**IEC Watertight Devices**
Provide safe and dependable performance in the most demanding environments. Heavy duty non-conductive nylon construction provides impact and corrosion protection. Thermoset polyester contact carriers withstand high temperatures and provide resistance to electrical tracking.

**Insulgrip® NEMA 4X UL 1686 C1 Devices**
Metallic where you want it and non-metallic where you need it. This tough product line is NEMA 4X rated for use in the harshest environments. The devices are fully interchangeable with other manufacturers of UL1686 C1 devices.

**Back Boxes and Accessories**
A complete line of metallic and non-metallic back boxes, angle adapters, closure caps and liquidtight adapters are available. These accessories help complement the line and aid in the installation of the product.

## Hubbell Produces the Highest Quality and Most Extensive Pin and Sleeve Offering.

Similar to our Twist-Lock® devices, Hubbell's Pin and Sleeve line of plugs, connectors, inlets, receptacles, mechanical interlocks and accessories are the highest performing products available. The HBL® series of IEC pin and sleeve and Insulgrip lines are assembled in the USA and have a full list of innovative features.

The IEC line of plugs and connectors are made with a rugged super tough, one-piece housing. The thermoset polyester contact carrier provides a high resistance to electrical tracking. They withstand higher temperatures which may result from overload or arcing. The heavy-duty, external cord grip provides superior strain relief on the conductors.

The Insulgrip line of pin and sleeve is listed UL Type 4X which provides a watertight, dust-tight seal for harsh environments. The non-metallic bodies of the plugs and connectors provide excellent insulating, impact and UV resistant properties. The patented beryllium copper spring-pin design of the contacts maintains high unit pressure on mating sleeves. This ensures reliable electrical contact while minimizing heat rise. There are two styles of Insulgrip pin and sleeve devices. Style I devices achieve grounding by attaching the metallic shell to a ground terminal within the device. Style II devices feature redundant grounding by including an additional ground pin and sleeve to the grounding method used in Style I. The full Insulgrip line of devices is interchangeable with other manufacturers of UL1686 C1 devices which makes it ideal for use in industrial applications where multiple manufactures of product may be present.

Both the IEC and Insulgrip lines of pin and sleeve are used often in conjunction with mechanical interlocks. Mechanical interlocks prevent users from mating or breaking the circuit under load. This feature is critical to maintain a safe electrical connection. The interlocks are also available in reverse service applications where a generator is providing power to an electrical system.

**Circuit-Lock® Mechanical Interlocks**
Hubbell's Circuit-Lock enclosure products virtually eliminate making or breaking the circuit under load. This revolutionary design incorporates a disconnect switch and receptacle in one compact non-metallic unit. They are available in either a fused or non-fused versions.

**Low Profile Devices**
90° Angled plugs and recessed receptacles allow for connections in tight spaces. Cords can be controlled easily along the wall. The integrated cord grips limit strain on terminals and prevent strain on plugs and cables exiting perpendicular from the wall.

**Corrosion Resistant Devices**
This superior grade of IEC and Insulgrip devices are ideal for the most demanding environments. Nickel-plated brass on the IEC and nickel-plated Tellurium copper on the Insulgrip contacts prevent corrosion and heat rise.


**Reverse Service**
Generators and portable power distribution units require devices to deliver power in a reverse direction to power up a piece of equipment or building. Hubbell manufactures reverse service devices in both the IEC and Insulgrip Pin and Sleeve configurations as well as IEC Mechanical Interlock Inlets.

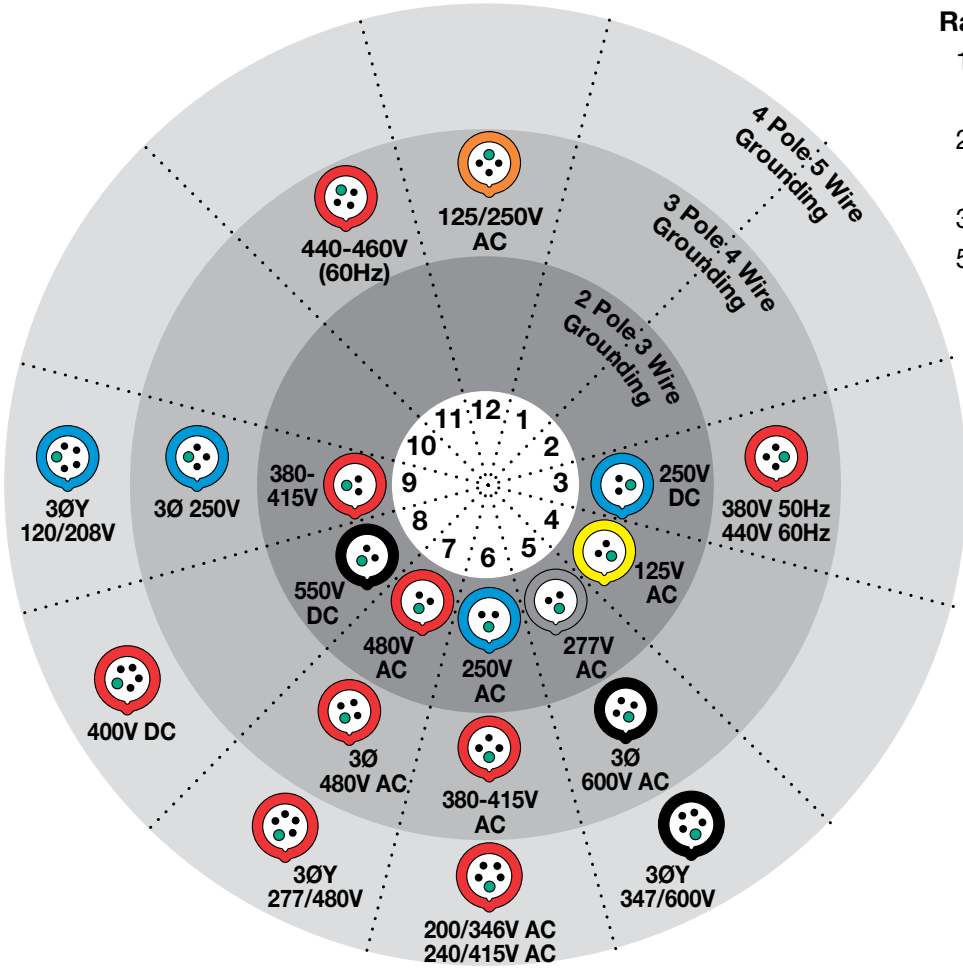
# IEC Configurations Chart

## Singly Rated Configurations

Hubbell Pin and Sleeve products are designed and manufactured to meet the International Standard IEC 60309-1 and IEC 60309-2. This device standard calls out a singly rated, non-interchangeable configuration for every voltage and type of service throughout the world. Pin and sleeve device housings are color coded by voltage rating.

