

# C-Series Commercial Pin & Sleeve Devices

**HUBBELL**<sup>®</sup>  
Wiring Device-Kellems







## C-Series - A New Generation of Pin & Sleeve Devices

Hubbell now offers a complete line of commercial grade pin and sleeve wiring devices. Safety, durability, performance, and positive locking are all essential to you. But so is economy. Where the application calls for a light-industrial wiring device designed and constructed with safety in mind, Hubbell C-Series pin and sleeve devices are the answer.

The North American devices are available in 20, 30, 60, and 100 Amp watertight configurations while the European devices are available in 16,32,63, and 125 Amp watertight and splashproof configurations.

### **An airtight case for a watertight pin and sleeve.**

Often, pin and sleeve devices are used in applications where water is present and that can make short work of an unprotected device. To minimize that risk, C-Series is designed with features that make them watertight.

For example, the self-closing, gasketed cover on the receptacle and connector body seats to provide a weatherproof seal and makes a watertight seal when locked. The plug and inlet are watertight when connected to a mating device and locked with the locking ring or closure cap.

Furthermore, neoprene glands provide a reliable watertight connection at the cable entry point. The same protective features make the C-Series pin and sleeve device dust tight, as well as watertight to reduce the risk of contamination by metal filings or dust.

### **A watertight pin and sleeve that holds tight, too.**

To protect the internal wire termination, the new C-Series pin and sleeve devices feature an internal cable grip which can handle a wide variety of cable sizes to prevent conductor movement and strain on the terminals.

### **But we didn't stop there.**

A tough pin and sleeve device has to withstand more than just external impact. It also has to withstand possible internal heat build-up. To meet this requirement, the C-Series devices utilize a glass filled nylon contact carrier. The result: interiors that resist arcing and prevent damage in the event of heat build-up due to overloads.

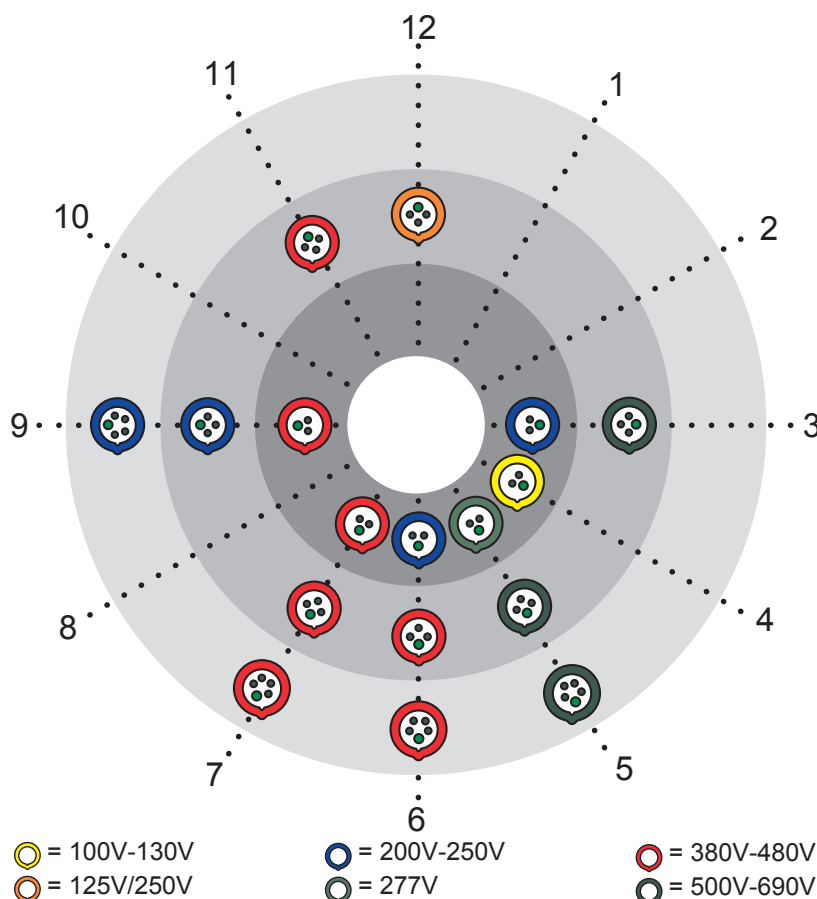
The C-Series also incorporates solid brass pins and sleeves combined with stainless steel components to improve overall corrosion resistance.

