# IP69K pin & sleeve plugs

The industry's first pin & sleeve devices that are designed to address high pressure, high temperature washdown applications

Crouse-Hinds Series pin and sleeve devices are the industry's first to offer IP69K rated protection. Each device has been carefully engineered to offer reliability, efficiency, and added safety protection in demanding wet locations, particularly where harsh washdowns are a must!



## Pin & sleeve plugs features & benefits





impact performance for 60A & 100A devices

Nickel plated pins offer long life corrosion protection



Threaded NPT cable entry provides efficient means of attaching flexible conduit or wire mesh grips



Pins fully shrouded for mechanical protection; lockout hole for plugs



Tapered wiring pockets to ease insertion of stranded wire; deep pockets with clear markings keep bare conductors isolated

# IP69K pin & sleeve receptacles

## Pin & sleeve receptacles features & benefits

Spring-loaded self-closing cap with silicone gasket protects contacts when not in use. Watertight cap meets IP67 and IP69K protection standards

IP69K certified

Rugged materials selected for use in wet locations; provides corrosion resistance

Standard mounting footprints and blind holes provide interchangeability with major brands







Individual Silicone Sealing Grommets with cord diameter range makes for faster, easier assembly



Impact-resistant thermoplastic contact carrier provides superior electrical insulation and V0 flammability rating\*



Nickel plated contacts with selfcleaning field-proven pressure bands for smooth pin insertion, low heat rise, corrosion resistance, and quality electrical performance

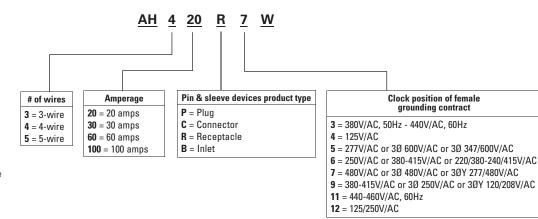
\*Does not include 20/30A Inlets



Understanding IEC 60309 pin & sleeve device and mechanical interlock catalog numbers

#### Pin & sleeve devices

Pin & sleeve device sample number: AH420P7W



#### Note:

Exceptions for pin & sleeve devices: Not every clock face position available for each pole/amp/device combo. Consult your Crouse-Hinds representative for details.

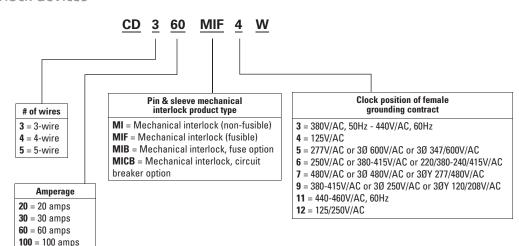
#### Pin & sleeve mechanical interlock devices

Pin & sleeve mechanical interlock device sample number: CD360MIF4W

#### Notes:

Exceptions for mechanical interlock: HMI available only on 20A. MIF available only on 30A & 60A MIB & MICB available only on 20A, 30A & 60A Not every clock face position available for each pole/amp/device combo.

Not every clock face position available for each pole/amp/device combo.
Consult your Crouse-Hinds representative for details.