## Voltage

The voltage is determined by the location of the female ground contact relative to the housing keyway. Simply by manufacturing the device with a ground contact in a certain "clock" position, the device will be rated for a particular voltage system. The diagram shows the keying position and the color coding that is associated with each voltage.




| Rated Voltage | Color |
|---|---|
| 100V - 130V | |
| 125V/250V | |
| 200V - 250V | |
| 277V | |
| 380V - 480V | |
| 500V - 690V | |

## Typical IEC Pin and Sleeve Catalog Number

**HBL4100C12W**

HBL 4 100 C 12 W

- HBL — Hubbell Catalog Number
- 4 — 4 Wire
- 100 — 100 Amp
- C — "C" Connector
- 12 — Female Ground Sleeve at "12" O'Clock (125/250V)
- W — Watertight

**Explanation**

**1 (HBL) Designates Hubbell Catalog Number**

**2 First Digit**
- 3-3 wire
- 4-4 wire
- 5-5 wire

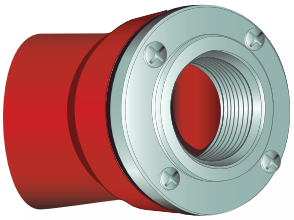
**3 Next Series Of Digits**
Preceding a letter
- 20-20 Amp
- 30-30 Amp
- 60-60 Amp
- 100-100 Amp

**4 Letter**
- P-Plug
- R-Receptacle
- C-Connector
- B-Inlet
- MI-Mechanical Interlock
- MIF-Mechanical Interlock Fused

**5 Last Digit(s)**
After the letter. This denotes the position of the ground sleeve and the assigned voltage in the receptacle as it relates to the hours of the clock. This is done to eliminate interchangeability between devices with different voltages.

**6 Letter: W**
Watertight

**IP67**
SUITABILITY



**Liquidtight Conduit Adapters**
Machined aluminum adapters are available to provide a means for attaching flexible liquidtight metal conduit to rear of Hubbell Pin and Sleeve plug or connector

**Self-Closing Gasketed Cover**
Detents into position to fully close automatically. Corrosion-resistant hardware

**Watertight Neoprene Sealing Glands**
Provide a reliable seal at the cable entry point. Prevents infiltration of contaminants



**Color Coded Housings**
IEC pin and sleeve devices are color coded by voltage for easy identification

**Insulated Non-Metallic Housing**
Super tough, non-conductive and chemical resistant for heavy duty industrial environments

**Powerful Mechanical Cord Grip**
Hubbell's design incorporates two molded-in teeth to securely grip the outer cable jacket, and internal conductors to prevent slippage and strain on terminations. Captive barrel nuts ease assembly and allow higher tightening torque for maximum cord retention.

**Watertight Cord Entrance**
The tapered bore entrance creates high compression forces on sealing gland, providing a watertight seal around cord. Individual solid neoprene glands are supplied to match a full range of cord sizes and assure watertight performance.

**Multi-Contact Spring**
(60/63 and 100/125 Amp)
Recessed within the female sleeve, provides and maintains high unit pressure on mating pins to minimize temperature rise. Broaches oxide film to achieve low resistance contact for cooler operation.

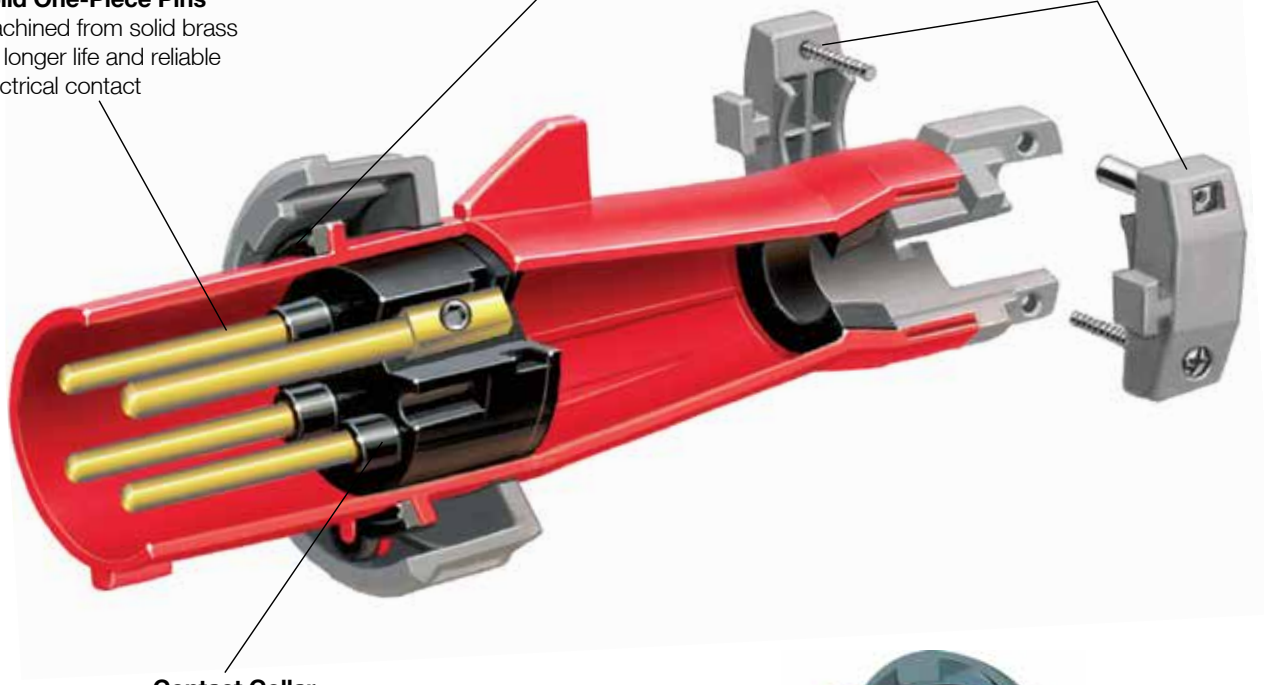
**Sequential Contact Engagement**
Ground makes first and breaks last. Neutral makes second and breaks second (to prevent a momentary over-voltage on components connected phase to neutral). Phase contacts make last and break first.

**IP67**
SUITABILITY

**Gasketed Sealing Ring**
Provides watertight seal when mated with receptacle or connector

**Heavy Duty External Cord Grips**
Provide maximum cord retention to maintain secure terminations

**Solid One-Piece Pins**
Machined from solid brass for longer life and reliable electrical contact



**Contact Collar**
Raised collar surrounds each phase pin increasing the tracking resistance between contacts across the contact carrier face

**Lockout/Tagout**
Tapered opening on plug shroud accommodates up to ⅜ inch (9.7mm) lock shackle diameter

**Rugged One-Piece Housing**
Thick wall construction protects internal components, eliminates joints preventing infiltration of contaminants. Amperage/ voltage rating and catalog number molded in housing for easy identification.

