.0    |
|                                                                                     | 30   | 32    | 3 Wire         | inch 6.97  | 3.78 | 3.78 | 0.395 - 0.825   | 0.395 - 0.825 |
|                                                                                     |      |       |                | mm 177     | 96   | 96   | 10.0 - 21.0     | 10.0 - 21.0   |
|                                                                                     | 30   | 32    | 4 Wire         | inch 6.97  | 3.78 | 3.78 | 0.650 - 1.10    | 0.395 - 0.825 |
|                                                                                     |      |       |                | mm 177     | 96   | 96   | 16.5 - 28.0     | 10.0 - 21.0   |
|                                                                                     | 30   | 32    | 5 Wire         | inch 6.97  | 4.06 | 4.13 | 0.650 - 1.10    | 0.395 - 0.825 |
|                                                                                     |      |       |                | mm 177     | 103  | 105  | 16.5 - 28.0     | 10.0 - 21.0   |
|   | 60   | 63    | 3, 4, & 5 Wire | inch 10.0  | 4.33 | 4.61 | 0.650 - 1.50    | 0.650 - 1.50  |
|                                                                                     |      |       |                | mm 255     | 110  | 117  | 16.5 - 38.0     | 16.5 - 38.0   |
|                                                                                     | 100  | 125   | 3, 4, & 5 Wire | inch 13.1  | 5.12 | 5.12 | 0.950 - 1.90    | 0.950 - 1.90  |
|                                                                                     |      |       |                | mm 332     | 130  | 130  | 24.0 - 48.0     | 24.0 - 48.0   |
|  | 20   | 16    | 3 Wire         | inch 5.32  | 2.01 | 2.68 | 0.275 - 0.530   | 0.275 - 0.530 |
|                                                                                     |      |       |                | mm 135     | 51   | 68   | 7.0 - 13.5      | 7.0 - 13.5    |
|                                                                                     | 20   | 16    | 4 Wire         | inch 5.95  | 2.56 | 3.35 | 0.395 - 0.825   | 0.275 - 0.630 |
|                                                                                     |      |       |                | mm 151     | 65   | 85   | 10.0 - 21.0     | 7.0 - 16.0    |
|                                                                                     | 20   | 16    | 5 & 7 Wire     | inch 5.95  | 2.56 | 3.35 | 0.395 - 0.825   | 0.275 - 0.630 |
|                                                                                     |      |       |                | mm 151     | 65   | 85   | 10.0 - 21.0     | 7.0 - 16.0    |
|                                                                                     | 30   | 32    | 3 Wire         | inch 6.73  | 2.83 | 3.58 | 0.395 - 0.825   | 0.395 - 0.825 |
|                                                                                     |      |       |                | mm 171     | 72   | 91   | 10.0 - 21.0     | 10.0 - 21.0   |
|                                                                                     | 30   | 32    | 4 Wire         | inch 6.73  | 2.83 | 3.58 | 0.650 - 1.10    | 0.395 - 0.825 |
|                                                                                     |      |       |                | mm 171     | 72   | 91   | 16.5 - 28.0     | 10.0 - 21.0   |
|                                                                                     | 30   | 32    | 5 & 7 Wire     | inch 6.73  | 2.83 | 3.86 | 0.650 - 1.10    | 0.395 - 0.825 |
|                                                                                     |      |       |                | mm 171     | 72   | 98   | 16.5 - 28.0     | 10.0 - 21.0   |
|  | 60   | 63    | 3, 4, & 5 Wire | inch 10.0  | 3.78 | 4.49 | 0.650 - 1.50    | 0.650 - 1.50  |
|                                                                                     |      |       |                | mm 255     | 96   | 114  | 16.5 - 38.0     | 16.5 - 38.0   |
|                                                                                     | 20   | 16    | 3 Wire         | inch 6.06  | 2.01 | 2.69 | 0.275 - 0.675   | 0.275 - 0.675 |
|                                                                                     |      |       |                | mm 154     | 51   | 68.4 | 7.0 - 17.0      | 7.0 - 17.0    |
|                                                                                     | 20   | 16    | 4 Wire         | inch 6.54  | 2.56 | 2.97 | 0.315 - 0.800   | 0.315 - 0.800 |
|                                                                                     |      |       |                | mm 166     | 65   | 75.4 | 8.0 - 20.0      | 8.0 - 20.0    |
|                                                                                     | 20   | 16    | 5 & 7 Wire     | inch 6.54  | 2.56 | 3.29 | 0.315 - 0.800   | 0.315 - 0.800 |
|                                                                                     |      |       |                | mm 166     | 65   | 83.5 | 8.0 - 20.0      | 8.0 - 20.0    |
|                                                                                     | 30   | 32    | 3 Wire         | inch 7.72  | 2.83 | 3.54 | 0.590 - 0.950   | 0.435 - 0.950 |
|                                                                                     |      |       |                | mm 196     | 72   | 90   | 15.0 - 24.0     | 11.0 - 24.0   |
|                                                                                     | 30   | 32    | 4 Wire         | inch 7.72  | 2.83 | 3.54 | 0.590 - 0.950   | 0.435 - 0.95  |
|                                                                                     |      |       |                | mm 196     | 72   | 90   | 15.0 - 24.0     | 11.0 - 24.0   |
|                                                                                     | 30   | 32    | 5 & 7 Wire     | inch 7.72  | 2.83 | 3.78 | 0.590 - 0.950   | 0.435 - 0.95  |
|                                                                                     |      |       |                | mm 196     | 72   | 96   | 15.0 - 24.0     | 11.0 - 24.0   |
|                                                                                     | 60   | 63    | 3, 4, & 5 Wire | inch 10.5  | 3.78 | 4.41 | 0.635 - 1.30    | 0.600 - 1.30  |
|                                                                                     |      |       |                | mm 266     | 96   | 112  | 16.0 - 33.0     | 15.0 - 33.0   |