## Hubbell Safe

The C-Series devices are designed and built to conform to IEC 309-2, the worldwide pin and sleeve standard established by the International Electrotechnical Commission. This is a uniform system that makes the mating of plugs and receptacles of different voltages and current ratings physically impossible as required by the National Electrical Code.

C-Series devices are color coded according to voltage rating and female grounding contact position. Within a particular voltage group, every plug and the weatherproof cap on every receptacle is identical in color. All 250 VAC devices are blue, all 480 VAC devices are red, etc.

As shown, a clock face is used to represent the ground sleeve position for all receptacles. With the keyway at the bottom, the female grounding sleeve will appear at one of the twelve "hour" positions. Using this system, it is easy to identify the system voltage for any plug and receptacle. This standard calls out a singly rated non-interchangeable configuration for every voltage and type of service throughout the world.





## Features and Benefits

Terminal identification - the ground and neutral terminals are clearly identified with large color coded markings for easy recognition.

Watertight multi-diameter sealing glands - for use with varying cable sizes insure a highly reliable seal at the cable entry to the device.

Insulated housing - tough nylon provides increased safety and maximum impact and abuse resistance.

Gasketed cover and locking ring - The self-closing cover sits in a position that provides a weatherproof seal. Simply rotating the cover then locking it makes it watertight

Solid pins - dependable solid pin construction provides for long life and reliable electrical contact.

Cable grip - internal strain relief protects the wiring by preventing conductor movement which can cause strain on terminals. The internal cable grip is designed to swing out of the way for easier wiring.

Staggered contacts - in female devices to assure protection of personnel and equipment. Oversized ground contact is farthest forward, assuring first make and last break of the ground for safety. Neutral contact is next to prevent the possibility of an "open neutral" condition that could result in an over-voltage condition at equipment. Phase contact is farthest back, making it last to make, first to break.

Shrouding - protects pins from impact and abuse.

Color coding - all devices are color coded by voltage for quick visual identification of mating devices.

Product identification - every device is marked with its respective catalog number and rating for ease in identification.



## Pin and Sleeve C-Series



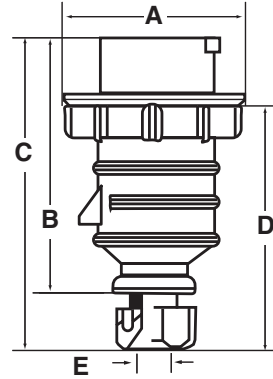
Amps	Poles/ Wires	Configuration		Voltage	Watertight Devices				Cord Diameter Inches	Back Boxes		
		Recep./ Conn.	Plug/ Inlet		Receptacle	Plug	Connector	Inlet		Non-Metallic	Metal	Adapter Plate
20	2P 3W			125V AC	C320R4W	C320P4W	C320C4W		.365-6.25	BB2030N	SP20301	CAP2030
	2P 3W			250V AC	C320R6W	C320P6W	C320C6W					
	3P 4W			125/250V AC	C420R12W	C420P12W	C420C12W					
	3P 4W			3Ø 250V	C420R9W	C420P9W	C420C9W					
	3P 4W			3Ø 480V	C420R7W	C420P7W	C420C7W					
	3P 4W			3Ø 600V	C420R5W	C420P5W	C420C5W					
	4P 5W			3ØY 120/208V		C520P9W						
30	2P 3W			250V AC	C330R6W	C330P6W	C330C6W	C330B6W	.535-.95	BB2030N	SP20301	CAP2030
	2P 3W			480V AC	C330R7W	C330P7W	C330C7W					
	3P 4W			125/250V AC		C430P12W						
	3P 4W			3Ø 250V	C430R9W	C430P9W	C430C9W	C430B9W				
	3P 4W			3Ø 480V	C430R7W	C430P7W	C430C7W					
	3P 4W			3Ø 600v	C430R5W	C430P5W	C430C5W					
	4P 5W			3ØY 120/208V	C530R9W	C530P9W	C530C9W					
	4P 5W			3ØY 277/480V	C530R7W	C530P7W	C530C7W					
60/63	2P3W			220-240V 250V	C360R6W	C360P6W			.78-1.40			
60	2P 3W			125V AC		C360P4W	C360C4W		.78-1.40	BB60N	SP602	CAP60
	2P 3W			250V AC	C360R6W	C360P6W	C360C6W					
	3P 4W			3Ø 250V	C460R9W	C460P9W	C460C9W					
	3P 4W			3Ø 480V	C460R7W	C460P7W	C460C7W					
	3P 4W			3Ø 600V	C460R5W	C460P5W	C460C5W					
	4P 5W			3ØY 120/208V	C560R9W	C560P9W	C560C9W					
100	2P 3W			250V AC	C3100R6W				.92-1.72	BB100N	BB100N	CAP100
	3P 4W			125/250V AC	C4100R12W	C4100P12W	C4100C12W	C4100B12W				
	3P 4W			3Ø 250V	C4100R9W	C4100P9W	C4100C9W					
	3P 4W			3Ø 480V	C4100R7W	C4100P7W	C4100C7W					
	3P 4W			3Ø 600V	C4100R5W	C4100P5W	C4100C5W					
	4P 5W			3ØY 120/208V	C5100R9W	C5100P9W	C5100C9W					