**Shrouded Pins**
Super tough plug shroud protects pins from deforming from physical abuse. Protects the user from the possibility of touching live contacts during insertion and withdrawal of mating parts.

**Swivel Pressure Pads**
16/20 and 30/32 Amp devices feature patented swiveling pressure pad terminal screws and prevent damage to conductor strands. 60/63 and 100/125 Amp devices feature large hex-head stainless steel screws which provide higher torque levels for secure terminations. The large box terminals are designed for North American conductors.

**Thermoset Polyester Contact Carrier**
Molded thermoset polyester provides high resistance to electrical tracking. Withstands higher temperatures which may result from overload or arcing. Thermoset properties provide dimensional stability for this critical assembly.

| Rating | | | | | Watertight Devices | | | | Accessories | | | Replacement Interiors | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Configuration | | |  |  |  |  |  Back Boxes |  |  |  |  |
| Amps | Poles and Wires | Recep./ Conn. | Plug/ Inlet | AC Voltage | Receptacle | Plug | Connector | Inlet | Non-Metallic | Metallic* | Closure Caps | Recep./ Conn. | Plug/ Inlet |
| 16 | 2P 3W | | | 100–130V | HBL316R4W | HBL316P4W | HBL316C4W | HBL316B4W† | BB2030N | BB201W BB301W | PC320 | IN320BF | IN320BM |
| | 2P 3W | | | 220–240V | HBL316R6W | HBL316P6W | HBL316C6W | HBL316B6W | BB2030N | BB201W BB301W | PC320 | IN320BF | IN320BM |
| | 3P 4W | | | 380–415V | HBL416R6W | HBL416P6W | HBL416C6W | HBL416B6W† | BB2030N | BB201W BB301W | PC420 | IN420DF | IN420DM |
| | 4P 5W | | | 220/380V 240/415V | HBL516R6W | HBL516P6W | HBL516C6W | HBL516B6W | BB2030N | BB201W BB301W | PC520 | IN520EF† | IN520EM |
| 20 | 2P 3W | | | 125V | HBL320R4W | HBL320P4W | HBL320C4W | HBL320B4W | BB2030N | BB201W BB301W | PC320 | IN320AF | IN320AM |
| | 2P 3W | | | 250V | HBL320R6W | HBL320P6W | HBL320C6W | HBL320B6W | BB2030N | BB201W BB301W | PC320 | IN320BF | IN320BM |
| | 2P 3W | | | 480V | HBL320R7W | HBL320P7W | HBL320C7W | HBL320B7W | BB2030N | BB201W BB301W | PC320 | IN320BF | IN320BM |
| | 3P 4W | | | 125/250V | HBL420R12W | HBL420P12W | HBL420C12W | HBL420B12W | BB2030N | BB201W BB301W | PC420 | IN420CF | IN420CM |
| | 3P 4W | | | 3Ø 250V | HBL420R9W | HBL420P9W | HBL420C9W | HBL420B9W | BB2030N | BB201W BB301W | PC420 | IN420DF | IN420DM |
| | 3P 4W | | | 3Ø 480V | HBL420R7W | HBL420P7W | HBL420C7W | HBL420B7W | BB2030N | BB201W BB301W | PC420 | IN420DF | IN420DM |
| | 3P 4W | | | 3Ø 600V | HBL420R5W | HBL420P5W | HBL420C5W | HBL420B5W | BB2030N | BB201W BB301W | PC420 | IN420DF | IN420DM |
| | 4P 5W | | | 3ØY 120/208V | HBL520R9W | HBL520P9W | HBL520C9W | HBL520B9W | BB2030N | BB201W BB301W | PC520 | IN520EF† | IN520EM |
| | 4P 5W | | | 3ØY 277/480V | HBL520R7W | HBL520P7W | HBL520C7W | HBL520B7W | BB2030N | BB201W BB301W | PC520 | IN520EF† | IN520EM |
| | 4P 5W | | | 3ØY 347/600V | HBL520R5W | HBL520P5W | HBL520C5W | HBL520B5W | BB2030N | BB201W BB301W | PC520 | IN520EF† | IN520EM |
| 30 | 2P 3W | | | 125V | HBL330R4W | HBL330P4W | HBL330C4W | HBL330B4W | BB2030N | BB201W BB301W | PC3430 | IN330AF | IN330AM† |
| | 2P 3W | | | 250V | HBL330R6W | HBL330P6W | HBL330C6W | HBL330B6W | BB2030N | BB201W BB301W | PC3430 | IN330BF | IN330BM |
| | 2P 3W | | | 480V | HBL330R7W | HBL330P7W | HBL330C7W | HBL330B7W | BB2030N | BB201W BB301W | PC3430 | IN330BF | IN330BM |
| | 3P 4W | | | 125/250V | HBL430R12W | HBL430P12W | HBL430C12W | HBL430B12W | BB2030N | BB201W BB301W | PC3430 | IN430CF | IN430CM |
| | 3P 4W | | | 3Ø 250V | HBL430R9W | HBL430P9W | HBL430C9W | HBL430B9W | BB2030N | BB201W BB301W | PC3430 | IN430DF | IN430DM |
| | 3P 4W | | | 3Ø 480V | HBL430R7W | HBL430P7W | HBL430C7W | HBL430B7W | BB2030N | BB201W BB301W | PC3430 | IN430DF | IN430DM |
| | 3P 4W | | | 3Ø 600V | HBL430R5W | HBL430P5W | HBL430C5W | HBL430B5W | BB2030N | BB201W BB301W | PC3430 | IN430DF | IN430DM |
| | 4P 5W | | | 3ØY 120/208V | HBL530R9W | HBL530P9W | HBL530C9W | HBL530B9W | BB2030N | BB201W BB301W | PC530 | IN530EF | IN530EM |
| | 4P 5W | | | 3ØY 277/480V | HBL530R7W | HBL530P7W | HBL530C7W | HBL530B7W | BB2030N | BB201W BB301W | PC530 | IN530EF | IN530EM |
| | 4P 5W | | | 3ØY 347/600V | HBL530R5W | HBL530P5W | HBL530C5W | HBL530B5W | BB2030N | BB201W BB301W | PC530 | IN530EF | IN530EM |
| 32 | 2P 3W | | | 100–130V | HBL332R4W† | HBL332P4W† | HBL332C4W† | HBL332B4W† | BB2030N | BB201W BB301W | PC3430 | IN330BF | IN330BM |
| | 2P 3W | | | 220–240V | HBL332R6W | HBL332P6W | HBL332C6W | HBL332B6W | BB2030N | BB201W BB301W | PC3430 | IN330BF | IN330BM |
| | 3P 4W | | | 380–415V | HBL432R6W | HBL432P6W | HBL432C6W | HBL432B6W | BB2030N | BB201W BB301W | PC3430 | IN430DF | IN430DM |
| | 3P 4W | | | 380V 50Hz 440V 60Hz | HBL432R3W | HBL432P3W | HBL432C3W | HBL432B3W† | BB2030N | BB201W BB301W | PC3430 | IN430DF | IN430DM |
| | 4P 5W | | | 220/380V 240/415V | HBL532R6W | HBL532P6W | HBL532C6W | HBL532B6W | BB2030N | BB201W BB301W | PC530 | IN530EF | IN530EM |