# IEC 309 Pin & Sleeve Devices

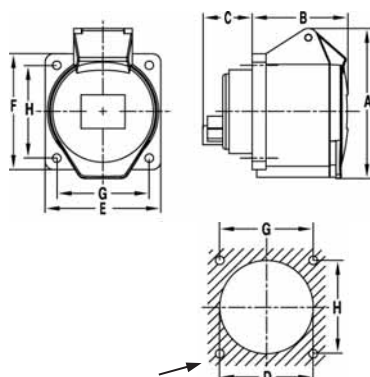
## Approximate Dimensions

| <div><div><div>WATERTIGHT<br/>RECEPTACLE (IP67)</div><div>(Straight)</div><div></div><div>5.5mm (.22") 20 and 30 Amp<br/>6.5mm (.26") 60 and 100 Amp</div></div></div> <table><tr><th colspan="3">Amps</th><th colspan="10">Dimensions</th></tr><tr><th>N.A.</th><th>Intl.</th><th>Type</th><th></th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th><th>H</th></tr><tr><td>20</td><td>16</td><td>3 Wire</td><td>inch</td><td>2.82</td><td>2.05</td><td>1.10</td><td>1.81</td><td>2.44</td><td>2.44</td><td>1.85</td><td>1.85</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>71.5</td><td>52</td><td>28</td><td>46</td><td>62</td><td>62</td><td>47</td><td>47</td></tr><tr><td>20</td><td>16</td><td>4 Wire</td><td>inch</td><td>31.9</td><td>2.05</td><td>1.10</td><td>2.36</td><td>2.95</td><td>2.95</td><td>2.36</td><td>2.36</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>81</td><td>52</td><td>28</td><td>60</td><td>75</td><td>75</td><td>60</td><td>60</td></tr><tr><td>20</td><td>16</td><td>5 Wire</td><td>inch</td><td>3.46</td><td>2.05</td><td>1.10</td><td>2.36</td><td>2.95</td><td>2.95</td><td>2.36</td><td>2.36</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>88</td><td>52</td><td>28</td><td>60</td><td>75</td><td>75</td><td>60</td><td>60</td></tr><tr><td>30</td><td>32</td><td>3 &amp; 4 Wire</td><td>inch</td><td>3.78</td><td>2.56</td><td>1.06</td><td>2.36</td><td>2.95</td><td>2.95</td><td>2.36</td><td>2.36</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>96</td><td>65</td><td>27</td><td>60</td><td>75</td><td>75</td><td>60</td><td>60</td></tr><tr><td>30</td><td>32</td><td>5 Wire</td><td>inch</td><td>4.06</td><td>2.56</td><td>1.06</td><td>2.36</td><td>2.95</td><td>2.95</td><td>2.36</td><td>2.36</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>103</td><td>65</td><td>27</td><td>60</td><td>75</td><td>75</td><td>60</td><td>60</td></tr><tr><td>60</td><td>63</td><td>3, 4, &amp; 5 Wire</td><td>inch</td><td>4.29</td><td>3.27</td><td>2.05</td><td>3.54</td><td>3.94</td><td>4.21</td><td>3.03</td><td>3.35</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>109</td><td>83</td><td>52</td><td>90</td><td>100</td><td>107</td><td>77</td><td>85</td></tr><tr><td>100</td><td>125</td><td>3, 4, &amp; 5 Wire</td><td>inch</td><td>5.12</td><td>3.78</td><td>2.52</td><td>3.54</td><td>4.49</td><td>4.49</td><td>3.54</td><td>3.54</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>130</td><td>96</td><td>64</td><td>90</td><td>114</td><td>114</td><td>90</td><td>90</td></tr></table> | Amps  |                |            | Dimensions |      |      |       |      |      |      |      |      |  | N.A. | Intl. | Type |  | A | B | C | D | E | F | G | H | 20 | 16 | 3 Wire | inch | 2.82 | 2.05 | 1.10 | 1.81 | 2.44 | 2.44 | 1.85 | 1.85 |  |  |  | mm | 71.5 | 52 | 28 | 46 | 62 | 62 | 47 | 47 | 20 | 16 | 4 Wire | inch | 31.9 | 2.05 | 1.10 | 2.36 | 2.95 | 2.95 | 2.36 | 2.36 |  |  |  | mm | 81 | 52 | 28 | 60 | 75 | 75 | 60 | 60 | 20 | 16 | 5 Wire | inch | 3.46 | 2.05 | 1.10 | 2.36 | 2.95 | 2.95 | 2.36 | 2.36 |  |  |  | mm | 88 | 52 | 28 | 60 | 75 | 75 | 60 | 60 | 30 | 32 | 3 & 4 Wire | inch | 3.78 | 2.56 | 1.06 | 2.36 | 2.95 | 2.95 | 2.36 | 2.36 |  |  |  | mm | 96 | 65 | 27 | 60 | 75 | 75 | 60 | 60 | 30 | 32 | 5 Wire | inch | 4.06 | 2.56 | 1.06 | 2.36 | 2.95 | 2.95 | 2.36 | 2.36 |  |  |  | mm | 103 | 65 | 27 | 60 | 75 | 75 | 60 | 60 | 60 | 63 | 3, 4, & 5 Wire | inch | 4.29 | 3.27 | 2.05 | 3.54 | 3.94 | 4.21 | 3.03 | 3.35 |  |  |  | mm | 109 | 83 | 52 | 90 | 100 | 107 | 77 | 85 | 100 | 125 | 3, 4, & 5 Wire | inch | 5.12 | 3.78 | 2.52 | 3.54 | 4.49 | 4.49 | 3.54 | 3.54 |  |  |  | mm | 130 | 96 | 64 | 90 | 114 | 114 | 90 | 90 | <div><div><div>WATERTIGHT<br/>RECEPTACLE (IP67)</div><div>(Angled 15°)</div><div></div><div>5.5mm (.22") 20 and 30 Amp<br/>6.5mm (.26") 60 and 100 Amp</div></div></div> <table><tr><th colspan="3">Amps</th><th colspan="10">Dimensions</th></tr><tr><th>N.A.</th><th>Intl.</th><th>Type</th><th></th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th><th>H</th></tr><tr><td>20</td><td>16</td><td>3 Wire</td><td>inch</td><td>2.82</td><td>1.93</td><td>1.61</td><td>2.01</td><td>2.44</td><td>2.68</td><td>1.85</td><td>1.85</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>71.5</td><td>49</td><td>41</td><td>51</td><td>62</td><td>68</td><td>47</td><td>47</td></tr><tr><td>20</td><td>16</td><td>4 Wire</td><td>inch</td><td>3.19</td><td>2.05</td><td>1.50</td><td>2.87</td><td>3.62</td><td>3.94</td><td>3.03</td><td>3.35</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>81</td><td>52</td><td>38</td><td>73</td><td>92</td><td>100</td><td>77</td><td>85</td></tr><tr><td>20</td><td>16</td><td>5 Wire</td><td>inch</td><td>3.46</td><td>2.05</td><td>1.50</td><td>2.87</td><td>3.62</td><td>3.94</td><td>3.03</td><td>3.35</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>88</td><td>52</td><td>38</td><td>73</td><td>92</td><td>100</td><td>77</td><td>85</td></tr><tr><td>30</td><td>32</td><td>3 &amp; 4 Wire</td><td>inch</td><td>3.78</td><td>2.20</td><td>1.85</td><td>2.87</td><td>3.62</td><td>3.94</td><td>3.03</td><td>3.35</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>96</td><td>56</td><td>47</td><td>73</td><td>92</td><td>100</td><td>77</td><td>85</td></tr><tr><td>30</td><td>32</td><td>5 Wire</td><td>inch</td><td>4.06</td><td>2.36</td><td>1.85</td><td>2.87</td><td>3.62</td><td>3.94</td><td>3.03</td><td>3.35</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>103</td><td>60</td><td>47</td><td>73</td><td>92</td><td>100</td><td>77</td><td>85</td></tr><tr><td>60</td><td>63</td><td>3, 4, &amp; 5 Wire</td><td>inch</td><td>4.29</td><td>3.23</td><td>2.52</td><td>3.19</td><td>3.94</td><td>4.21</td><td>3.03</td><td>3.35</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>109</td><td>82</td><td>64</td><td>81</td><td>100</td><td>107</td><td>77</td><td>85</td></tr><tr><td>100</td><td>125</td><td>3, 4, &amp; 5 Wire</td><td>inch</td><td>5.12</td><td>3.70</td><td>2.95</td><td>3.54</td><td>4.49</td><td>4.49</td><td>3.54</td><td>3.54</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>130</td><td>94</td><td>75</td><td>90</td><td>114</td><td>114</td><td>90</td><td>90</td></tr></table> | Amps |  |  | Dimensions |  |  |  |  |  |  |  |  |  | N.A. | Intl. | Type |  | A | B | C | D | E | F | G | H | 20 | 16 | 3 Wire | inch | 2.82 | 1.93 | 1.61 | 2.01 | 2.44 | 2.68 | 1.85 | 1.85 |  |  |  | mm | 71.5 | 49 | 41 | 51 | 62 | 68 | 47 | 47 | 20 | 16 | 4 Wire | inch | 3.19 | 2.05 | 1.50 | 2.87 | 3.62 | 3.94 | 3.03 | 3.35 |  |  |  | mm | 81 | 52 | 38 | 73 | 92 | 100 | 77 | 85 | 20 | 16 | 5 Wire | inch | 3.46 | 2.05 | 1.50 | 2.87 | 3.62 | 3.94 | 3.03 | 3.35 |  |  |  | mm | 88 | 52 | 38 | 73 | 92 | 100 | 77 | 85 | 30 | 32 | 3 & 4 Wire | inch | 3.78 | 2.20 | 1.85 | 2.87 | 3.62 | 3.94 | 3.03 | 3.35 |  |  |  | mm | 96 | 56 | 47 | 73 | 92 | 100 | 77 | 85 | 30 | 32 | 5 Wire | inch | 4.06 | 2.36 | 1.85 | 2.87 | 3.62 | 3.94 | 3.03 | 3.35 |  |  |  | mm | 103 | 60 | 47 | 73 | 92 | 100 | 77 | 85 | 60 | 63 | 3, 4, & 5 Wire | inch | 4.29 | 3.23 | 2.52 | 3.19 | 3.94 | 4.21 | 3.03 | 3.35 |  |  |  | mm | 109 | 82 | 64 | 81 | 100 | 107 | 77 | 85 | 100 | 125 | 3, 4, & 5 Wire | inch | 5.12 | 3.70 | 2.95 | 3.54 | 4.49 | 4.49 | 3.54 | 3.54 |  |  |  | mm | 130 | 94 | 75 | 90 | 114 | 114 | 90 | 90 | <div><div><div>WATERTIGHT<br/>RECEPTACLE (IP67)</div><div>(Angled 80°)</div><div></div><div>5.5mm (.22") 20 and 30 Amp<br/>6.2mm (.24") 60 Amp</div></div></div> <table><tr><th colspan="3">Amps</th><th colspan="8">Dimensions</th></tr><tr><th>N.A.</th><th>Intl.</th><th>Type</th><th></th><th>A</th><th>B</th><th>C</th><th>D max</th><th>E</th><th>F</th><th>G</th><th>H</th></tr><tr><td>20</td><td>16</td><td>3 Wire</td><td>inch</td><td>2.83</td><td>3.46</td><td>4.29</td><td>1.18</td><td>2.56</td><td>2.05</td><td>2.17</td><td>1.18</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>72</td><td>88</td><td>109</td><td>30</td><td>65</td><td>52</td><td>55</td><td>30</td></tr><tr><td>20</td><td>16</td><td>4 Wire</td><td>inch</td><td>3.19</td><td>4.25</td><td>4.84</td><td>1.50</td><td>3.15</td><td>2.60</td><td>2.68</td><td>1.57</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>81</td><td>108</td><td>123</td><td>38</td><td>80</td><td>66</td><td>68</td><td>40</td></tr><tr><td>20</td><td>16</td><td>5 Wire</td><td>inch</td><td>3.46</td><td>4.25</td><td>4.84</td><td>1.50</td><td>3.15</td><td>2.60</td><td>2.68</td><td>1.57</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>88</td><td>108</td><td>123</td><td>38</td><td>80</td><td>66</td><td>68</td><td>40</td></tr><tr><td>30</td><td>32</td><td>3 &amp; 4 Wire</td><td>inch</td><td>3.78</td><td>4.76</td><td>5.71</td><td>1.73</td><td>3.54</td><td>2.95</td><td>3.07</td><td>1.77</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>96</td><td>121</td><td>145</td><td>44</td><td>90</td><td>75</td><td>78</td><td>45</td></tr><tr><td>30</td><td>32</td><td>5 Wire</td><td>inch</td><td>4.06</td><td>4.84</td><td>5.71</td><td>1.73</td><td>3.54</td><td>2.95</td><td>3.07</td><td>1.77</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>103</td><td>123</td><td>145</td><td>44</td><td>90</td><td>75</td><td>78</td><td>45</td></tr><tr><td>60</td><td>63</td><td>3, 4, &amp; 5 Wire</td><td>inch</td><td>4.33</td><td>5.63</td><td>7.99</td><td>2.20</td><td>4.49</td><td>4.49</td><td>3.54</td><td>3.54</td></tr><tr><td></td><td></td><td></td><td>mm</td><td>110</td><td>143</td><td>203</td><td>56</td><td>114</td><td>114</td><td>90</td><td>90</td></tr></table> | Amps |  |  | Dimensions |  |  |  |  |  |  |  | N.A. | Intl. | Type |  | A | B | C | D max | E | F | G | H | 20 | 16 | 3 Wire | inch | 2.83 | 3.46 | 4.29 | 1.18 | 2.56 | 2.05 | 2.17 | 1.18 |  |  |  | mm | 72 | 88 | 109 | 30 | 65 | 52 | 55 | 30 | 20 | 16 | 4 Wire | inch | 3.19 | 4.25 | 4.84 | 1.50 | 3.15 | 2.60 | 2.68 | 1.57 |  |  |  | mm | 81 | 108 | 123 | 38 | 80 | 66 | 68 | 40 | 20 | 16 | 5 Wire | inch | 3.46 | 4.25 | 4.84 | 1.50 | 3.15 | 2.60 | 2.68 | 1.57 |  |  |  | mm | 88 | 108 | 123 | 38 | 80 | 66 | 68 | 40 | 30 | 32 | 3 & 4 Wire | inch | 3.78 | 4.76 | 5.71 | 1.73 | 3.54 | 2.95 | 3.07 | 1.77 |  |  |  | mm | 96 | 121 | 145 | 44 | 90 | 75 | 78 | 45 | 30 | 32 | 5 Wire | inch | 4.06 | 4.84 | 5.71 | 1.73 | 3.54 | 2.95 | 3.07 | 1.77 |  |  |  | mm | 103 | 123 | 145 | 44 | 90 | 75 | 78 | 45 | 60 | 63 | 3, 4, & 5 Wire | inch | 4.33 | 5.63 | 7.99 | 2.20 | 4.49 | 4.49 | 3.54 | 3.54 |  |  |  | mm | 110 | 143 | 203 | 56 | 114 | 114 | 90 | 90 |
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|--------|------|------|------|------|------|------|------|------|------|--|--|--|----|----|-----|-----|----|----|----|----|----|----|----|--------|------|------|------|------|------|------|------|------|------|--|--|--|----|----|-----|-----|----|----|----|----|----|----|----|------------|------|------|------|------|------|------|------|------|------|--|--|--|----|----|-----|-----|----|----|----|----|----|----|----|--------|------|------|------|------|------|------|------|------|------|--|--|--|----|-----|-----|-----|----|----|----|----|----|----|----|----------------|------|------|------|------|------|------|------|------|------|--|--|--|----|-----|-----|-----|----|-----|-----|----|----|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Amps  |                |            | Dimensions |      |      |       |      |      |      |      |      |  |      |       |      |  |   |   |   |   |   |   |   |   |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |      |    |    |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    | 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   |    |    |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |    |    |    |    |    |    |    |    |    |    |            |      |      |      |      |      |      |      |      |      |  |  |  |    |    |    |    |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |     |    |    |    |    |    |    |    |    |    |                |      |      |      |      |      |      |      |      |      |  |  |  |    |     |    |    |    |     |     |    |    |     |     |                |      |      |      |      |      |      |      |      |      |  |  |  |    |     |    |    |    |     |     |    |    |                                                                                                                                                                                                                                                             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| 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 63    | 3, 4, & 5 Wire | inch       | 4.33       | 5.63 | 7.99 | 2.20  | 4.49 | 4.49 | 3.54 | 3.54 |      |  |      |       |      |  |   |   |   |   |   |   |   |   |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |      |    |    |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |    |    |    |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |    |    |    |    |    |    |    |    |    |    |            |      |      |      |      |      |      |      |      |      |  |  |  |    |    |    |    |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |     |    |    |    |    |    |    |    |    |    |                |      |      |      |      |      |      |      |      |      |  |  |  |    |     |    |    |    |     |     |    |    |     |     |                |      |      |      |      |      |      |      |      |      |  |  |  |    |     |    |    |    |     |     |    |    |                                                                                                                                                                                                                                                             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|      |      |      |      |      |      |      |      |      |  |  |  |    |    |     |     |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |    |     |     |    |    |    |    |    |    |    |            |      |      |      |      |      |      |      |      |      |  |  |  |    |    |     |     |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |     |     |     |    |    |    |    |    |    |    |                |      |      |      |      |      |      |      |      |      |  |  |  |    |     |     |     |    |     |     |    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       |                | mm         | 110        | 143  | 203  | 56    | 114  | 114  | 90   | 90   |      |  |      |       |      |  |   |   |   |   |   |   |   |   |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |      |    |    |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |    |    |    |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |    |    |    |    |    |    |    |    |    |    |            |      |      |      |      |      |      |      |      |      |  |  |  |    |    |    |    |    |    |    |    |    |    |    |        |      |      |      |      |      |      |      |      |      |  |  |  |    |     |    |    |    |    |    |    |    |    |    |                |      |      |      |      |      |      |      |      |      |  |  |  |    |     |    |    |    |     |     |    |    |     |     |                |      |      |      |      |      |      |      |      |      |  |  |  |    |     |    |    |    |     |     |    |    |                                                                                                                                                                                                                                                             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# IEC 309 Pin & Sleeve Devices