# Dimensions - Watertight Devices



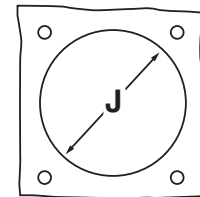
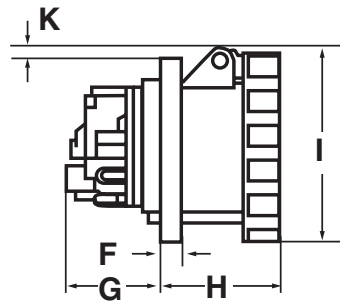
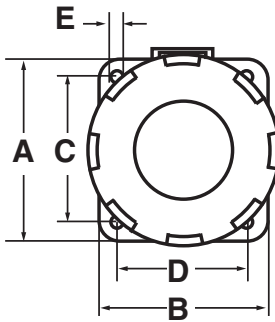
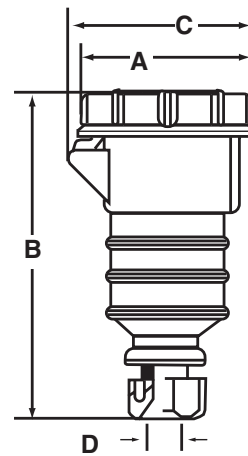
(inch/mm)

Plugs	A	B	C	D	E
<b>C320P</b>	2.75 70.5	4.37 112	5.42 139	4.11 105.5	0.62 16
<b>C420P</b>	3.04 78	4.37 112	5.42 139	4.11 105.5	0.62 16
<b>C520P</b>	3.37 86.5	4.60 118	5.66 145	4.35 111.5	0.62 16
<b>C330P, C430P</b>	3.67 94	5.62 144	6.67 171	4.95 127	0.88 22.5
<b>C530P</b>	3.96 101.5	5.62 144	6.67 171	4.95 127	0.88 22.5
<b>C360P, C460P, C560P</b>	4.43 113.5	8.81 226	9.91 254	7.49 192	1.43 36.5
<b>C3100P, C4100P, C5100P</b>	4.88 125	9.87 253	11.15 286	8.39 215	1.72 44



(inch/mm)

Connectors	A	B	C	D
<b>C320C</b>	2.75 70.5	5.97 153	3.00 77	0.62 16
<b>C420C</b>	3.04 78	5.97 153	3.24 83	0.62 16
<b>C520C</b>	3.37 86.5	6.20 159	3.63 93	0.62 16
<b>C330C, C430C</b>	3.67 94	7.33 188	3.86 99	0.88 22.5
<b>C530C</b>	3.96 101.5	7.33 188	4.17 107	0.88 22.5
<b>C360C, C460C, C560C</b>	4.29 110	10.61 272	4.43 113.5	1.42 36.5
<b>C3100C, C4100C</b>	4.91 126	12.01 308	4.99 128	1.72 44
<b>C5100C</b>	4.91 126	12.01 308	4.99 128	1.72 44