*Note: See page G-12 and G-13 for back boxes and accessories, G-14 and G-15 for product dimensions, G-16 and G-17 for product specifications and HP ratings.*
*See page G-13 for closure caps, purchased separately. PC320, PC420, PC520, PC3430, PC530 are not UL or CSA.*
**These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint.*
*†Consult factory.*

# Watertight Devices

*60 and 100 Ampere – North American Ratings, 63 and 125 Ampere – International Ratings*

IP67 SUITABILITY

| Rating | | | | | Watertight Devices | | | | Accessories | | | Replacement Interiors | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Configuration | | |  |  |  |  |  Back Boxes | |  |  |  |
| Amps | Poles and Wires | Recep./ Conn. | Plug/ Inlet | AC Voltage | Receptacle | Plug | Connector | Inlet | Non-Metallic | Metallic* | Closure Caps | Recep./ Conn. | Plug/ Inlet |
| 60 | 2P 3W | | | 125V | HBL360R4W | HBL360P4W | HBL360C4W | HBL360B4W | BB60N | BB601W BB602W | PC60 | IN360AF | IN360AM |
| | 2P 3W | | | 250V | HBL360R6W | HBL360P6W | HBL360C6W | HBL360B6W | BB60N | BB601W BB602W | PC60 | IN360BF | IN360BM† |
| | 2P 3W | | | 480V | HBL360R7W | HBL360P7W | HBL360C7W | HBL360B7W | BB60N | BB601W BB602W | PC60 | IN360BF | IN360BM† |
| | 3P 4W | | | 125/250V | HBL460R12W | HBL460P12W | HBL460C12W | HBL460B12W | BB60N | BB601W BB602W | PC60 | IN460CF | IN460CM |
| | 3P 4W | | | 3Ø 250V | HBL460R9W | HBL460P9W | HBL460C9W | HBL460B9W | BB60N | BB601W BB602W | PC60 | IN460DF | IN460DM |
| | 3P 4W | | | 3Ø 480V | HBL460R7W | HBL460P7W | HBL460C7W | HBL460B7W | BB60N | BB601W BB602W | PC60 | IN460DF | IN460DM |
| | 3P 4W | | | 3Ø 600V | HBL460R5W | HBL460P5W | HBL460C5W | HBL460B5W | BB60N | BB601W BB602W | PC60 | IN460DF | IN460DM |
| | 4P 5W | | | 3ØY 120/208V | HBL560R9W | HBL560P9W | HBL560C9W | HBL560B9W | BB60N | BB601W BB602W | PC60 | IN560EF | IN560EM† |
| | 4P 5W | | | 3ØY 277/480V | HBL560R7W | HBL560P7W | HBL560C7W | HBL560B7W | BB60N | BB601W BB602W | PC60 | IN560EF | IN560EM† |
| | 4P 5W | | | 3ØY 347/600V | HBL560R5W | HBL560P5W | HBL560C5W | HBL560B5W | BB60N | BB601W BB602W | PC60 | IN560EF | IN560EM† |
| 63 | 2P 3W | | | 220–240V | HBL363R6W | HBL363P6W | HBL363C6W | HBL363B6W | BB60N | BB601W BB602W | PC60 | IN360BFS | IN360BMS† |
| | 3P 4W | | | 380–415V | HBL463R6W | HBL463P6W | HBL463C6W | HBL463B6W | BB60N | BB601W BB602W | PC60 | IN460DFS | IN460DMS |
| | 4P 5W | | | 220/380V 240/415V | HBL563R6W | HBL563P6W | HBL563C6W | HBL563B6W | BB60N | BB601W BB602W | PC60 | IN560EFS† | IN560EMS |
| 100 | 2P 3W | | | 125V | HBL3100R4W | HBL3100P4W | HBL3100C4W | HBL3100B4W | BB100N | BB1001W BB1002W | PC100 | IN3100AF | IN3100AM |
| | 2P 3W | | | 250V | HBL3100R6W | HBL3100P6W | HBL3100C6W | HBL3100B6W | BB100N | BB1001W BB1002W | PC100 | IN3100BF | IN3100BM† |
| | 2P 3W | | | 480V | HBL3100R7W | HBL3100P7W | HBL3100C7W | HBL3100B7W | BB100N | BB1001W BB1002W | PC100 | IN3100BF | IN3100BM† |
| | 3P 4W | | | 125/250V | HBL4100R12W | HBL4100P12W | HBL4100C12W | HBL4100B12W | BB100N | BB1001W BB1002W | PC100 | IN4100CF† | IN4100CM |
| | 3P 4W | | | 3Ø 250V | HBL4100R9W | HBL4100P9W | HBL4100C9W | HBL4100B9W | BB100N | BB1001W BB1002W | PC100 | IN4100DF | IN4100DM |
| | 3P 4W | | | 3Ø 480V | HBL4100R7W | HBL4100P7W | HBL4100C7W | HBL4100B7W | BB100N | BB1001W BB1002W | PC100 | IN4100DF | IN4100DM |
| | 3P 4W | | | 3Ø 600V | HBL4100R5W | HBL4100P5W | HBL4100C5W | HBL4100B5W | BB100N | BB1001W BB1002W | PC100 | IN4100DF | IN4100DM |
| | 4P 5W | | | 3ØY 120/208V | HBL5100R9W | HBL5100P9W* | HBL5100C9W | HBL5100B9W | BB100N | BB1001W BB1002W | PC100 | IN5100EF | IN5100EM |
| | 4P 5W | | | 3ØY 277/480V | HBL5100R7W | HBL5100P7W | HBL5100C7W | HBL5100B7W | BB100N | BB1001W BB1002W | PC100 | IN5100EF | IN5100EM |
| | 4P 5W | | | 3ØY 347/600V | HBL5100R5W | HBL5100P5W | HBL5100C5W | HBL5100B5W | BB100N | BB1001W BB1002W | PC100 | IN5100EF | IN5100EM |
| 125 | 2P 3W | | | 220–240V | HBL3125R6W | HBL3125P6W | HBL3125C6W | HBL3125B6W | BB100N | BB1001W BB1002W | PC100 | IN3100BFS† | IN3100BMS† |
| | 3P 4W | | | 380–415V | HBL4125R6W | HBL4125P6W | HBL4125C6W | HBL4125B6W | BB100N | BB1001W BB1002W | PC100 | IN4100DFS | IN4100DMS |
| | 4P 5W | | | 220/380V 240/415V | HBL5125R6W | HBL5125P6W | HBL5125C6W | HBL5125B6W | BB100N | BB1001W BB1002W | PC100 | IN5100EFS | IN5100EMS |

*Note: See page G-12 and G-13 for back boxes and accessories, G-14 and G-15 for product dimensions, G-16 and G-17 for product specifications and HP ratings.*
*All 63A and all 125A devices have pilot pins or contacts.*
*See page G-13 for closure caps, purchased separately. PC60 and PC100 are not UL or CSA.*
*See page G-14 for additional information on short housing plug. IP22 suitability - length 8.30" (210.8).*
**These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint.*
*†Consult factory.*

# Advantage™ Series Switch-Rated IEC Pin and Sleeve Devices

*Features and Benefits*

Hubbell Wiring Device-Kellems Advantage™ Series Pin and Sleeve Switch-Rated Devices are IEC 60309-2 compatible devices that are approved as a disconnecting means for motor and branch circuits.

