

20A & 30A IEC 309 Watertight pin & sleeve devices

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Product Description - North American

20A & 30A;
2-pole, 3-wire grounding;
3-pole, 4-wire grounding;
4-pole, 5-wire grounding



AH430R7W

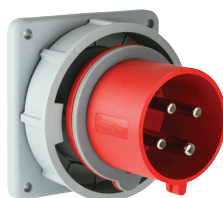
**IP69K
certified**



AH430P7W



AH430C7W



AH430B7W

Pin & sleeve plugs features & benefits

- Mechanical cord clamp with silicone rubber grommet seal and locking screw ensures a positive and watertight strain relief system
- Tri-combo cord grip screws for convenience
- Durable impact resistant thermoplastic body
- Color-coded front housing for easy and accurate identification of voltages
- Oversized grounding pin assures mating only with oversized female grounding sleeve; staggered contact to ensure ground makes first and breaks last
- Engineered thermoplastic material improves cold impact performance
- Spring-loaded self-closing cap with silicone rubber gasket protects contacts when not in use. Watertight cap meets IP67 and IP69K protection standards
- Rugged materials selected for use in wet locations; provides corrosion resistance
- Standard mounting footprints and blind holes provide interchangeability with major brands
- Nickel plated pins offer long life corrosion protection
- Pins fully shrouded for mechanical protection; lockout hole for plugs
- Threaded NPT cable entry provides efficient means of attaching flexible conduit or wire mesh grips
- Tapered wiring pockets to ease insertion of stranded wire; deep pockets with clear markings keep bare conductors isolated

Compliances, specifications and availability are subject to change without notice.

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Table 1. 20A & 30A Pin & sleeve devices for receptacles, plugs, connectors & inlets

Rating A	Poles/ wires	V/AC, color coding & configurations	Receptacle catalog no.	Plug catalog no.	Connector catalog no.	Inlet catalog no.
20	2-P, 3-W	125	AH320R4W	AH320P4W	AH320C4W	AH320B4W
		250	AH320R6W	AH320P6W	AH320C6W	AH320B6W
		480	AH320R7W	AH320P7W	AH320C7W	AH320B7W
	3-P, 4-W	125/250	AH420R12W	AH420P12W	AH420C12W	AH420B12W
		3Ø 250	AH420R9W	AH420P9W	AH420C9W	AH420B9W
		3Ø 480	AH420R7W	AH420P7W	AH420C7W	AH420B7W
		3Ø 600	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	AH520R5W	AH520P5W	AH520C5W	AH520B5W
30	2-P, 3-W	125	AH330R4W	AH330P4W	AH330C4W	AH330B4W
		250	AH330R6W	AH330P6W	AH330C6W	AH330B6W
		480	AH330R7W	AH330P7W	AH330C7W	AH330B7W
	3-P, 4-W	125/250	AH430R12W	AH430P12W	AH430C12W	AH430B12W
		3Ø 250	AH430R9W	AH430P9W	AH430C9W	AH430B9W
		3Ø 480	AH430R7W	AH430P7W	AH430C7W	AH430B7W
		3Ø 600	AH430R5W	AH430P5W	AH430C5W	AH430B5W
	4-P, 5-W	3ØY 120/208	AH530R9W	AH530P9W	AH530C9W	AH530B9W
		3ØY 277/480	AH530R7W	AH530P7W	AH530C7W	AH530B7W
		3ØY 347/600	AH530R5W	AH530P5W	AH530C5W	AH530B5W

Table 2. Ordering matrix

Pin & sleeve device sample number: AH420P7W			
AH	4	20	P 7 W
# of wires	Amperage	Pin & sleeve devices product type	Clock position of female grounding contact
3 = 3-wire 4 = 4-wire 5 = 5-wire	20 = 20 amps 30 = 30 amps 60 = 60 amps 100 = 100 amps	P = Plug C = Connector R = Receptacle B = Inlet	3 = 380V/AC, 50Hz - 440V/AC, 60Hz 4 = 125V/AC 5 = 277V/AC or 3Ø 600V/AC or 3Ø 347/600V/AC 6 = 250V/AC or 380-415V/AC or 220/380-240/415V/AC 7 = 480V/AC or 3Ø 480V/AC or 3ØY 277/480V/AC 9 = 380-415V/AC or 3Ø 250V/AC or 3ØY 120/208V/AC 11 = 440-460V/AC, 60Hz 12 = 125/250V/AC
Note: Exceptions for pin & sleeve devices: Not every clock face position available for each pole/amp/device combo. Consult your Eaton wiring devices representative for details.			