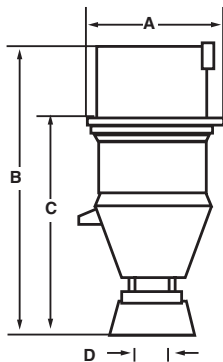
(inch/mm)

Receptacles	A	B	C	D	E	F	G	H	I	J	K
<b>C320R</b>	2.93 75	2.93 75	2.34 60	2.34 60	0.22 5.5	0.27 7	0.66 17	2.22 57	2.96 76	1.76 45	0.14 3.5
<b>C420R</b>	2.93 75	2.93 75	2.34 60	2.34 60	0.22 5.5	0.27 7	1.01 26	2.26 58	3.24 83	1.76 45	0.27 7
<b>C520R</b>	2.93 75	2.93 75	2.34 60	2.34 60	0.22 5.5	0.27 7	0.66 17	2.22 57	3.63 93	2.15 55	0.45 11.5
<b>C330R, C430R</b>	2.93 75	2.93 75	2.34 60	2.34 60	0.22 5.5	0.31 8	1.40 36	2.54 65	3.90 100	2.34 60	0.47 12
<b>C530R</b>	2.93 75	2.93 75	2.34 60	2.34 60	0.22 5.5	0.31 8	0.74 19	2.54 65	3.90 100	2.34 60	0.66 17
<b>C360R, C460R, C560R</b>	4.17 107	3.9 100	3.32 85	3.00 77	0.25 6.5	0.47 12	2.20 56.5	2.96 76	4.41 113	3.43 88	0.27 7
<b>C3100R, C4100R, C5100R</b>	4.68 120	4.68 120	3.90 100	3.90 100	0.25 6.5	0.82 21	1.95 50	4.56 117	5.03 129	3.28 84	0.23 6



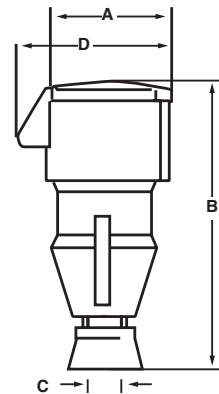
<b>IP44</b>					Splashproof Devices				Back Boxes		
Amps	Poles and Wires	Configuration Recept./ Conn.	Plug/ Inlet	Voltage	 Receptacle	 Plug	 Connector	 Cord Dia. inches	 Nonmetallic	 Metallic	 Adapter Plate
16	2P3W			100-130	C316R4S	C316P4S	C316C4S	.365-.625	BB2030N*	SP20301	CAP2030
	2P3W			200-250	C316R6S	C316P6S	C316C6S	.365-.625	BB2030N*	SP20301	CAP2030
	4P5W			200/346 240/415	C516R6S	C516P6S	C516C6S	.365-.625	BB2030N*	SP20301	CAP2030
32	2P3W			100-130	C332R4S	C332P4S	C332C4S	.565-.95	BB2030N*	SP20301	CAP2030
	2P3W			200-250	C332R6S	C332P6S	C332C6S	.565-.95	BB2030N*	SP20301	CAP2030
	4P5W			200/346 240/415	C532R6S	C532P6S	C532C6S	.565-.95	BB2030N*	SP20301	CAP2030

\* Adapter plate required



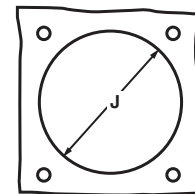
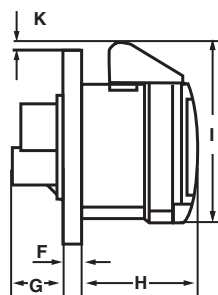
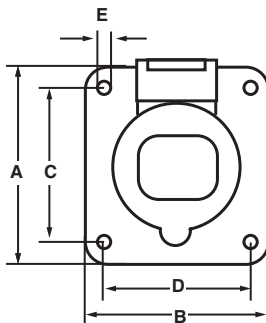
(inch/mm)

Plugs	A	B	C	D
<b>C316P</b>	1.99 51	5.38 138	3.98 102	0.66 17
<b>C516P</b>	2.5 64	5.58 143	4.17 107	0.66 17
<b>C332P</b>	2.57 66	6.83 175	5.07 130	0.96 24.5
<b>C532P</b>	2.85 73	6.86 176	5.11 131	.96 24.5



(inch/mm)