## Approximate Dimensions

### SPLASHPROOF RECEPTACLES (IP44)

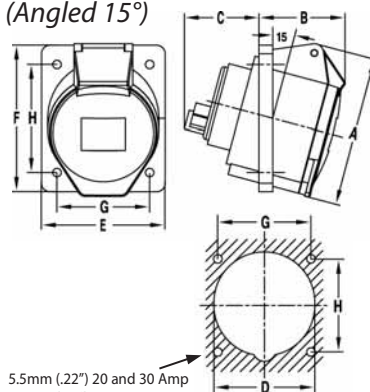


5.5mm (.22\") 20 and 30 Amp  
6.5mm (.26\") 60 Amp

| Amps |       | Type           | Dimensions |      |      |      |      |      |      |      |      |
|------|-------|----------------|------------|------|------|------|------|------|------|------|------|
| N.A. | Intl. |                |            | A    | B    | C    | D    | E    | F    | G    | H    |
| 20   | 16    | 3 Wire         | inch       | 2.68 | 2.05 | 1.10 | 1.81 | 2.44 | 2.44 | 1.85 | 1.85 |
|      |       |                | mm         | 68   | 52   | 28   | 46   | 62   | 62   | 47   | 47   |
| 20   | 16    | 4 & 5 Wire     | inch       | 3.35 | 2.09 | 1.10 | 2.36 | 2.95 | 2.95 | 2.36 | 2.36 |
|      |       |                | mm         | 85   | 53   | 28   | 60   | 75   | 75   | 60   | 60   |
| 20   | 16    | 7 Wire         | inch       | 3.35 | 2.09 | 1.10 | 2.36 | 3.15 | 3.15 | 2.36 | 2.36 |
|      |       |                | mm         | 85   | 53   | 28   | 60   | 80   | 80   | 60   | 60   |
| 30   | 32    | 3 & 4 Wire     | inch       | 3.58 | 2.56 | 1.06 | 2.36 | 2.95 | 2.95 | 2.36 | 2.36 |
|      |       |                | mm         | 91   | 65   | 27   | 60   | 75   | 75   | 60   | 60   |
| 30   | 32    | 5 Wire         | inch       | 3.86 | 2.56 | 1.06 | 2.36 | 2.95 | 2.95 | 2.36 | 2.36 |
|      |       |                | mm         | 98   | 65   | 27   | 60   | 75   | 75   | 60   | 60   |
| 30   | 32    | 7 Wire         | inch       | 3.86 | 2.56 | 1.06 | 2.36 | 3.15 | 3.15 | 2.36 | 2.36 |
|      |       |                | mm         | 98   | 65   | 27   | 60   | 80   | 80   | 60   | 60   |
| 60   | 63    | 3, 4, & 5 Wire | inch       | 4.49 | 3.35 | 2.05 | 3.54 | 3.94 | 4.21 | 3.03 | 3.35 |
|      |       |                | mm         | 114  | 85   | 52   | 90   | 100  | 107  | 77   | 85   |