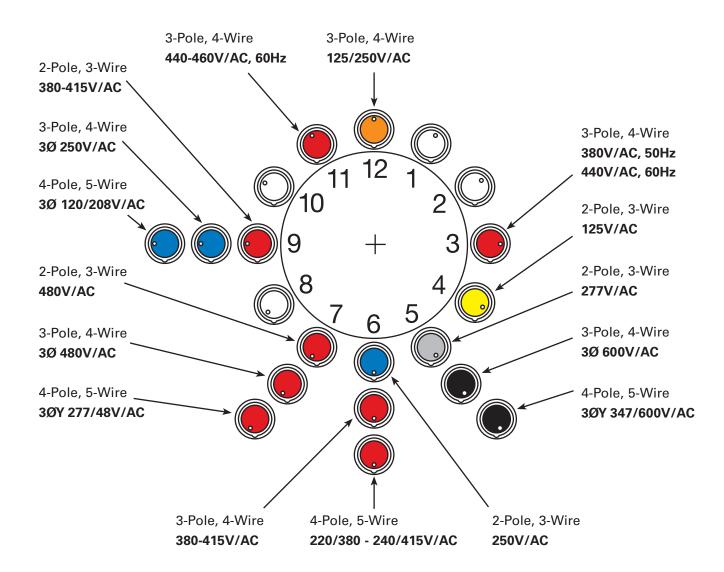


# Pin and sleeve configurations

## Understanding pin & sleeve configurations

The full line of Crouse-Hinds Series pin & sleeve products meet or exceed the rigorous IEC 60309-1 and 60309-2 watertight requirements, and as such are intermateable with all other non-hazardous IEC 309 devices.

A "clock face" is used to represent the grounding contact position for all female connectors and receptacles. With the keyway at the bottom, the female grounding contact will appear at one of the twelve "hour" positions. To identify the system's voltage, identify the housing color and hour location of the connector or receptacle grounding outlet.