**Compact Design**
Device is similar in size to standard IEC 60309-2 devices. Receptacles mount to standard Hubbell IEC Pin and Sleeve Back Boxes

**Spring-Loaded Disconnect Button**
Oversized for easy actuation with gloved hands

**Heavy Duty External Cord Grips**
Provides maximum cord retention to maintain unstressed terminations

**Impact Resistant Cover Arm**
Compact and durable internal swing arm is fully shrouded protecting it from damage

**Power Indicating LED Lights**
Provides visual verification of power when connected

**Pocketed Recess for Screws**
Deters slippage of the screw-driver and are conveniently located on the same side for easy installation

**Robust and Durable Housing**
The UV-stabilized, impact and corrosion-resistant PBT housing is designed to withstand harsh industrial environments

**Stainless Steel Hardware**
Provides superior corrosion resistance in wet and harsh environments

**Spring-Loaded Cover**
Spring-loaded to the open position, reminding users that the cover must be secured to ensure maximum ingress protection

**Color Coded Housings**
IEC pin and sleeve devices are color coded by voltage for easy identification

**Ergonomic Design**
Hubbell puts the Advantage™ into the palm of your hands with the easy-to-use leverage grip design from Hubbell

## The Advantages:

- **IEC 60309 Singularly Rated Device**
  Mates with existing installed base of IEC 60309-2 pin and sleeve devices. Color coded by voltage for easy identification of mating devices.
- **Superior Water Ingress Protection**
  UL witnessed IP69k and UL Type 4X and 12. Device is built to withstand wet and harsh environments.
- **Power Indicating LED Lights**
  Highly visible and long lasting green LED lights on both sides of the device provide visual verification of power when connected.
- **Continuous Ground Engagement**
  Unswitched feed-thru ground pin is first-to-make and last-to-break followed by switched neutral and phase contact(s).
- **Sleek and Modern Design**
  The ergonomic device is easy to keep clean making it ideal for hygienic food processing facilities.
- **Permanent Labelless Markings**
  Product ratings are laser-marked into the device and will not wash off for easy and permanent identification.

# Advantage™ Series Switch-Rated IEC Pin and Sleeve Devices

*Ordering Information*

| Rating | | | | | Pin and Sleeve Devices | | | |
|---|---|---|---|---|---|---|---|---|
| | | Configuration | | |  |  | |  |
| Amps | Poles & Wires | Recep./ Conn. | Plug/ Inlet | AC Voltage | Connector | Receptacle | HP | Mating Plug** |
| 30 | 2P 3W | | | 125V | HBLS330C4W | HBLS330R4W | 2 | HBLS330P4W |
| 30 | 2P 3W | | | 250V | HBLS330C6W* | HBLS330R6W* | 5 | HBLS330P6W* |
| 32 | 2P 3W | | | 220–240V | | | | |
| 30 | 2P 3W | | | 480V | HBLS330C7W | HBLS330R7W | 10 | HBLS330P7W |
| 32 | 2P 3W | | | 100–130V | HBLS332C4W | HBLS332R4W | 2 | HBLS332P4W |
| 30 | 3P 4W | | | 125/250V | HBLS430C12W | HBLS430R12W | 2 | HBLS430P12W |
| 30/32 | 3P 4W | | | 3Ø 250V | HBLS430C9W* | HBLS430R9W* | 10 | HBLS430P9W* |
| 30 | 3P 4W | | | 3Ø 480V | HBLS430C7W | HBLS430R7W | 20 | HBLS430P7W |
| 30 | 3P 4W | | | 3Ø 600V | HBLS430C5W | HBLS430R5W | 30 | HBLS430P5W |
| 30/32 | 3P 4W | | | 380–415V | HBLS430C6W* | HBLS430R6W* | 7.5 | HBLS430P6W* |
| 32 | 3P 4W | | | 380–440V | HBLS432C3W | HBLS432R3W | 10 | HBLS432P3W |
| 30 | 4P 5W | | | 3ØY 347/600V | HBLS530C5W | HBLS530R5W | 30 | HBLS530P5W |
| 30 | 4P 5W | | | 200/346–240/415V | HBLS530C6W* | HBLS530R6W* | 7.5 | HBLS530P6W* |
| 32 | 4P 5W | | | 220/380V 240/415V | | | | |
| 30 | 4P 5W | | | 3ØY 277/480V | HBLS530C7W | HBLS530R7W | 20 | HBLS530P7W |
| 30/32 | 4P 5W | | | 3ØY 120/208V | HBLS530C9W* | HBLS530R9W* | 10 | HBLS530P9W* |

*Note: *Certain IEC configurations allow for a single product to be certified as both a North American (Series 2) and International amperage (Series 1). These products are marked accordingly with both the UL Listing and UL Classified markings.*

***Mating plug required to maintain 4X/IP69k ratings. HP Ratings when used with ADVANTAGE™ Series connections.*

## HP Ratings

| 120V 1Ø | 240V 1Ø | 208V 1Ø | 240V 3Ø | 480V 3Ø | 600V 3Ø |
|---|---|---|---|---|---|
| 2 HP | 5 HP | 10 HP | 10 HP | 20 HP | 30 HP |

## Materials

| Part | Material | Connector | Receptacle | Plug |
|---|---|---|---|---|
| Cover | Valox | X | X | |
| Cover Gasket | Neporene | X | X | |
| Housing | Valox | X | X | X |
| Gasket | Santoprene | X | X | X |
| Female Contact Carrier | Nylon | X | X | |
| Male Contact Carrier | Thermoset | | | X |
| Phase, Ground Sleeves | Brass | X | X | |
| Sleeve Springs | Beryllium Copper with Silver Plating | X | X | |
| Pins | Brass | | | X |
| Glands | Solid Neoprene | X | | X |
| Cord Clamps | Valox | X | | X |
| Clamp Nut | Nickel-Plated Brass | X | | X |
| Screws | Stainless Steel (300 Series) | X | X | X |
| Locking Ring | Valox | | | X |
| Switch Contacts | Laminated Silver | X | X | |