### SPLASHPROOF RECEPTACLE (IP44)

(Angled 15°)

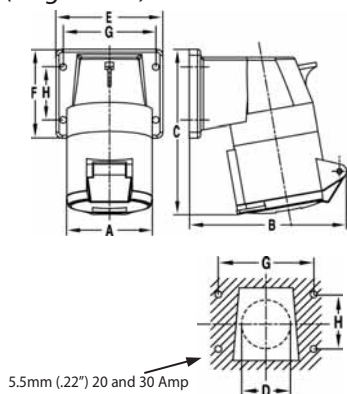


5.5mm (.22\") 20 and 30 Amp  
6.5mm (.26\") 60 Amp

| Amps |       | Type           | Dimensions |      |      |      |      |      |      |      |      |
|------|-------|----------------|------------|------|------|------|------|------|------|------|------|
| N.A. | Intl. |                |            | A    | B    | C    | D    | E    | F    | G    | H    |
| 20   | 16    | 3 Wire         | inch       | 2.68 | 1.77 | 1.61 | 2.01 | 2.44 | 2.68 | 1.85 | 1.85 |
|      |       |                | mm         | 68   | 45   | 41   | 51   | 62   | 68   | 47   | 47   |
| 20   | 16    | 4 Wire         | inch       | 3.35 | 2.01 | 1.50 | 2.36 | 2.95 | 2.95 | 2.36 | 2.36 |
|      |       |                | mm         | 85   | 51   | 38   | 60   | 75   | 75   | 60   | 60   |
| 20   | 16    | 5 Wire         | inch       | 3.35 | 2.01 | 1.50 | 2.56 | 2.95 | 3.35 | 2.36 | 2.36 |
|      |       |                | mm         | 85   | 51   | 38   | 65   | 75   | 85   | 60   | 60   |
| 30   | 32    | 3 Wire         | inch       | 3.58 | 2.05 | 1.85 | 2.64 | 2.95 | 3.54 | 2.36 | 2.36 |
|      |       |                | mm         | 91   | 52   | 47   | 67   | 75   | 90   | 60   | 60   |
| 30   | 32    | 4 Wire         | inch       | 3.85 | 2.05 | 1.85 | 2.64 | 2.95 | 3.54 | 2.36 | 2.36 |
|      |       |                | mm         | 91   | 52   | 47   | 67   | 75   | 90   | 60   | 60   |
| 30   | 32    | 5 Wire         | inch       | 3.86 | 2.20 | 1.85 | 2.70 | 3.15 | 3.74 | 2.36 | 2.36 |
|      |       |                | mm         | 98   | 56   | 47   | 68.5 | 80   | 95   | 60   | 60   |
| 60   | 63    | 3, 4, & 5 Wire | inch       |      | 3.11 | 2.52 | 3.19 | 3.94 | 4.21 | 3.03 | 3.35 |
|      |       |                | mm         |      | 79   | 64   | 81   | 100  | 107  | 77   | 85   |

### SPLASHPROOF RECEPTACLE (IP44)

(Angled 80°)



5.5mm (.22\") 20 and 30 Amp  
6.2mm (.24\") 60 Amp

| Amps |       | Type           | Dimensions |      |      |      |       |      |      |      |      |
|------|-------|----------------|------------|------|------|------|-------|------|------|------|------|
| N.A. | Intl. |                |            | A    | B    | C    | D max | E    | F    | G    | H    |
| 20   | 16    | 3 Wire         | inch       | 2.01 | 3.43 | 4.57 | 1.18  | 2.56 | 2.05 | 2.17 | 1.18 |
|      |       |                | mm         | 51   | 87   | 116  | 30    | 65   | 52   | 55   | 30   |
| 20   | 16    | 4 Wire         | inch       | 2.56 | 4.33 | 4.80 | 1.50  | 3.15 | 2.60 | 2.68 | 1.57 |
|      |       |                | mm         | 65   | 110  | 122  | 38    | 80   | 66   | 68   | 40   |
| 20   | 16    | 5 & 7 Wire     | inch       | 2.56 | 4.33 | 4.80 | 1.50  | 3.15 | 2.60 | 2.68 | 1.57 |
|      |       |                | mm         | 65   | 110  | 122  | 38    | 80   | 66   | 68   | 40   |
| 30   | 32    | 3 Wire         | inch       | 2.83 | 4.72 | 5.55 | 1.73  | 3.54 | 2.95 | 3.07 | 1.77 |
|      |       |                | mm         | 72   | 120  | 141  | 44    | 90   | 75   | 78   | 45   |
| 30   | 32    | 4 Wire         | inch       | 2.83 | 4.72 | 5.55 | 1.73  | 3.54 | 2.95 | 3.07 | 1.77 |
|      |       |                | mm         | 72   | 120  | 141  | 44    | 90   | 75   | 78   | 45   |
| 30   | 32    | 5 & 7 Wire     | inch       | 2.83 | 4.88 | 5.59 | 1.73  | 3.54 | 2.95 | 3.07 | 1.77 |
|      |       |                | mm         | 72   | 124  | 142  | 44    | 90   | 75   | 78   | 45   |
| 60   | 63    | 3, 4, & 5 Wire | inch       | 3.78 | 5.51 | 7.64 | 2.20  | 4.49 | 4.49 | 3.54 | 3.54 |
|      |       |                | mm         | 96   | 140  | 194  | 56    | 114  | 114  | 90   | 90   |

# IEC 309 Pin & Sleeve Devices

## Approximate Dimensions

| Amps |     |        | Dimensions |       |      |      |      |      |      |      |      |      |   |
|------|-----|--------|------------|-------|------|------|------|------|------|------|------|------|---|
|      |     |        | N.A.       | Intl. | Type |      | A    | B    | C    | D    | E    | F    | G |
| 100  | 125 | 3 Wire | inch       |       | 5.12 | 3.70 | 2.20 | 3.54 | 5.12 | 5.12 | 4.09 | 4.09 |   |
|      |     |        | mm         |       | 130  | 94   | 56   | 90   | 130  | 130  | 104  | 104  |   |
|      | 125 | 4 Wire | inch       |       | 5.12 | 3.70 | 2.20 | 3.54 | 5.12 | 5.12 | 4.09 | 4.09 |   |
|      |     |        | mm         |       | 130  | 94   | 56   | 90   | 130  | 130  | 104  | 104  |   |
|      | 125 | 5 Wire | inch       |       | 5.12 | 3.70 | 2.20 | 3.54 | 5.12 | 5.12 | 4.09 | 4.09 |   |
|      |     |        | mm         |       | 130  | 94   | 56   | 90   | 130  | 130  | 104  | 104  |   |
|      |     |        |            |       |      |      |      |      |      |      |      |      |   |