### Examples of pin & sleeve connectors with their corresponding wiring diagrams



# AH560C9W 4-Pole, 5-Wire 3Ø 120/208V/AC Wiring diagram indicating contact position







AH4125C6W
3-Pole, 4-Wire
380-415V/AC
Wiring diagram
indicating contact
position







AH320C4W
2-Pole, 3-Wire
125V/AC
Wiring diagram
indicating contact
position





# IEC 60309 watertight pin & sleeve devices

#### **Product description**

North American 20A, 30A, 60A & 100A for receptacles, plugs, connectors & inlets



Receptacle



Plug



Connector



inlet



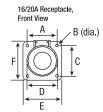
Angled Receptacle

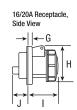
Rating A	Poles/ wires	V/AC, color codin & configurations	g	Receptacle catalog no.	Plug catalog no.	Connector catalog no.	Inlet catalog no.	15° Angled Receptacle catalog no.
20	2-P, 3-W	125	$\odot$	☐ AH320R4W	☐ AH320P4W	☐ AH320C4W	☐ AH320B4W	_
		250	$\odot$	☐ AH320R6W	☐ AH320P6W	☐ AH320C6W	☐ AH320B6W	_
		480	$\odot$	☐ AH320R7W	☐ AH320P7W	☐ AH320C7W	☐ AH320B7W	_
	3-P, 4-W	125/250		☐ AH420R12W	☐ AH420P12W	☐ AH420C12W	☐ AH420B12W	_
		3Ø 250	$\odot$	☐ AH420R9W	☐ AH420P9W	☐ AH420C9W	☐ AH420B9W	_
		3Ø 480	$\odot$	☐ AH420R7W	☐ AH420P7W	☐ AH420C7W	☐ AH420B7W	_
		3Ø 600	$\odot$	☐ AH420R5W	☐ AH420P5W	☐ AH420C5W	☐ AH420B5W	_
	4-P, 5-W	3ØY 120/208	◎ ◎	☐ AH520R9W	☐ AH520P9W	☐ AH520C9W	☐ AH520B9W	_
		3ØY 277/480		☐ AH520R7W	☐ AH520P7W	☐ AH520C7W	☐ AH520B7W	_
		3ØY 347/600	<b>©</b>	☐ AH520R5W	☐ AH520P5W	☐ AH520C5W	☐ AH520B5W	_
30	2-P, 3-W	125	<b>© ©</b>	☐ AH330R4W	☐ AH330P4W	☐ AH330C4W	☐ AH330B4W	_
		250	<b>© ©</b>	☐ AH330R6W	☐ AH330P6W	☐ AH330C6W	☐ AH330B6W	_
		480	$\bigcirc$	□ AH330R7W	□ AH330P7W	☐ AH330C7W	☐ AH330B7W	_
	3-P, 4-W	125/250	<b>© ©</b>	☐ AH430R12W	☐ AH430P12W	☐ AH430C12W	☐ AH430B12W	_
		3Ø 250	<b>② ③</b>	☐ AH430R9W	☐ AH430P9W	□ AH430C9W	☐ AH430B9W	_
		3Ø 480	<b>© ©</b>	☐ AH430R7W	☐ AH430P7W	□ AH430C7W	☐ AH430B7W	_
		3Ø 600	<b>© ©</b>	☐ AH430R5W	☐ AH430P5W	□ AH430C5W	☐ AH430B5W	_
	4-P, 5-W	3ØY 120/208	<b>②</b> ③	☐ AH530R9W	□ AH530P9W	□ AH530C9W	□ AH530B9W	_
		3ØY 277/480	<b>© ©</b>	☐ AH530R7W	□ AH530P7W	□ AH530C7W	□ AH530B7W	_
		3ØY 347/600	<b>©</b>	☐ AH530R5W	☐ AH530P5W	□ AH530C5W	☐ AH530B5W	_
60	2-P, 3-W	125	<b>O O</b>	□ AH360R4W	□ AH360P4W	□ AH360C4W	□ AH360B4W	_
		250	<b>Q Q</b>	□ AH360R6W	□ AH360P6W	□ AH360C6W	☐ AH360B6W	_
		480	<b>O O</b>	☐ AH360R7W	☐ AH360P7W	□ AH360C7W	☐ AH360B7W	_
	3-P, 4-W	125/250	<b>© ©</b>	☐ AH460R12W	☐ AH460P12W	☐ AH460C12W	☐ AH460B12W	_
		3Ø 250	<b>② ③</b>	□ AH460R9W	□ AH460P9W	□ AH460C9W	□ AH460B9W	_
		3Ø 480	<b>©</b>	☐ AH460R7W	☐ AH460P7W	☐ AH460C7W	☐ AH460B7W	_
		3Ø 600	<b>© ©</b>	☐ AH460R5W	☐ AH460P5W	□ AH460C5W	□ AH460B5W	_
	4-P, 5-W	3ØY 120/208	<b>③</b> ①	☐ AH560R9W	☐ AH560P9W	☐ AH560C9W	☐ AH560B9W	☐ AH560R9W-15
		3ØY 277/480		☐ AH560R7W	☐ AH560P7W	☐ AH560C7W	☐ AH560B7W	_
		3ØY 347/600	<b>©</b>	☐ AH560R5W	□ AH560P5W	□ AH560C5W	□ AH560B5W	_
100	2-P, 3-W	125	<b>O O</b>	☐ AH3100R4W	☐ AH3100P4W	☐ AH3100C4W	☐ AH3100B4W	_
		250	<b>O O</b>	☐ AH3100R6W	☐ AH3100P6W	☐ AH3100C6W	☐ AH3100B6W	_
		480	$\odot$	☐ AH3100R7W	☐ AH3100P7W	☐ AH3100C7W	☐ AH3100B7W	_
	3-P, 4-W	125/250		☐ AH4100R12W	☐ AH4100P12W	☐ AH4100C12W	☐ AH4100B12W	☐ AH4100R12W-15
		3Ø 250	<b>② ③</b>	□ AH4100R9W	☐ AH4100P9W	☐ AH4100C9W	☐ AH4100B9W	_
		3Ø 480	<b>© ©</b>	□ AH4100R7W	☐ AH4100P7W	☐ AH4100C7W	☐ AH4100B7W	☐ AH4100R7W-15
		3Ø 600	<b>© ©</b>	□ AH4100R5W	☐ AH4100P5W	☐ AH4100C5W	☐ AH4100B5W	_
	4-P, 5-W	3ØY 120/208	<b>③ ③</b>	□ AH5100R9W	☐ AH5100P9W	☐ AH5100C9W	☐ AH5100B9W	☐ AH5100R9W-15
		3ØY 277/480	<b>© ©</b>	□ AH5100R7W	☐ AH5100P7W	☐ AH5100C7W	☐ AH5100B7W	☐ AH5100R7W-15
		3ØY 347/600	<b>③ ⓒ</b>	□ AH5100R5W	☐ AH5100P5W	☐ AH5100C5W	☐ AH5100B5W	_