## Specifications

| | |
|---|---|
| Temperature Rise | < 30°C |
| Dielectric Voltage | Min 2,200V AC |
| Electrical Life | Min 6,000 Cycles at rated switch load (p.f.= .75-.80) |
| Max Working Voltage | 600V AC |
| Current Interrupting | Certified for current interrupting at full rated current and voltage |
| Horsepower Locked Rotor Test | 50 Operations at 600% of full load motor current (p.f.= .40-.50) |
| Short Circuit | 100kA when protected by 100A Class J fuse or 125A RK1 fuse |
| Endurance | Min 10,000 mating cycles |
| Flammability | HB or Better per UL 94 or CSA C22.2 No. 0.17 |
| Operating Temperature | Max Continuous +75°C; Min continous -40°C |
| Environmental | Type 4X, 12 and IP69k |
| UV Resistance | All materials are UV stabilized |

## Devices that Withstand the Most Abusive Environments

IP67 SUITABILITY

Hubbell offers a superior grade of 100A IEC Pin and Sleeve designed for use in the most demanding environments. These devices feature nickel plated solid brass pins for long life and reliable electrical contact in the most corrosive environments. They have a high visibility yellow supertough nylon housing. The heavy duty external cord clamps provide maximum cord retention to maintain secure terminations. The screws and fasteners are made from stainless steel.

- Food Processing
- Factory

- Water Treatment
- Washdown
- Temporary Power

- Meat Packing
- Construction

- Agriculture
- Outdoor Entertainment

## Standard Service

| Rating | | | | | Watertight Devices | | | Accessories | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | |  |  |  |  Back Boxes | |  |
| Amps | Poles And Wires | Configuration Recep./ Conn. | Plug | AC Voltage | Receptacle | Plug | Connector | Non-Metallic | Metallic* | Closure Caps |
| 100 | 3P 4W |  |  | 125/250V | M4100R12 | M4100P12 | M4100C12 | BB100N | BB1001W BB1002W | PC100 |
| | 4P 5W |  |  | 3ØY 120/208V | M5100R9 | M5100P9 | M5100C9 | BB100N | BB1001W BB1002W | PC100 |
| | 4P 5W |  |  | 3ØY 277/480V | M5100R7 | M5100P7 | M5100C7 | BB100N | BB1001W BB1002W | PC100 |

## "Reverse Service"

| Rating | | | | | Watertight Devices | | | Accessories | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | |  | |  |  Back Boxes | |  |
| Amps | Poles And Wires | Configuration Conn. | Inlet | AC Voltage | Inlet | Plug | Connector | Non-Metallic | Metallic* | Closure Caps |
| 100 | 3P 4W |  |  | 125/250V | M4100B12R | — | M4100C12R | BB100N | BB1001W BB1002W | PC100 |
| | 4P 5W |  |  | 3ØY 120/208V | M5100B9R | — | M5100C9R | BB100N | BB1001W BB1002W | PC100 |
| | 4P 5W |  |  | 3ØY 277/480V | M5100B7R | — | M5100C7R | BB100N | BB1001W BB1002W | PC100 |

*Note: *These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint.*
*See page Y-17 for corrosion resistant cord sets.*

## DC Rated Pin and Sleeve Devices

IP67 SUITABILITY

In today's environmentally conscious world, energy savings is a pinnacle part of going green. DC (Direct Current) is being used to reduce power consumption and decrease the amount of infrastructure needed to energize specific types of data center equipment. Electrical devices provide a means of connecting DC power.

Hubbell is the first manufacturer to introduce a series of IEC Pin and Sleeve devices configured for the UL1686 eight o'clock ground position for DC voltage (Disconnecting use only). Hubbell's IEC DC rated pin and sleeve line has been qualified by UL to the requirements of DC voltage. The thermoset polyester contact carrier provide high resistance to electrical tracking, it withstands higher temperatures for this type of demanding application. The solid one-piece pins are machined from solid brass for longer life and reliable electrical contact. In addition, the heavy-duty external cord grips provide maximum cord retention to maintain secure terminations. Finally, the super tough, color coded, non-conductive V-0 rated Valox® housing is heavy duty for safety and protecting the internal components.

| Rating | | | | | Watertight Devices | | |
|---|---|---|---|---|---|---|---|
| | | | | |  |  |  |
| Amps | Poles And Wires | Configuration Recep./ Conn. | Plug | DC Voltage | Receptacle | Plug | Connector |
| 30 | 2P 3W | | | 550V | HBL330R8WDC | HBL330P8V0DC | HBL330C8V0DC |
| 60 | 2P 3W | | | 550V | HBL360R8WDC* | HBL360P8V0DC | HBL360C8V0DC |
| 100 | 2P 3W | | | 550V | HBL3100R8WDC | HBL3100P8V0DC | HBL3100C8V0DC |
| | 4P 5W | | | 400V | HBL5100R8WDC | HBL5100P8V0DC | HBL5100C8V0DC |

*Note: *Inlet available - HBL360B8WDC.*

## Dual Certified Pin and Sleeve Devices

IP67 SUITABILITY

Hubbell's dual certified pin and sleeve devices are ideal for the data center and high tech server industry. They are UL Listed to UL1682 for the North American market and are TUV Rheinland Certified for the European and International market. Customers can use the same plug and connector for multiple electrical configurations. They reduce the number of SKU's end users have to use if they sell to both domestic and overseas customers. These devices are IP67 rated, RoHs compliant and showcase all the inherent safety benefits of their V-0 rated Valox® housing and internal components.

| Rating | | | | | Watertight Devices | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | |  |  |  |  |
| Amps | Poles And Wires | Configuration Recep./ Conn. | Plug | AC Voltage | Receptacle | Plug | Connector | Inlet |
| 30/32 | 3P 4W | | | 380-415V | HBL430R6V02 | HBL430P6V02 | HBL430C6V02 | HBL430B6V02 |
| | 4P 5W | | | 200/346V 240/415V | HBL530R6V02 | HBL530P6V02 | HBL530C6V02 | HBL530B6V02 |
| 60/63 | 3P 4W | | | 380-415V | HBL460R6V02 | HBL460P6V02 | HBL460C6V02 | HBL460B6V02 |
| | 4P 5W | | | 200/346V 240/415V | HBL560R6V02 | HBL560P6V02 | HBL560C6V02 | HBL560B6V02 |

*Valox® is a trademark of SABIC Innovative Plastics, acquired from General Electric Company.*


**BB60N**


**BB601W**


**FW6010055**


**FT202W**


**FW60100**


**HBL2030AP**


**AA2030PS**

## Back Boxes

Hubbell manufactures an extensive line of back boxes for use with IEC Pin and Sleeve devices. Each back box is designed to give the user the maximum amount of wiring room while achieving grounding to metallic conduit. Hubbell back boxes are available in non-metallic and cast metal versions.