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Applications

The industry's first pin & sleeve devices that are designed to address high pressure, high temperature washdown applications. Arrow Hart's pin and sleeve devices are unlike other brands - our 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!

Table 3. Specifications

Device Type	20A & 30A pin & sleeve receptacles	20A & 30A pin & sleeve plugs	20A & 30A pin & sleeve connectors	20A & 30A pin & sleeve inlets
Testing & code compliance	Base device: - Classified to IEC standards 60309-1 and 60309-2 - cULus listed to UL1682 & UL1686 and CSA 22.2 no. 182.1	Base device: - Classified to IEC standards 60309-1 and 60309-2 - cULus listed to UL1682 & UL1686 and CSA 22.2 no. 182.1	Base device: - Classified to IEC standards 60309-1 and 60309-2 - cULus listed to UL1682 & UL1686 and CSA 22.2 no. 182.1	Base device: - Classified to IEC standards 60309-1 and 60309-2 - cULus listed to UL1682 & UL1686 and CSA 22.2 no. 182.1
Environmental specifications	Flammability: Meets UL94 requirements; HB rated (housing), V0 rated (contact carriers) Protection: Watertight to IP67 per IEC 60529 & IP69K to DIN 40050 Part 9	Flammability: Meets UL94 requirements; HB rated (housing), V0 rated (contact carriers) Protection: Watertight to IP67 per IEC 60529 & IP69K to DIN 40050 Part 9	Flammability: Meets UL94 requirements; HB rated (housing), V0 rated (contact carriers) Protection: Watertight to IP67 per IEC 60529 & IP69K to DIN 40050 Part 9	Flammability: Meets UL94 requirements; V2 rated (housing), V2 rated (contact carriers) Protection: Watertight to IP67 per IEC 60529 & IP69K to DIN 40050 Part 9
Electrical specifications	Dielectric voltage: <300V:2000V - 1 minute. >300V:3000V - 1 minute Maximum working voltage: 600V (rms) Current interrupting: Yes, at full-rated current & voltage Temperature rise: Max. 30°C (86°F) after 50 cycles of overload @150% of rated current Endurance: <20A:5000 cycles >20A:1000 cycles	Dielectric voltage: 1000V plus 2x rated V - 1 minute Maximum working voltage: 600V (rms) Current interrupting: Yes, at full-rated current & voltage Temperature rise: Max. 30°C (86°F) after 50 cycles of overload @150% of rated current Endurance: <20A:5000 cycles >20A:1000 cycles	Dielectric voltage: 1000V plus 2x rated V - 1 minute Maximum working voltage: 600V (rms) Current interrupting: Yes, at full-rated current & voltage Temperature rise: Max. 30°C (86°F) after 50 cycles of overload @150% of rated current Endurance: <20A:5000 cycles >20A:1000 cycles	Dielectric voltage: <300V:2000V - 1 minute. >300V:3000V - 1 minute Maximum working voltage: 600V (rms) Current interrupting: Yes, at full-rated current & voltage Temperature rise: Max. 30°C (86°F) after 50 cycles of overload @150% of rated current Endurance: <20A:5000 cycles >20A:1000 cycles
Mechanical Specifications	Voltage ratings: Marked on device Impact resistance: UL1682 Cable grip retention: UL1682	Voltage ratings: Marked on device Impact resistance: UL1682 Cable grip retention: UL1682	Voltage ratings: Marked on device Impact resistance: UL1682 Cable grip retention: UL1682	Voltage ratings: Marked on device Impact resistance: UL1682 Cable grip retention: UL1682