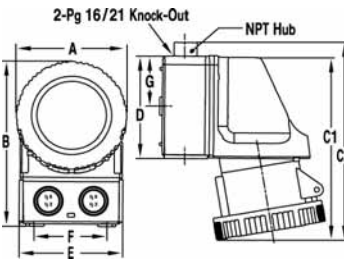
| Amps |    |                | Dimensions |       |      |      |      |      |      |         |      |      |
|------|----|----------------|------------|-------|------|------|------|------|------|---------|------|------|
|      |    |                | N.A.       | Intl. | Type |      | A    | B    | C    | D (max) | E    | F    |
| 20   | 16 | 3 Wire         | inch       |       | 2.83 | 3.19 | 3.86 | 1.18 | 2.56 | 2.05    | 2.17 | 1.18 |
|      |    |                | mm         |       | 72   | 81   | 98   | 30   | 65   | 52      | 55   | 30   |
| 20   | 16 | 4 Wire         | inch       |       | 3.19 | 3.90 | 4.33 | 1.50 | 3.15 | 2.60    | 2.68 | 1.57 |
|      |    |                | mm         |       | 81   | 99   | 110  | 38   | 80   | 66      | 68   | 40   |
| 20   | 16 | 5 Wire         | inch       |       | 3.50 | 4.06 | 4.45 | 1.50 | 3.15 | 2.60    | 2.68 | 1.57 |
|      |    |                | mm         |       | 89   | 103  | 113  | 38   | 80   | 66      | 68   | 40   |
| 30   | 32 | 3 Wire         | inch       |       | 3.78 | 4.45 | 5.12 | 1.73 | 3.54 | 2.95    | 3.07 | 1.77 |
|      |    |                | mm         |       | 96   | 113  | 130  | 44   | 90   | 75      | 78   | 45   |
| 30   | 32 | 4 Wire         | inch       |       | 3.78 | 4.45 | 5.12 | 1.73 | 3.54 | 2.95    | 3.07 | 1.77 |
|      |    |                | mm         |       | 96   | 113  | 130  | 44   | 90   | 75      | 78   | 45   |
| 30   | 32 | 5 Wire         | inch       |       | 4.02 | 4.61 | 5.12 | 1.73 | 3.54 | 2.95    | 3.07 | 1.77 |
|      |    |                | mm         |       | 102  | 117  | 130  | 44   | 90   | 75      | 78   | 45   |
| 60   | 63 | 3, 4, & 5 Wire | inch       |       | 4.33 | 5.00 | 7.20 | 2.20 | 4.49 | 4.49    | 3.54 | 3.54 |
|      |    |                | mm         |       | 110  | 127  | 183  | 56   | 114  | 114     | 90   | 90   |

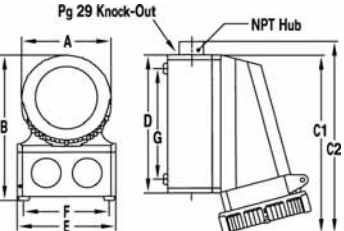
| Amps |    |        | Dimensions |       |      |      |      |      |                |                |      |      | Hub Size* |
|------|----|--------|------------|-------|------|------|------|------|----------------|----------------|------|------|-----------|
|      |    |        | N.A.       | Intl. | Type |      | A    | B    | C <sup>1</sup> | C <sup>2</sup> | D    | E    |           |
| 20   | 16 | 3 Wire | inch       |       | 2.83 | 5.51 | 6.06 | 6.73 | 3.78           | 3.74           | 2.62 | 1.87 | 3/4"      |
|      |    |        | mm         |       | 72   | 140  | 154  | 171  | 96             | 95             | 66.5 | 47.5 |           |
| 20   | 16 | 4 Wire | inch       |       | 3.19 | 5.51 | 6.06 | 6.73 | 3.78           | 3.74           | 2.62 | 1.87 | 3/4"      |
|      |    |        | mm         |       | 81   | 140  | 154  | 171  | 96             | 95             | 66.5 | 47.5 |           |
| 20   | 16 | 5 Wire | inch       |       | 3.46 | 5.51 | 6.06 | 6.73 | 3.78           | 3.74           | 2.62 | 1.87 | 3/4"      |
|      |    |        | mm         |       | 88   | 140  | 154  | 171  | 96             | 95             | 66.5 | 47.5 |           |
| 30   | 32 | 3 Wire | inch       |       | 3.78 | 5.79 | 6.46 | 7.13 | 3.78           | 3.74           | 2.62 | 1.87 | 3/4"      |
|      |    |        | mm         |       | 96   | 147  | 164  | 181  | 96             | 95             | 66.5 | 47.5 |           |
| 30   | 32 | 4 Wire | inch       |       | 3.78 | 5.79 | 6.46 | 7.13 | 3.78           | 3.74           | 2.62 | 1.87 | 3/4"      |
|      |    |        | mm         |       | 96   | 147  | 164  | 181  | 96             | 95             | 66.5 | 47.5 |           |
| 30   | 32 | 5 Wire | inch       |       | 4.06 | 5.91 | 6.46 | 7.13 | 3.78           | 3.74           | 2.62 | 1.87 | 3/4"      |
|      |    |        | mm         |       | 103  | 150  | 164  | 181  | 96             | 95             | 66.5 | 47.5 |           |

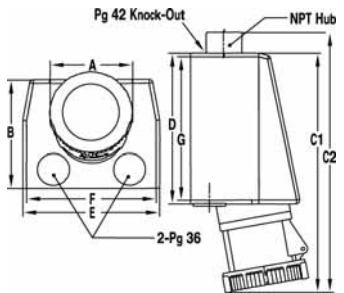
\* North American devices supplied with NPT Hub.

# IEC 309 Pin & Sleeve Devices

## Approximate Dimensions

|                                                                                  |    | Amps   |        | Type | Dimensions |      |      |                |                |      |      |      |      | Hub Size* |
|----------------------------------------------------------------------------------|----|--------|--------|------|------------|------|------|----------------|----------------|------|------|------|------|-----------|
|                                                                                  |    | N.A.   | Intl.  |      |            | A    | B    | C <sup>1</sup> | C <sup>2</sup> | D    | E    | F    | G    |           |
|  | 20 | 16     | 3 Wire | inch | 2.83       | 5.51 | 6.46 | 7.13           | 3.78           | 3.74 | 2.62 | 1.87 | 3/4" |           |
|                                                                                  |    |        |        | mm   | 72         | 140  | 164  | 181            | 96             | 95   | 66.5 | 47.5 |      |           |
|                                                                                  |    |        | 4 Wire | inch | 3.19       | 5.67 | 6.46 | 7.13           | 3.78           | 3.74 | 2.62 | 1.87 | 3/4" |           |
|                                                                                  |    |        |        | mm   | 81         | 144  | 164  | 181            | 96             | 95   | 66.5 | 47.5 |      |           |
|                                                                                  |    |        | 5 Wire | inch | 3.46       | 5.79 | 6.46 | 7.13           | 3.78           | 3.74 | 2.62 | 1.87 | 3/4" |           |
|                                                                                  |    |        |        | mm   | 88         | 147  | 164  | 181            | 96             | 95   | 66.5 | 47.5 |      |           |
|                                                                                  | 30 | 32     | 3 Wire | inch | 3.78       | 6.06 | 6.93 | 7.60           | 3.78           | 3.74 | 2.62 | 1.87 | 3/4" |           |
|                                                                                  |    |        |        | mm   | 96         | 154  | 176  | 193            | 96             | 95   | 66.5 | 47.5 |      |           |
|                                                                                  |    |        | 4 Wire | inch | 3.78       | 6.06 | 6.93 | 7.60           | 3.78           | 3.74 | 2.62 | 1.87 | 3/4" |           |
|                                                                                  |    |        |        | mm   | 96         | 154  | 176  | 193            | 96             | 95   | 66.5 | 47.5 |      |           |
|                                                                                  |    | 5 Wire | inch   | 4.06 | 6.14       | 6.93 | 7.60 | 3.78           | 3.74           | 2.62 | 1.87 | 3/4" |      |           |
|                                                                                  |    |        | mm     | 103  | 156        | 176  | 193  | 96             | 95             | 66.5 | 47.5 |      |      |           |
|                                                                                  |    |        |        |      |            |      |      |                |                |      |      |      |      |           |

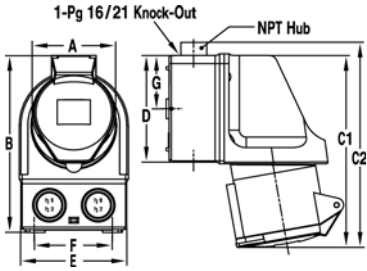
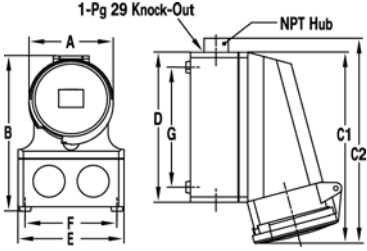
|                                                                                   |    | Amps |        | Type | Dimensions |      |      |                |                |      |      |      |        | Hub Size* |
|-----------------------------------------------------------------------------------|----|------|--------|------|------------|------|------|----------------|----------------|------|------|------|--------|-----------|
|                                                                                   |    | N.A. | Intl.  |      |            | A    | B    | C <sup>1</sup> | C <sup>2</sup> | D    | E    | F    | G      |           |
|  | 60 | 63   | 4 Wire | inch | 4.33       | 7.01 | 8.82 | 9.76           | 6.77           | 4.76 | 4.09 | 5.35 | 1 1/4" |           |
|                                                                                   |    |      |        | mm   | 110        | 178  | 224  | 248            | 172            | 121  | 104  | 136  |        |           |
|                                                                                   |    |      | 5 Wire | inch | 4.33       | 7.01 | 8.82 | 9.76           | 6.77           | 4.76 | 4.09 | 5.35 | 1 1/4" |           |
|                                                                                   |    |      |        | mm   | 110        | 178  | 224  | 248            | 172            | 121  | 104  | 136  |        |           |
|                                                                                   |    |      |        |      |            |      |      |                |                |      |      |      |        |           |
|                                                                                   |    |      |        |      |            |      |      |                |                |      |      |      |        |           |
|                                                                                   |    |      |        |      |            |      |      |                |                |      |      |      |        |           |
|                                                                                   |    |      |        |      |            |      |      |                |                |      |      |      |        |           |
|                                                                                   |    |      |        |      |            |      |      |                |                |      |      |      |        |           |
|                                                                                   |    |      |        |      |            |      |      |                |                |      |      |      |        |           |