### Non-Metallic 15º Angle Back Box

| Description | NPT Hub Size* | Catalog Number |
|---|---|---|
| Back box for 16, 20, 30 and 32A devices. | 1" | **BB2030N** |
| Back box for 60 and 63A devices. | 1¼" | **BB60N** |
| Back box for 100 and 125A devices. | 1½" | **BB100N** |

*Note: *Hub is not included; order one of the following Raco® part numbers: 1 in. = 1704, 1¼ in. = 1705, 1½ in. = 1706. These boxes meets IP67 requirement and Type 4X requirements when installed with a watertight conduit hub.*

### Metallic 15º Angle Back Box**

| Description | NPT Hub Size | Catalog Number |
|---|---|---|
| Back box for 16, 20, 30 and 32A devices. | ¾" | **BB201W** |
| | 1" | **BB301W** |
| Back box for 60 and 63A devices. | 1¼" | **BB601W** |
| | 1½" | **BB602W** |
| Back box for 100 and 125A devices. | 1½" | **BB1001W** |
| | 2" | **BB1002W** |

*Note: **These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint.*

### Metallic 55º Angle Back Box and Adapter**

| Description | NPT Hub Size | Catalog Number |
|---|---|---|
| Feed-thru box back box and adapter for 16, 20, 30 and 32A devices. | 1" | **AB203055** |
| Angle adapter only. | | **AA203055** |
| Back box and adapter for 60, 63, 100 and 125A devices. | 1½" | **FW6010055** |
| Angle adapter only. | | **AA6010055** |

*Note: **These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint.*

### Metallic Feed-Thru Back Box**

| Description | NPT Hub Size | Catalog Number |
|---|---|---|
| Feed-thru box for 16, 20, 30 and 32A devices. | ¾" | **FT202W** |
| | 1" | **FT302W** |

*Note: **These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint.*

### Metallic Four-Way 15º Angle Back Box**

| Description | NPT Hub Size | Catalog Number |
|---|---|---|
| Four-way box for 60, 63, 100 and 125A devices. | 1½" | **FW60100** |

*Note: **These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint.*

### Straight Wall Box Adapter

| Description | Catalog Number |
|---|---|
| Adapts 16, 20, 30 and 32A Watertight IEC Pin and Sleeve devices to 2-gang, device boxes and FD boxes. | **HBL2030AP** |

### Angle Wall Box Adapter

| Description | Catalog Number |
|---|---|
| Adapts 16, 20, 30 and 32A Watertight IEC Pin and Sleeve devices to standard wall boxes. | **AA2030PS** |

*Note: Adapts 20 and 30A Watertight Pin and Sleeve receptacle to single, 2-gang standard wall box and 4 or 4 11/16 inch square for non-watertight applications.*

## Closure Caps

Cap assemblies provide watertight sealing to a disconnected male IEC Pin and Sleeve plug or inlet. Manufactured of the same tough non-metallic material as the watertight IEC Pin and Sleeve devices for corrosion and abuse resistance.

| Description | Catalog Number |
|---|---|
| Fits all 16 and 20A, 3 wire plugs and inlets. | **PC320** |
| Fits all 16 and 20A, 4 wire plugs and inlets. | **PC420** |
| Fits all 16 and 20A, 5 wire plugs and inlets. | **PC520** |
| Fits all 30 and 32A, 3 and 4 wire plugs and inlets. | **PC3430** |
| Fits all 30 and 32A, 5 wire plugs and inlets. | **PC530** |
| Fits all 60 and 63A plugs and inlets. | **PC60** |
| Fits all 100 and 125A plugs and inlets. | **PC100** |

**PC3430**

## Cover Assemblies

Replacement cover assemblies for use with watertight connector bodies and receptacles. Kit contains cover, arm assembly and installation tool.

| Description | Catalog Number |
|---|---|
| Fits all 16 and 20A, 3 wire watertight female devices. | **CA320** |
| Fits all 16 and 20A, 4 wire watertight female devices. | **CA420** |
| Fits all 16 and 20A, 5 wire watertight female devices. | **CA520** |
| Fits all 30 and 32A, 3 and 4 wire watertight female devices. | **CA3430** |
| Fits all 30 and 32A, 5 wire watertight female devices. | **CA530** |
| Fits all 60 and 63A watertight female devices. | **CA60** |
| Fits all 100 and 125A watertight female devices. | **CA100** |

**CA3430**

## Cord Clamp and Locking Ring

Replacement cord clamp and locking ring for use with IEC plugs, connectors and inlets.

| Description | Cord Clamp and Locking Ring | Locking Ring Only |
|---|---|---|
| Fits all 16 and 20A, 3 wire plugs, connectors and inlets. | **CC320** | **LR320*** |
| Fits all 16 and 20A, 4 wire plugs, connectors and inlets. | **CC420** | **LR420*** |
| Fits all 16 and 20A, 5 wire plugs, connectors and inlets. | **CC520†** | **LR520*** |
| Fits all 30 and 32A, 3 and 4 wire plugs, connectors and inlets. | **CC3430** | **LR3430*** |
| Fits all 30 and 32A, 5 wire plugs, connectors and inlets. | **CC530†** | **LR530*** |
| Fits all 60 and 63A plugs, connectors and inlets. | **CC60** | **LR60*** |
| Fits all 100 and 125A plugs, connectors and inlets. | **CC100** | **LR100*** |

*Note: *Locking Ring only for plugs and inlets.*
*†Consult factory.*

**CC3430**

**LR3430**

## Liquidtight Adapters

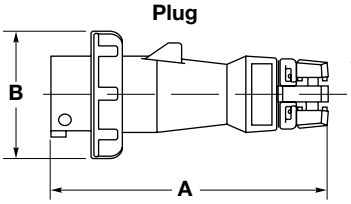
Machined aluminum adapters are available to provide a means for attaching flexible liquidtight metal conduit to rear of a Hubbell Pin and Sleeve plug or connector. To install, remove cord grip and two gland cap screws. Use screws to attach adapter. Kellems® liquidtight conduit connectors are available to control arc of bend and to prevent conduit pull-out where vibration, motion or strain is present. These grips interface directly with Hubbell's liquidtight adapters and are available in a wide variety of NPT sizes and configurations. Consult your local code grounding requirements before using liquidtight adapters.

| Rating of Hubbell Pin and Sleeve Device | Liquidtight Conduit Size | Hubbell Liquidtight Adapter | Optional Kellems Liquidtight Conduit Grip |
|---|---|---|---|
| 16 and 20 Amp 3 and 4 Wire | ½" NPT | **SAA12** | **074093402** |
| | ¾" NPT | **SAA34** | **074093403** |
| 16 and 20 Amp 5 wire and 30 and 32 Amp 3 and 4 wire | ½" NPT | **SAB12** | **074093402** |
| | ¾" NPT | **SAB34** | **074093403** |
| | 1" NPT | **SAB100** | **074093404** |
| 30 and 32 Amp 5 wire | ¾" NPT | **SAC34** | **074093403** |
| 30 and 32 Amp 5 wire and 60 and 63 Amp (all) | 1" NPT | **SAC100** | **074093404** |
| | 1¼" NPT | **SAC125** | **074093405** |
| 100 and 125 Amp (all) | 1¼" NPT | **SAD125** | **074093405** |
| | 1½" NPT | **SAD150** | **074093406** |