Table 4. Materials

Device Type	20A & 30A pin & sleeve receptacles	20A & 30A pin & sleeve plugs	20A & 30A pin & sleeve connectors	20A & 30A pin & sleeve inlets
Housing & flange	Nylon PA6-GF30	Nylon PA6-GF30	Nylon PA6-GF30	Nylon PA6
Back body	N/A	Nylon PA6-GF30	Nylon PA6-GF30	N/A
Contact carrier	Nylon PA6	Nylon PA6	Nylon PA6	Nylon PA6
Sleeves	Nickel plated brass	N/A	Nickel plated brass	N/A
Contact spring on sleeves	Nickel plated spring steel	N/A	Nickel plated spring steel	N/A
Pins	N/A	Nickel plated brass	N/A	Nickel plated brass
External strain relief clamp	N/A	Nylon PA6-GF30	Nylon PA6-GF30	N/A
Cable seal	N/A	Silicon rubber	Silicon rubber	N/A
Support washer for cord grip	N/A	Plated steel	Plated steel	N/A
Cover	Nylon PA6-GF30	N/A	Nylon PA6-GF30	N/A
Hinge pin	Nylon PA6-GF30	N/A	Nylon PA6-GF30	N/A
Cover spring	Stainless steel	N/A	Stainless steel	N/A
Cover gasket	Silicon rubber	N/A	Silicon rubber	N/A
Flange gasket	Silicon rubber	N/A	N/A	Silicon rubber
Terminal screws	Nickel plated steel	Nickel plated steel	Nickel plated steel	Nickel plated steel
Assembly screws	Stainless steel	Stainless steel	Stainless steel	Stainless steel

Project Name:	Prepared By:
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Product Dimensions
20A Receptacles, Front, Side & Back Views