|                                                                                    |     | Amps |        | Type | Dimensions |      |      |                |                |      |      |      |    | Hub Size* |
|------------------------------------------------------------------------------------|-----|------|--------|------|------------|------|------|----------------|----------------|------|------|------|----|-----------|
|                                                                                    |     | N.A. | Intl.  |      |            | A    | B    | C <sup>1</sup> | C <sup>2</sup> | D    | E    | F    | G  |           |
|  | 100 | 125  | 3 Wire | inch | 5.12       | 7.48 | 16.0 | 16.9           | 10.4           | 8.66 | 7.87 | 9.45 | 2" |           |
|                                                                                    |     |      |        | mm   | 130        | 190  | 406  | 430            | 263            | 220  | 200  | 240  |    |           |
|                                                                                    |     |      | 4 Wire | inch | 5.12       | 7.48 | 16.0 | 16.9           | 10.4           | 8.66 | 7.87 | 9.45 | 2" |           |
|                                                                                    |     |      |        | mm   | 130        | 190  | 406  | 430            | 263            | 220  | 200  | 240  |    |           |
|                                                                                    |     |      | 5 Wire | inch | 5.12       | 7.48 | 16.0 | 16.9           | 10.4           | 8.66 | 7.87 | 9.45 | 2" |           |
|                                                                                    |     |      |        | mm   | 130        | 190  | 406  | 430            | 263            | 220  | 200  | 240  |    |           |
|                                                                                    |     |      |        |      |            |      |      |                |                |      |      |      |    |           |
|                                                                                    |     |      |        |      |            |      |      |                |                |      |      |      |    |           |
|                                                                                    |     |      |        |      |            |      |      |                |                |      |      |      |    |           |
|                                                                                    |     |      |        |      |            |      |      |                |                |      |      |      |    |           |

\* North American devices supplied with NPT Hub.

# IEC 309 Pin & Sleeve Devices

## Approximate Dimensions

|                                                                                                                                                                    |  | Amps |       | Type       | Dimensions |      |      |                |                |      |      |      |      | Hub Size* |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------|-------|------------|------------|------|------|----------------|----------------|------|------|------|------|-----------|
|                                                                                                                                                                    |  | N.A. | Intl. |            |            | A    | B    | C <sup>1</sup> | C <sup>2</sup> | D    | E    | F    | G    |           |
| <b>SPLASHPROOF RECEPTACLES (IP44)</b><br><i>(Surface Mount, Angled 80°)</i><br>   |  | 20   | 16    | 3 Wire     | inch       | 2.01 | 5.51 | 6.30           | 6.97           | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                                    |  |      |       |            | mm         | 51   | 140  | 160            | 177            | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                                    |  | 20   | 16    | 4 Wire     | inch       | 2.56 | 5.63 | 6.46           | 7.13           | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                                    |  |      |       |            | mm         | 65   | 143  | 164            | 181            | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                                    |  | 20   | 16    | 5 & 7 Wire | inch       | 2.56 | 5.75 | 6.46           | 7.13           | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                                    |  |      |       |            | mm         | 65   | 146  | 164            | 181            | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                                    |  | 30   | 32    | 3 Wire     | inch       | 2.83 | 6.06 | 6.81           | 7.48           | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                                    |  |      |       |            | mm         | 72   | 154  | 173            | 190            | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                                    |  | 30   | 32    | 4 Wire     | inch       | 2.83 | 6.06 | 6.81           | 7.48           | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                                    |  |      |       |            | mm         | 72   | 154  | 173            | 190            | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                                    |  | 30   | 32    | 5 & 7 Wire | inch       | 2.83 | 6.18 | 6.81           | 7.48           | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                                    |  |      |       |            | mm         | 72   | 157  | 173            | 190            | 96   | 95   | 66.5 | 47.5 |           |
| <b>SPLASHPROOF RECEPTACLES (IP44)</b><br><i>(Surface Mount, Angled 80°)</i><br> |  | 60   | 63    | 4 Wire     | inch       | 3.78 | 7.01 | 8.66           | 9.61           | 6.77 | 4.76 | 4.09 | 5.35 | 1 1/4"    |
|                                                                                                                                                                    |  |      |       |            | mm         | 96   | 178  | 220            | 244            | 172  | 121  | 104  | 136  |           |
|                                                                                                                                                                    |  | 60   | 63    | 5 Wire     | inch       | 3.78 | 7.01 | 8.66           | 9.61           | 6.77 | 4.76 | 4.09 | 5.35 | 1 1/4"    |
|                                                                                                                                                                    |  |      |       |            | mm         | 96   | 178  | 220            | 244            | 172  | 121  | 104  | 136  |           |
|                                                                                                                                                                    |  |      |       |            |            |      |      |                |                |      |      |      |      |           |
|                                                                                                                                                                    |  |      |       |            |            |      |      |                |                |      |      |      |      |           |
|                                                                                                                                                                    |  |      |       |            |            |      |      |                |                |      |      |      |      |           |
|                                                                                                                                                                    |  |      |       |            |            |      |      |                |                |      |      |      |      |           |
|                                                                                                                                                                    |  |      |       |            |            |      |      |                |                |      |      |      |      |           |
|                                                                                                                                                                    |  |      |       |            |            |      |      |                |                |      |      |      |      |           |
|                                                                                                                                                                    |  |      |       |            |            |      |      |                |                |      |      |      |      |           |
|                                                                                                                                                                    |  |      |       |            |            |      |      |                |                |      |      |      |      |           |

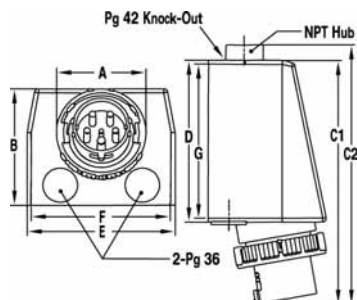
\* North American devices supplied with NPT Hub.

# IEC 309 Pin & Sleeve Devices

## Approximate Dimensions

### WATERTIGHT INLET (IP67)

(Surface Mount, Angled 80°)



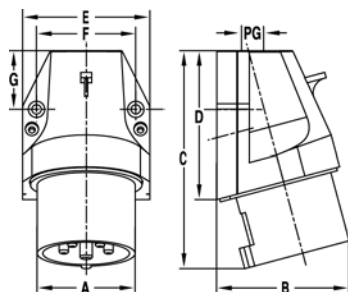
| Amps |       | Type   | Dimensions |      |      |      |      |      |      |      |      | Hub Size* |
|------|-------|--------|------------|------|------|------|------|------|------|------|------|-----------|
| N.A. | Intl. |        |            | A    | B    | C'   | C²   | D    | E    | F    | G    |           |
| 60   | 63    | 3 Wire | inch       | 4.33 | 4.65 | 9.13 | 10.1 | 5.98 | 4.65 | 4.17 | 4.72 | 1 1/4"    |
|      |       |        | mm         | 110  | 118  | 232  | 256  | 152  | 118  | 106  | 120  |           |
| 60   | 63    | 4 Wire | inch       | 4.33 | 4.65 | 9.13 | 10.1 | 5.98 | 4.65 | 4.17 | 4.72 | 1 1/4"    |
|      |       |        | mm         | 110  | 118  | 232  | 256  | 152  | 118  | 106  | 120  |           |
| 60   | 63    | 5 Wire | inch       | 4.33 | 4.65 | 9.13 | 10.1 | 5.98 | 4.65 | 4.17 | 4.72 | 1 1/4"    |
|      |       |        | mm         | 110  | 118  | 232  | 256  | 152  | 118  | 106  | 120  |           |
| 100  | 125   | 3 Wire | inch       | 5.12 | 6.89 | 15.4 | 16.3 | 10.4 | 8.66 | 7.87 | 9.45 | 2"        |
|      |       |        | mm         | 130  | 175  | 390  | 414  | 263  | 220  | 200  | 240  |           |
| 100  | 125   | 4 Wire | inch       | 5.12 | 6.89 | 15.4 | 16.3 | 10.4 | 8.66 | 7.87 | 9.45 | 2"        |
|      |       |        | mm         | 130  | 175  | 390  | 414  | 263  | 220  | 200  | 240  |           |
| 100  | 125   | 5 Wire | inch       | 5.12 | 6.89 | 15.4 | 16.3 | 10.4 | 8.66 | 7.87 | 9.45 | 2"        |
|      |       |        | mm         | 130  | 175  | 390  | 414  | 263  | 220  | 200  | 240  |           |

\* North American devices supplied with NPT Hub.