Connectors	A	B	C	D
<b>C316C</b>	1.99 51	5.85 150	0.66 17	2.77 71
<b>C516C</b>	2.50 64	6.05 155	0.66 17	3.32 85
<b>C332C</b>	2.57 66	7.33 188	0.96 24.50	3.63 93
<b>C532C</b>	2.81 72	7.37 189	.96 24.5	3.86 99



(inch/mm)

Receptacles	A	B	C	D	E	F	G	H	I	J	K
<b>C316R</b>	2.93 75	2.93 75	2.34 60	2.34 60	0.22 5.5	0.27 7	0.66 17	1.99 51	2.73 70	1.76 45	0.40 3.5
<b>C516R</b>	2.93 75	2.93 75	2.34 60	2.34 60	0.21 5.5	0.27 7	0.66 17	2.07 53	3.32 85	2.15 55	.45 11.5
<b>C332R</b>	2.93 75	2.93 75	2.34 60	2.34 60	0.21 5.5	0.31 8	1.40 36	2.42 62	3.51 90	2.34 60	.47 12
<b>C532R</b>	2.93 75	2.93 75	2.34 60	2.34 60	.21 5.5	.31 8	.74 19	2.42 62	3.82 98	2.34 60	.47 17



## Accessories

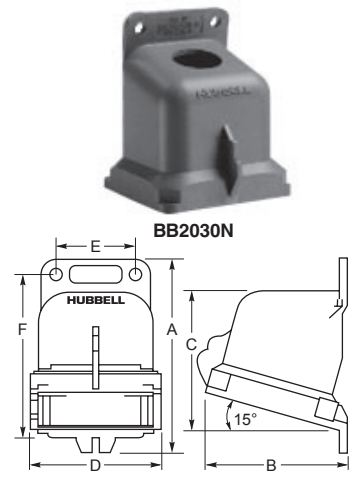


### Nonmetallic Back Box

This Hubbell back box is made of a high grade engineered thermoplastic that meets IP67 requirements. It resists chemicals, abuse and UV rays. What's more, this box has an integral grounding plate and, when installed with a watertight conduit hub, it meets Type 4X requirements (hose-directed water, corrosion resistance).

Description	Hub Size Inch (mm)	A Inch (mm)	B Inch (mm)	C Inch (mm)	D Inch (mm)	E Inch (mm)	F Inch (mm)	Cubic Inch Capacity	Catalog Number
Back box for 20 & 30A devices.	1*	5.67	4.44 (144.0)	4.05 (112.8)	3.91 (102.9)	2.35 (99.3)	4.92 (59.7)	30 (125.0)	<b>BB2030N</b>
Back box for 60A devices.	1 1/4**	7.76	5.16 (197.0)	5.87 (131.0)	4.72 (149.0)	2.99 (120.0)	6.94 (76.0)	70 (176.0)	<b>BB60N</b>
Back box for 100A devices.	1 1/2***	8.21	6.23 (209.0)	6.31 (158.0)	5.71 (160.3)	3.99 (145.0)	7.41 (101.0)	120 (188.0)	<b>BB100N</b>

\* Hub is not included; order one of the following Racor part numbers: \* 1" = 1704, \*\* 1 1/4" = 1705, \*\*\* 1 1/2" = 1706

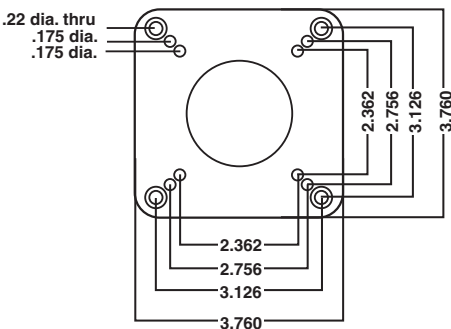


### Adapter Plate

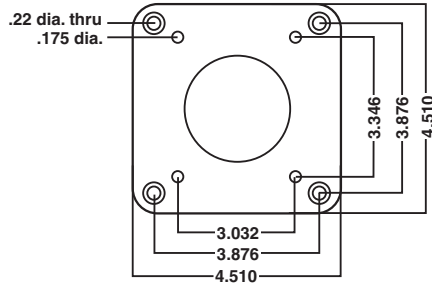
Adapter plate allows receptacles and inlets to be mounted to nonmetallic back boxes