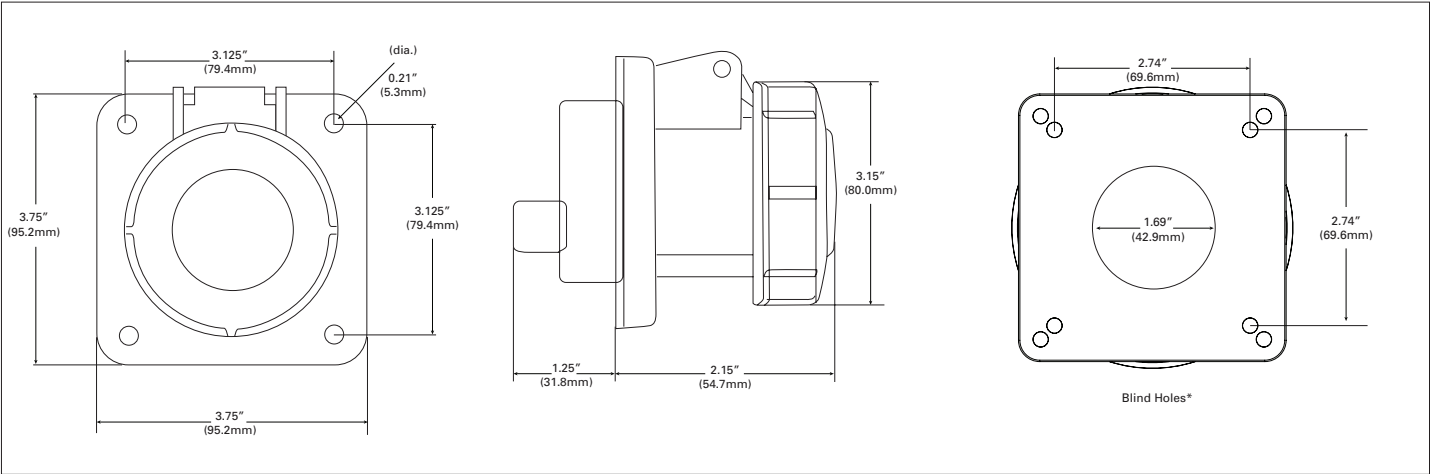


Figure 1. 20A 2-P, 3-W Receptacles, Front, Side & Back Views

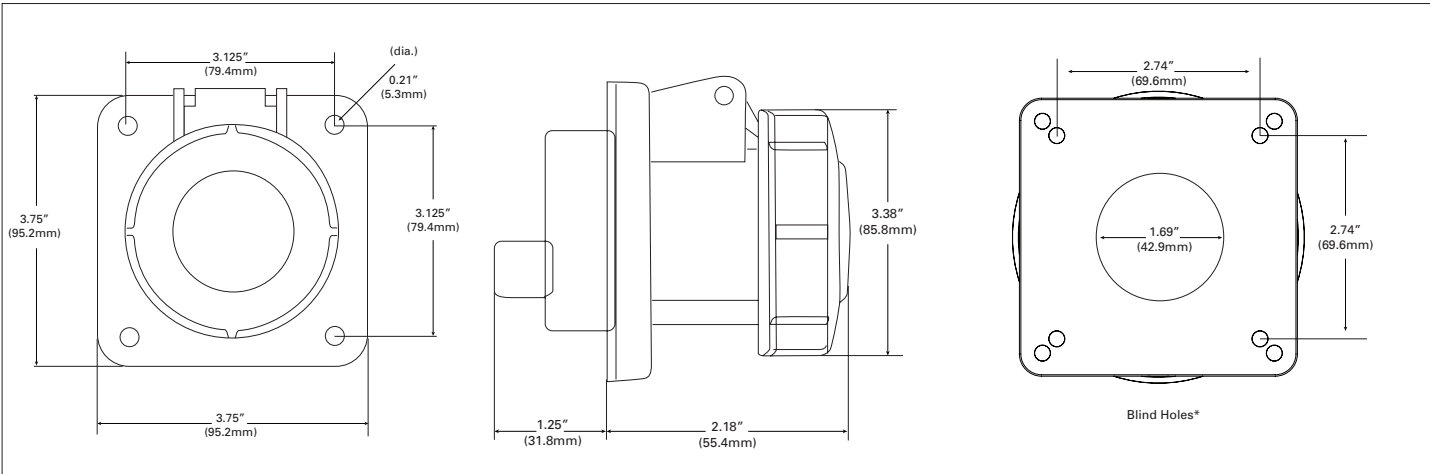


Figure 2. 20A 3-P, 4-W Receptacles, Front, Side & Back Views

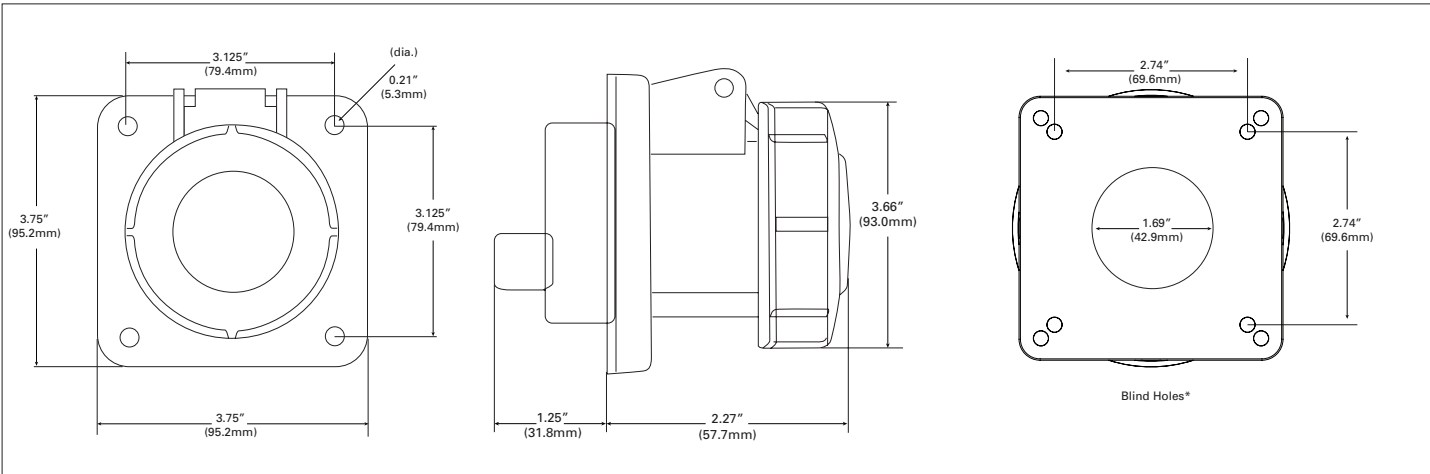


Figure 3. 20A 4-P, 5-W Receptacles, Front, Side & Back Views

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Product Dimensions

20A Plugs

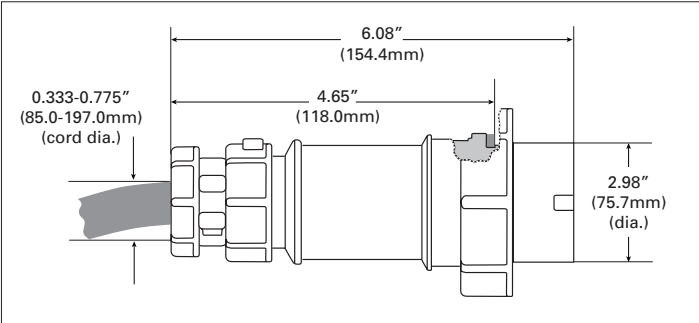


Figure 4. 20A 2-P, 3-W Plugs