Note: Two (2) PG36 knock-outs are on the bottom of the 100/125 amp device only.

### SPLASHPROOF INLET (IP44)

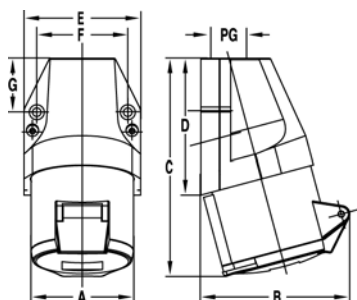
(Surface Mount, Angled 80°)



| Amps |       | Type       |      | Dimensions |      |      |      |      |      |      |   | PG   |
|------|-------|------------|------|------------|------|------|------|------|------|------|---|------|
| N.A. | Intl. |            |      |            | A    | B    | C    | D    | E    | F    | G |      |
|      | 16    | 3 Wire     | inch | 1.71       | 2.36 | 4.33 | 2.91 | 2.36 | 1.79 | 1.10 |   | 13.5 |
|      |       |            | mm   | 43.5       | 60   | 110  | 74   | 60   | 45.5 | 28   |   |      |
|      | 16    | 4 Wire     | inch | 1.97       | 2.87 | 4.61 | 3.15 | 2.91 | 2.36 | 1.22 |   | 16   |
|      |       |            | mm   | 50         | 73   | 117  | 80   | 74   | 60   | 31   |   |      |
|      | 16    | 5 & 7 Wire | inch | 2.20       | 2.87 | 4.61 | 3.15 | 2.91 | 2.36 | 1.22 |   | 16   |
|      |       |            | mm   | 56         | 73   | 117  | 80   | 74   | 60   | 31   |   |      |
|      | 32    | 3 Wire     | inch | 2.24       | 3.15 | 5.55 | 3.82 | 3.23 | 2.36 | 1.77 |   | 21   |
|      |       |            | mm   | 57         | 80   | 141  | 97   | 82   | 60   | 45   |   |      |
|      | 32    | 4 Wire     | inch | 2.24       | 3.15 | 5.55 | 3.82 | 3.23 | 2.36 | 1.77 |   | 21   |
|      |       |            | mm   | 57         | 80   | 141  | 97   | 82   | 60   | 45   |   |      |
|      | 32    | 5 & 7 Wire | inch | 2.52       | 3.39 | 5.55 | 3.82 | 3.23 | 2.36 | 1.77 |   | 21   |
|      |       |            | mm   | 64         | 86   | 141  | 97   | 82   | 60   | 45   |   |      |

### SPLASHPROOF RECEPTACLE (IP44)

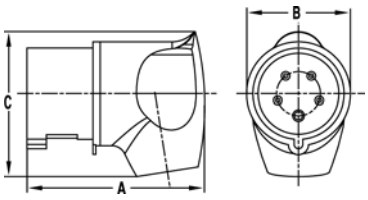
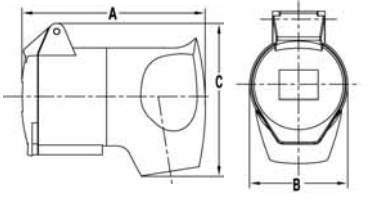
(Surface Mount, Angled 80°)



| Amps |       | Type       |      | Dimensions |      |      |      |      |      |      |   | PG   |
|------|-------|------------|------|------------|------|------|------|------|------|------|---|------|
| N.A. | Intl. |            |      |            | A    | B    | C    | D    | E    | F    | G |      |
|      | 16    | 3 Wire     | inch | 2.68       | 2.95 | 4.72 | 2.91 | 2.36 | 1.79 | 1.10 |   | 13.5 |
|      |       |            | mm   | 68         | 75   | 120  | 74   | 60   | 45.5 | 28   |   |      |
|      | 16    | 4 Wire     | inch | 3.35       | 3.39 | 5.04 | 3.15 | 2.91 | 2.36 | 1.22 |   | 16   |
|      |       |            | mm   | 85         | 86   | 128  | 80   | 74   | 60   | 31   |   |      |
|      | 16    | 5 & 7 Wire | inch | 3.35       | 3.54 | 5.08 | 3.15 | 2.91 | 2.36 | 1.22 |   | 16   |
|      |       |            | mm   | 85         | 90   | 129  | 80   | 74   | 60   | 31   |   |      |
|      | 32    | 3 Wire     | inch | 3.58       | 4.06 | 6.06 | 3.82 | 3.23 | 2.36 | 1.77 |   | 21   |
|      |       |            | mm   | 91         | 103  | 154  | 97   | 82   | 60   | 45   |   |      |
|      | 32    | 4 Wire     | inch | 3.58       | 4.06 | 6.06 | 3.82 | 3.23 | 2.36 | 1.77 |   | 21   |
|      |       |            | mm   | 91         | 103  | 154  | 97   | 82   | 60   | 45   |   |      |
|      | 32    | 5 & 7 Wire | inch | 3.86       | 4.13 | 6.10 | 3.82 | 3.23 | 2.36 | 1.77 |   | 21   |
|      |       |            | mm   | 98         | 105  | 155  | 97   | 82   | 60   | 45   |   |      |

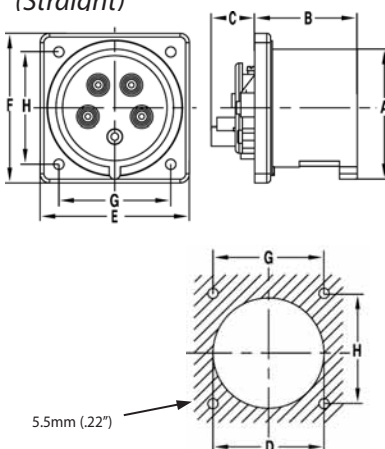
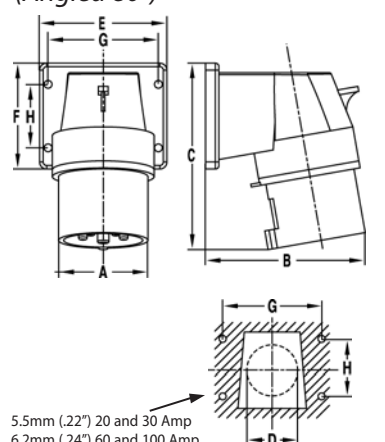
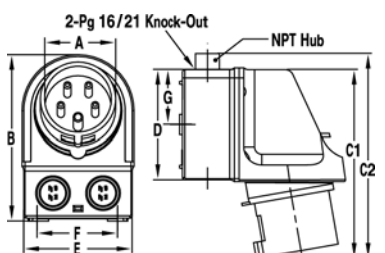
# IEC 309 Pin & Sleeve Devices

## Approximate Dimensions

|                                                                                                                                            |  | Amps |       | Type   | Dimensions |      |      |       |
|--------------------------------------------------------------------------------------------------------------------------------------------|--|------|-------|--------|------------|------|------|-------|
|                                                                                                                                            |  | N.A. | Intl. |        |            | A    | B    | C     |
| <b>SPLASHPROOF PLUG (IP44)</b><br><i>(Angled)</i>         |  | 20   | 16    | 3 Wire | inch       | 3.31 | 1.98 | 2.66  |
|                                                                                                                                            |  |      |       |        | mm         | 84   | 50.3 | 67.5  |
|                                                                                                                                            |  | 20   | 16    | 4 Wire | inch       | 3.98 | 2.53 | 3.32  |
|                                                                                                                                            |  |      |       |        | mm         | 101  | 64.3 | 84.2  |
|                                                                                                                                            |  | 20   | 16    | 5 Wire | inch       | 3.98 | 2.53 | 3.39  |
|                                                                                                                                            |  |      |       |        | mm         | 101  | 64.3 | 86    |
|                                                                                                                                            |  | 30   | 32    | 3 Wire | inch       | 4.53 | 2.83 | 3.76  |
|                                                                                                                                            |  |      |       |        | mm         | 115  | 72   | 95.5  |
|                                                                                                                                            |  | 30   | 32    | 4 Wire | inch       | 4.53 | 2.83 | 3.76  |
|                                                                                                                                            |  |      |       |        | mm         | 115  | 72   | 95.5  |
|                                                                                                                                            |  | 30   | 32    | 5 Wire | inch       | 4.53 | 2.83 | 3.96  |
|                                                                                                                                            |  |      |       |        | mm         | 115  | 72   | 100.5 |
| <b>SPLASHPROOF CONNECTOR (IP44)</b><br><i>(Angled)</i>  |  |      |       |        |            |      |      |       |
|                                                                                                                                            |  |      |       |        |            |      |      |       |
|                                                                                                                                            |  |      |       |        |            |      |      |       |
|                                                                                                                                            |  | Amps |       | Type   | Dimensions |      |      |       |
|                                                                                                                                            |  | N.A. | Intl. |        |            | A    | B    | C     |
|                                                                                                                                            |  | 20   | 16    | 3 Wire | inch       | 3.74 | 1.98 | 3.15  |
|                                                                                                                                            |  |      |       |        | mm         | 95   | 50.3 | 80    |
|                                                                                                                                            |  |      |       |        |            |      |      |       |
|                                                                                                                                            |  |      |       |        |            |      |      |       |