Description	Catalog Number
20, 30, 16, 32 Amp Adapter Plate	<b>CAP2030</b>
60, 63 Amp Adapter Plate	<b>CAP60</b>
100, 125 Amp Adapter Plate	<b>CAP100</b>

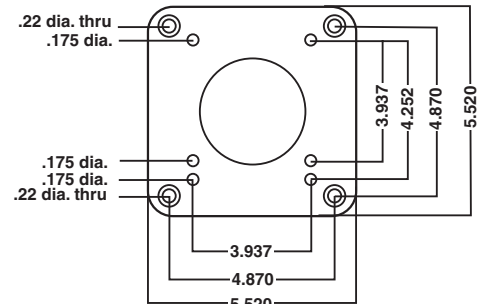
Adapter Plate thickness .375



**CAP2030**



**CAP60**

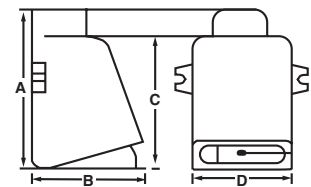


**CAP100**

### Metallic Back Boxes, Back Box Dimensions

Description	Hub Size	A Inch (mm)	B Inch (mm)	C Inch (mm)	D Inch (mm)	Catalog Number
15° angle for 20A & 30A	3/4"	5.07 130	3.38 87	4.13 106	3.62 93	<b>SP20301</b>
15° angle for 60A	1 1/4"	5.81 149	4.28 110	4.56 117	4.58 117	<b>SP602</b>
15° angle for 100A	1 1/2"	8.38 215	6.75 173	6.88 176	5.50 141	<b>BB1001W*</b>

Note: All metal boxes are made of cast aluminum, \*Adapter plate required



### Closure Caps

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

Description	Catalog Number
Fits all 20A 3 wire plugs and inlets	<b>PC320</b>
Fits all 20A 4 wire plugs and inlets	<b>PC420</b>
Fits all 20A 5 wire plugs and inlets	<b>PC520</b>
Fits all 30A 3 and 4 wire plugs and inlets	<b>PC3430</b>
Fits all 30A 5 wire plugs and inlets	<b>PC530</b>
Fits all 60A plugs and inlets	<b>PC60</b>
Fits all 100A plugs and inlets	<b>PC100</b>





Listed to UL Standard 1682 & 1686

Certified to CSA Standard C22.2 Number 182.1 (Industrial-type, Special-use Attachment Plugs, Receptacles and Connectors).

## Watertight and Splashproof Materials

Part	Material
<b>Plug</b>	
Housing	Nylon.
Locking Ring	Polycarbonate.
Gasket & Seals	Neoprene, EPDM, TPE, Silicone.
Cord Clamp Assembly	Nylon.
Gland Nut	Nylon.
Assembly Screws	Stainless Steel (300 Series)(20, 30A, Plated Steel).
Contact Carrier	Reinforced Nylon (60A Nylon).
Retainer	Reinforced Nylon
Ground, Phase Pins	Brass.
Terminal	Plated Steel.
<b>Receptacle</b>	
Housing	Nylon.
Mounting Flange	Nylon.
Cover Arm	Nylon.
Cover	Polycarbonate.
Cover Rivet	Brass.
Cover Spring	Stainless Steel (300 Series).
Gaskets & Seals	Neoprene, EPDM, TPE, Silicone.
Mounting Screws	Stainless Steel (300 Series).
Terminal Screw	Plated Steel.
Phase, Ground Sleeves	Brass.
Contact Carrier & Retainer	Reinforced Nylon (60A Nylon)
<b>Connector Body</b>	
Housing	Nylon.
Cord Clamp Assembly	Nylon.
Gland Nut	Nylon.
Cover Arm	Nylon.
Cover	Polycarbonate.
Cover Rivet	Brass.
Cover Spring	Stainless Steel (300 Series).
Gaskets & Seals	Neoprene, EPDM, TPE, Silicone.
Contact Carrier	Reinforced Nylon (60A Nylon).
Retainer	Reinforced Nylon.
Phase, Ground Sleeves	Brass.
Terminal	Plated Steel
Assembly Screws	Stainless Steel (300 Series) (20, 30A Plated Steel)