# **Dimensional information**

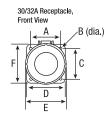
#### Table 1. 16/20A & 30/32A Receptacles

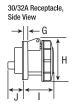
Family	Α	В	C	D	E	F	G	Н	1	J	K	L	M
16/20A	3.125"	0.21"	3.125"	2.98"	3.75"	3.75"	0.315"	3.15"	2.15"	1.25"	2.74"	2.74"	1.69"
2-P, 3-W	(7.94cm)	(0.54cm)	(7.94cm)	(7.57cm)	(9.52cm)	(9.52cm)	(.8cm)	(8cm)	(5.47cm)	(3.18cm)	(6.96cm)	(6.96cm)	(4.29cm)
16/20A	3.125"	0.21"	3.125"	3.28"	3.75"	3.75"	0.315"	3.38"	2.18"	1.25"	2.74"	2.74"	2.01"
3-P, 4-W	(7.94cm)	(0.54cm)	(7.94cm)	(8.33cm)	(9.52cm)	(9.52cm)	(.8cm)	(8.58cm)	(5.54cm)	(3.18cm)	(6.96cm)	(6.96cm)	(5.12cm)
16/20A	3.125"	0.21"	3.125"	3.66"	3.75"	3.75"	0.315"	3.66"	2.27"	1.25"	2.74"	2.74"	2.09"
4-P, 5-W	(7.94cm)	(0.54cm)	(7.94cm)	(9.3cm)	(9.52cm)	(9.52cm)	(.8cm)	(9.3cm)	(5.77cm)	(3.18cm)	(6.96cm)	(6.96cm)	(5.3cm)
30/32A 2-P, 3-W & 3-P, 4-W	3.125" (7.94cm)	0.21" (0.54cm)	3.125" (7.94cm)	3.97" (10cm)	3.75" (9.52cm)	3.75" (9.52cm)	0.315" (.8cm)	3.91" (9.92cm)	2.64" (6.7cm)	1.57" (4.0cm)	2.74" (6.96cm)	2.74" (6.96cm)	2.24" (5.69cm)
30/32A	3.125"	0.21"	3.125"	4.22"	3.75"	3.75"	0.315"	4.13"	2.64"	1.57"	2.74"	2.74"	2.47"
4-P, 5-W	(7.94cm)	(0.54cm)	(7.94cm)	(10.7cm)	(9.52cm)	(9.52cm)	(.8cm)	(10.5cm)	(6.7cm)	(4.0cm)	(6.96cm)	(6.96cm)	(6.27cm)











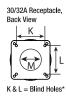
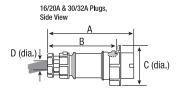


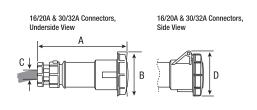
Table 2. 16/20A & 30/32A Plugs

Family	Α	В	C	D (cord dia.)	Threaded Entry (NPT)
16/20A 2-P, 3-W	6.08" (15.44cm)	4.65" (11.8cm)	2.98" (7.57cm)	0.333-0.775" (0.85-1.97cm)	0.75" (1.91cm)
16/20A 3-P, 4-W	6.14" (15.6cm)	4.70" (11.94cm)	3.28" (8.33cm)	0.333-0.775" (0.85-1.97cm)	0.75" (1.91cm)
16/20A 4-P, 5-W	6.24" (15.85cm)	4.81" (12.22cm)	4.18" (10.6cm)	0.433-0.84" (1.10-2.13cm)	1.0" (2.54cm)
30/32A 2-P, 3-W & 3-P, 4-W	7.32" (18.6cm)	5.53" (14.05cm)	3.85" (9.78cm)	0.433-0.985" (1.10-2.5cm)	1.0" (2.54cm)
30/32A 4-P, 5-W	7.46" (18.95cm)	5.67" (14.4cm)	4.17" (10.6cm)	0.433-1.15" (1.10-2.92cm)	1.25" (3.18cm)