# IEC 309 Pin & Sleeve Devices

## Approximate Dimensions

| Amps                                                                                                                                                  |       |      | Dimensions     |       |      |      |         |      |      |      |      |      |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|----------------|-------|------|------|---------|------|------|------|------|------|-----------|
|                                                                                                                                                       |       |      | N.A.           | Intl. | Type |      | A       | B    | C    | D    | E    | F    | G         |
| <b>SPLASHPROOF INLETS (IP44)</b><br>(Straight)<br>                    | 20    | 16   | 3 Wire         | inch  | 1.85 | 1.85 | 0.87    | 1.97 | 2.44 | 2.44 | 1.85 | 1.85 |           |
|                                                                                                                                                       |       |      |                | mm    | 47   | 47   | 22      | 50   | 62   | 62   | 47   | 47   |           |
|                                                                                                                                                       | 20    | 16   | 4 Wire         | inch  | 2.09 | 1.85 | 0.87    | 2.64 | 3.15 | 3.15 | 2.36 | 2.36 |           |
|                                                                                                                                                       |       |      |                | mm    | 53   | 47   | 22      | 67   | 80   | 80   | 60   | 60   |           |
|                                                                                                                                                       | 20    | 16   | 5 & 7 Wire     | inch  | 2.40 | 1.85 | 0.87    | 2.64 | 3.15 | 3.15 | 2.36 | 2.36 |           |
|                                                                                                                                                       |       |      |                | mm    | 61   | 47   | 22      | 67   | 80   | 80   | 60   | 60   |           |
|                                                                                                                                                       | 30    | 32   | 3 Wire         | inch  | 2.48 | 2.20 | 0.87    | 2.80 | 3.15 | 3.15 | 2.36 | 2.36 |           |
|                                                                                                                                                       |       |      |                | mm    | 63   | 56   | 22      | 71   | 80   | 80   | 60   | 60   |           |
|                                                                                                                                                       | 30    | 32   | 4 Wire         | inch  | 2.48 | 2.20 | 0.87    | 2.80 | 3.15 | 3.15 | 2.36 | 2.36 |           |
|                                                                                                                                                       |       |      |                | mm    | 63   | 56   | 22      | 71   | 80   | 80   | 60   | 60   |           |
|                                                                                                                                                       | 30    | 32   | 5 & 7 Wire     | inch  | 2.72 | 2.20 | 0.87    | 2.80 | 3.15 | 3.15 | 2.36 | 2.36 |           |
|                                                                                                                                                       |       |      |                | mm    | 69   | 56   | 22      | 71   | 80   | 80   | 60   | 60   |           |
|                                                                                                                                                       | 60    | 63   | 5 Wire         | inch  | 2.99 | 3.27 | 1.14    | 3.39 | 4.17 | 4.33 | 3.54 | 3.54 |           |
|                                                                                                                                                       |       |      | mm             | 76    | 83   | 29   | 86      | 106  | 110  | 90   | 90   |      |           |
|                                                                                                                                                       |       |      |                |       |      |      |         |      |      |      |      |      |           |
|                                                                                                                                                       |       |      |                |       |      |      |         |      |      |      |      |      |           |
| Amps                                                                                                                                                  |       |      | Dimensions     |       |      |      |         |      |      |      |      |      |           |
| N.A.                                                                                                                                                  | Intl. | Type |                | A     | B    | C    | D (max) | E    | F    | G    | H    |      |           |
| <b>SPLASHPROOF INLETS (IP44)</b><br>(Angled 80°)<br>                 | 20    | 16   | 3 Wire         | inch  | 1.71 | 2.83 | 3.82    | 1.18 | 2.56 | 2.05 | 2.17 | 1.18 |           |
|                                                                                                                                                       |       |      |                | mm    | 43.5 | 72   | 97      | 30   | 65   | 52   | 55   | 30   |           |
|                                                                                                                                                       | 20    | 16   | 4 Wire         | inch  | 1.97 | 3.54 | 4.33    | 1.50 | 3.15 | 2.60 | 2.68 | 1.57 |           |
|                                                                                                                                                       |       |      |                | mm    | 50   | 90   | 110     | 38   | 80   | 66   | 68   | 40   |           |
|                                                                                                                                                       | 20    | 16   | 5 & 7 Wire     | inch  | 2.20 | 3.62 | 4.33    | 1.50 | 3.15 | 2.60 | 2.68 | 1.57 |           |
|                                                                                                                                                       |       |      |                | mm    | 56   | 92   | 110     | 38   | 80   | 66   | 68   | 40   |           |
|                                                                                                                                                       | 30    | 32   | 3 Wire         | inch  | 2.24 | 4.06 | 5.08    | 1.73 | 3.54 | 2.95 | 3.07 | 1.77 |           |
|                                                                                                                                                       |       |      |                | mm    | 57   | 103  | 129     | 44   | 90   | 75   | 78   | 45   |           |
|                                                                                                                                                       | 30    | 32   | 4 Wire         | inch  | 2.24 | 4.06 | 5.08    | 1.73 | 3.54 | 2.95 | 3.07 | 1.77 |           |
|                                                                                                                                                       |       |      |                | mm    | 57   | 103  | 129     | 44   | 90   | 75   | 78   | 45   |           |
|                                                                                                                                                       | 30    | 32   | 5 & 7 Wire     | inch  | 2.52 | 4.06 | 5.08    | 1.73 | 3.54 | 2.95 | 3.07 | 1.77 |           |
|                                                                                                                                                       |       |      |                | mm    | 64   | 103  | 129     | 44   | 90   | 75   | 78   | 45   |           |
|                                                                                                                                                       | 60    | 63   | 3, 4, & 5 Wire | inch  | 2.72 | 4.57 | 7.28    | 2.20 | 4.49 | 4.49 | 3.54 | 3.54 |           |
|                                                                                                                                                       |       |      | mm             | 69    | 116  | 185  | 56      | 114  | 114  | 90   | 90   |      |           |
|                                                                                                                                                       |       |      |                |       |      |      |         |      |      |      |      |      |           |
|                                                                                                                                                       |       |      |                |       |      |      |         |      |      |      |      |      |           |
| Amps                                                                                                                                                  |       |      | Dimensions     |       |      |      |         |      |      |      |      |      | Hub Size* |
| N.A.                                                                                                                                                  | Intl. | Type |                | A     | B    | C'   | C²      | D    | E    | F    | G    |      |           |
| <b>SPLASHPROOF INLETS (IP44)</b><br>(Surface Mount, Angled 80°)<br> | 20    | 16   | 4 Wire         | inch  | 1.97 | 5.51 | 5.95    | 6.61 | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                       |       |      |                | mm    | 50   | 140  | 151     | 168  | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                       | 20    | 16   | 5 & 7 Wire     | inch  | 2.20 | 5.51 | 5.95    | 6.61 | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                       |       |      |                | mm    | 56   | 140  | 151     | 168  | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                       | 30    | 32   | 3 Wire         | inch  | 2.24 | 5.51 | 6.30    | 6.97 | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                       |       |      |                | mm    | 57   | 140  | 160     | 177  | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                       | 30    | 32   | 4 Wire         | inch  | 2.24 | 5.51 | 6.30    | 6.97 | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                       |       |      |                | mm    | 57   | 140  | 160     | 177  | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                       | 30    | 32   | 5 & 7 Wire     | inch  | 2.52 | 5.51 | 6.30    | 6.97 | 3.78 | 3.74 | 2.62 | 1.87 | 3/4"      |
|                                                                                                                                                       |       |      |                | mm    | 64   | 140  | 160     | 177  | 96   | 95   | 66.5 | 47.5 |           |
|                                                                                                                                                       |       |      |                |       |      |      |         |      |      |      |      |      |           |
|                                                                                                                                                       |       |      |                |       |      |      |         |      |      |      |      |      |           |

\* North American devices supplied with NPT Hub.

Notes

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.