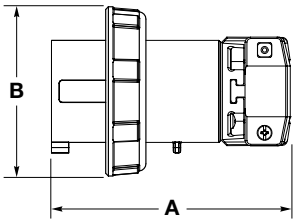
**SAB34**

**074093403**

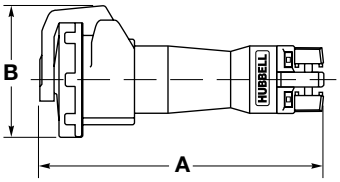
Plug



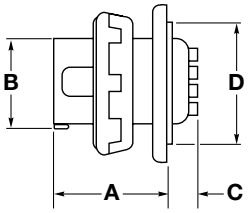

Short Housing Plug

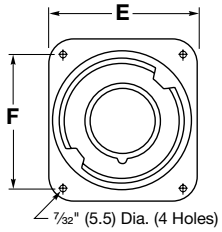



Connector Body

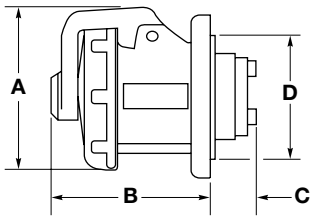


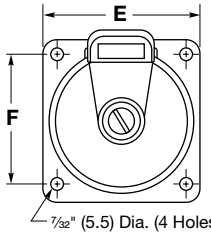

Inlet




Receptacle




*Dimensions in Inches (mm)*

## Plug Dimensions

| Type | A | B | Cord Grip Range |
|---|---|---|---|
| **HBL320P** | 6.61" (167.8) | 2.87" (73.0) | .330"-.830" (8.4-21.1) |
| **HBL420P** | 7.00" (177.8) | 3.19" (81.0) | .330"-.830" (8.4-21.1) |
| **HBL520P** | 7.65" (194.3) | 3.50" (89.0) | .330"-.830" (8.4-21.1) |
| **HBL330P** | 8.05" (204.5) | 3.74" (95.0) | .375"-1.250" (9.5-31.8) |
| **HBL430P** | 8.05" (204.5) | 3.74" (95.0) | .375"-1.250" (9.5-31.8) |
| **HBL530P** | 8.54" (216.9) | 4.02" (102.0) | .500"-1.450" (12.7-36.8) |
| **HBL360P, HBL460P, HBL560P** | 10.15" (257.8) | 4.49" (114.0) | .500"-1.450" (12.7-36.8) |
| **HBL3100P, HBL4100P, M4100P, HBL5100P, M5100P** | 12.63" (320.8) | 4.92" (125.0) | 1.065"-1.940" (27.1-49.3) |

## Short Housing Plug Dimensions

| Type | A | B | Cord Grip Range |
|---|---|---|---|
| **HBL5100P9WSH** | 8.30" (210.82) | 4.92" (125.0) | 1.065"-1.940" (27.1-49.3) |

## Connector Body Dimensions

| Type | A | B | Cord Grip Range |
|---|---|---|---|
| **HBL320C** | 7.49" (190.3) | 3.33" (84.6) | .330"-.830" (8.4-21.1) |
| **HBL420C** | 7.90" (200.6) | 3.66" (93.0) | .330"-.830" (8.4-21.1) |
| **HBL520C** | 8.54" (216.9) | 3.94" (100.0) | .330"-.830" (8.4-21.1) |
| **HBL330C** | 9.05" (229.9) | 4.27" (108.5) | .375"-1.250" (9.5-31.8) |
| **HBL430C** | 9.05" (229.9) | 4.27" (108.5) | .375"-1.250" (9.5-31.8) |
| **HBL530C** | 9.68" (245.8) | 4.70" (119.5) | .500"-1.450" (12.7-36.8) |
| **HBL360C, HBL460C, HBL560C** | 11.15" (283.2) | 5.10" (129.5) | .500"-1.450" (12.7-36.8) |
| **HBL3100C, HBL4100C, M4100C, HBL5100C, M5100C** | 13.57" (344.7) | 5.71" (145) | 1.065"-1.940" (27.1-49.3) |

## Inlet Dimensions

| Type | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| **HBL320B** | 2.54" (64.5) | 1.85" (47.0) | 1.14" (29.0) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL420B** | 2.54" (64.5) | 2.11" (53.6) | 1.14" (29.0) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL520B** | 2.54" (64.5) | 2.41" (61.2) | 1.14" (29.0) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL330B** | 2.99" (76.0) | 2.49" (63.2) | 1.04" (26.5) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL430B** | 2.99" (76.0) | 2.49" (63.2) | 1.04" (26.5) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL530B** | 2.99" (76.0) | 2.75" (69.9) | 1.04" (26.5) | 2.80" (71.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL360B, HBL460B, HBL560B** | 4.04" (102.6) | 2.97" (75.5) | 1.18" (30.0) | 3.46" (88.0) | 4.50" (114.3) | 3.88" (98.5) |
| **HBL3100B, HBL4100B, M4100B, HBL5100B, M5100B** | 4.53" (115) | 3.44" (87.5) | 1.95" (49.5) | 3.94" (100.0) | 5.50" (139.7) | 4.88" (124.0) |

## Receptacle Dimensions

| Type | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| **HBL320R** | 3.33" (84.5) | 2.78" (70.6) | 1.02" (26.0) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL420R** | 3.66" (93.0) | 2.78" (70.6) | 1.02" (26.0) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL520R** | 3.94" (100.0) | 2.78" (70.6) | 1.02" (26.0) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL330R** | 4.27" (108.5) | 3.09" (78.5) | 1.16" (29.5) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL430R** | 4.27" (108.5) | 3.09" (78.5) | 1.16" (29.5) | 2.72" (69.0) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL530R** | 4.70" (119.4) | 3.09" (78.5) | 1.16" (29.5) | 2.83" (71.9) | 3.75" (95.3) | 3.13" (79.5) |
| **HBL360R, HBL460R, HBL560R** | 5.10" (129.5) | 4.07" (103.4) | 1.69" (43.0) | 3.46" (88.0) | 4.50" (114.3) | 3.88" (98.6) |
| **HBL3100R, HBL4100R, M4100R, HBL5100R, M5100R** | 5.71" (145) | 4.23" (107.4) | 2.46" (62.5) | 3.95" (100.3) | 5.50" (139.7) | 4.88" (123.9) |

*Note: 20, 30, 60 and 100A devices are dimensionally equivalent to 16, 32, 63 and 125A devices, respectively.*