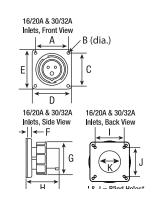
#### Table 3. 16/20A & 30/32A Connectors

Family	Α	В	C (cord dia.)	D	Threaded Entry (NPT)
16/20A 2-P, 3-W	6.91" (17.56cm)	2.98" (7.57cm)	0.333-0.775" (0.85-1.97cm)	3.13" (7.96cm)	0.75" (1.91cm)
16/20A 3-P, 4-W	6.89" (17.49cm)	3.28" (8.33cm)	0.333-0.775" (0.85-1.97cm)	3.37" (8.56cm)	0.75" (1.91cm)
16/20A 4-P, 5-W	7.19" (18.27cm)	3.66" (8.33cm)	0.433-0.84" (1.10-2.13cm)	3.66" (9.3cm)	1.0" (2.54cm)
30/32A 2-P, 3-W & 3-P, 4-W	8.55" (22.72cm)	3.97" (10.1cm)	0.433-0.985" (1.10-2.5cm)	3.89" (9.89cm)	1.0" (2.54cm)
30/32A 4-P, 5-W	8.74" (22.19cm)	4.22" (10.7cm)	0.433-1.15" (1.10-2.92cm)	4.13" (10.49cm)	1.25" (3.18cm)



#### Table 4. 16/20A & 30/32A Inlets

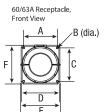
Family	Α	В	С	D	E	F	G	Н	1	J	K
16/20A	3.125"	0.21"	3.125"	3.75"	3.75"	0.315"	2.76"	2.75"	2.74"	2.74"	1.52"
2-P, 3-W	(7.94cm)	(0.54cm)	(7.94cm)	(9.52cm)	(9.52cm)	(0.8cm)	(7cm)	(6.99cm)	(6.96cm)	(6.96cm)	(3.86cm)
16/20A	3.125"	0.21"	3.125"	3.75"	3.75"	0.315"	3.06"	2.75"	2.74"	2.74"	1.74"
3-P, 4-W	(7.94cm)	(0.54cm)	(7.94cm)	(9.52cm)	(9.52cm)	(0.8cm)	(7.77cm)	(6.99cm)	(6.96cm)	(6.96cm)	(4.42cm)
16/20A	3.125"	0.21"	3.125"	3.75"	3.75"	0.315"	3.45"	2.75"	2.74"	2.74"	1.96"
4-P, 5-W	(7.94cm)	(0.54cm)	(7.94cm)	(9.52cm)	(9.52cm)	(0.8cm)	(8.76cm)	(6.99cm)	(6.96cm)	(6.96cm)	(4.98cm)
30/32A 2-P, 3-W & 3-P, 4-W	3.125" (7.94cm)	0.21" (0.54cm)	3.125" (7.94cm)	3.75" (9.52cm)	3.75" (9.52cm)	0.315" (0.8cm)	3.68" (9.35cm)	3.4" (8.64cm)	2.74" (6.96cm)	2.74" (6.96cm)	2.0" (5.08cm)
30/32A	3.125"	0.21"	3.125"	3.75"	3.75"	0.315"	3.94"	3.4"	2.74"	2.74"	2.22"
4-P, 5-W	(7.94cm)	(0.54cm)	(7.94cm)	(9.52cm)	(9.52cm)	(0.8cm)	(10cm)	(8.64cm)	(6.96cm)	(6.96cm)	(5.64cm)

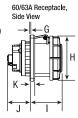


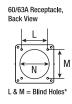
# **Dimensional information**

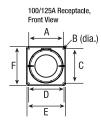
#### Table 5. 60/63A & 100/125A Receptacles

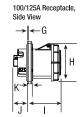
Family	Α	В	C	D	E	F	G	Н	ı	J	K	L	M	N
60/63 Amp	3.88"	0.21"	3.88"	4.5"	4.6"	4.5"	0.079"	4.42"	3.02"	2.3"	0.39"	3.03"	3.35"	3.35"
	(9.8cm)	(0.54cm)	(9.8cm)	(11.4cm)	(11.7cm)	(11.4cm)	(0.2cm)	(11.2cm)	(7.68cm)	(5.8cm)	(1cm)	(7.70cm)	(8.51cm)	(8.5cm)
100/125 Amp	4.87"	0.21"	4.87"	5.5"	5.11"	5.5"	0.12"	4.86"	4.20"	1.93"	0.47"	4.10"	4.10"	4.57"
	(12.4cm)	(0.54cm)	(12.4cm)	(14cm)	(13cm)	(14cm)	(0.3cm)	(12.3cm)	(10.7cm)	(4.9cm)	(1.2cm)	(10.4cm)	(10.4cm)	(11.6cm)











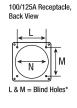
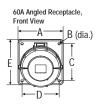


Table 6. 60A & 100A Angled Receptacles

Family	Α	В	C	D	E	F	G	Н	I	J
60 Amp	4.69"	0.21"	3.87"	3.87"	4.69"	.45"	5.49"	2.26"	3.35"	3.03"
	(119.2mm)	(5.3mm)	(98.4mm)	(98.4mm)	(119.2mm)	(11.5mm)	(139.5mm)	(57.3mm)	(85.1mm)	(77mm)
100 Amp	5.5"	0.21"	4.87"	4.87"	5.5"	.55"	6.35"	2.85"	3.54"	3.54"
	(139.6mm)	(5.3mm)	(123.7mm)	(123.7mm)	(139.6mm)	(14.0mm)	(161.3mm)	(72.4mm)	(90.0mm)	(90.0mm)







60A Angled Receptacle,

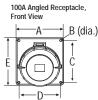






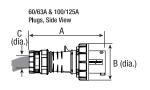


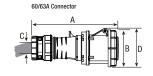
Table 7. 60/63A & 100/125A Plugs

Family	A	В	C (cord dia.)	Threaded Entry (NPT)
60/63 Amp	9.26" (23.52cm)	4.45" (11.29cm)	0.66-1.50" (1.68-3.81cm)	1.5" (3.81cm)
100/125 Amp	11.16" (28.35cm)	5.17" (13.14cm)	0.97-1.94" (2.46-5.00cm)	2.0" (5.08cm)

Table 8. 60/63A & 100/125A Connectors

Family	Α	В	C (cord dia.)	D	Threaded Entry (NPT)
60/63 Amp	10" (25.39cm)	4.29" (10.9cm)	0.66-1.5" (1.68-3.81cm)	4.43" (11.25cm)	1.5" (3.81cm)
100/125 Amp	11.83" (30.04cm)	4.76" (12.1cm)	0.97-1.94" (2.46-4.93cm)	4.86" (12.34cm)	2.0" (5.08cm)





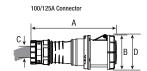


Table 9. 60/63A & 100/125A Inlets

Family	Α	В	C	D	E	F	G	Н	1	J	K	L	М	N
60/63 Amp	3.875"	0.21"	3.88"	4.5"	4.5"	0.39"	4.45"	3.25"	1.52"	3.88"	3.88"	2.88"	3.54"	3.54"
	(9.84 cm)	(0.54cm)	(9.84 cm)	(11.4 cm)	(11.4 cm)	(1cm)	(11.30 cm)	(8.26cm)	(3.87 cm)	(9.84 cm)	(9.84 cm)	(7.32 cm)	(8.99 cm)	(8.99 cm)
100/125 Amp	4.87"	0.21"	4.87"	5.5"	5.5"	0.47"	5.17"	4"	1.38"	4.87"	4.87"	3.66"	4.10"	4.10"
	(12.4cm)	(0.54 cm)	(12.4 cm)	(14cm)	(14cm)	(1.2 cm)	(13.1cm)	(10.2 cm)	(3.51 cm)	(12.4 cm)	(12.4 cm)	(9.3 cm)	(10.41 cm)	(10.41 cm)