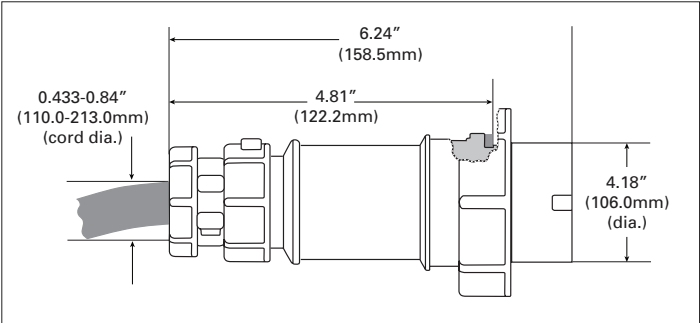


Figure 6. 20A 4-P, 5-W Plugs

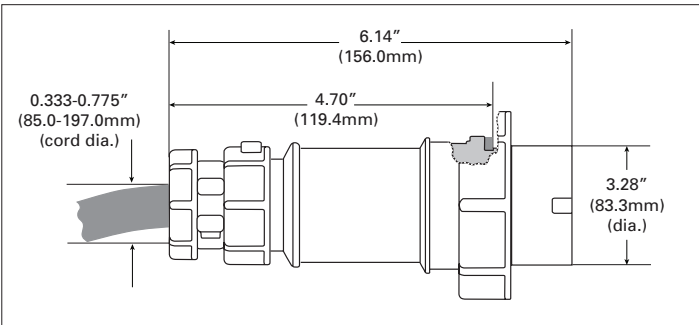


Figure 5. 20A 3-P, 4-W Plugs

20A Connectors

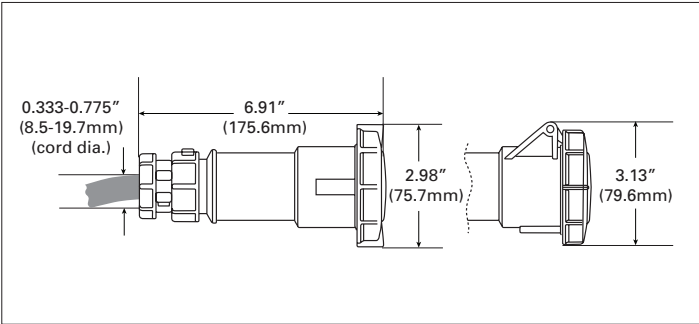


Figure 7. 20A 2-P, 3-W Underside & Side View Connectors

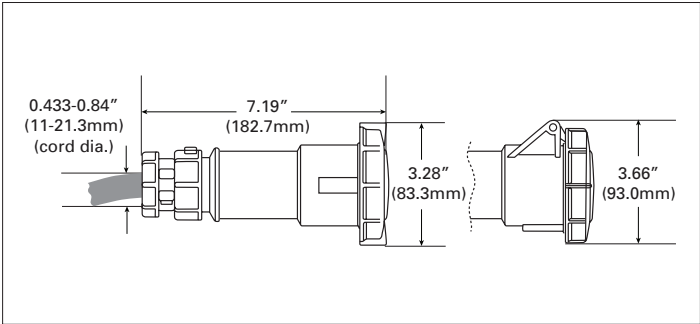


Figure 9. 20A 4-P, 5-W Underside & Side View Connectors

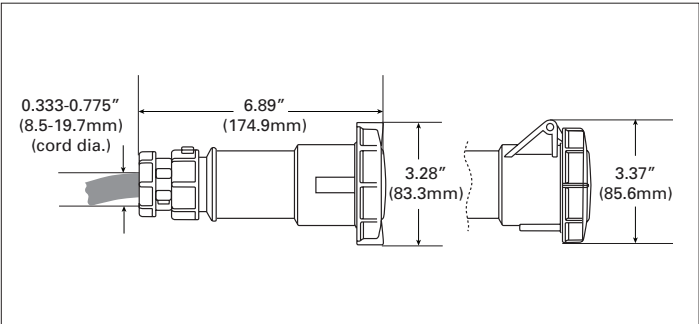


Figure 8. 20A 3-P, 4-W Underside & Side View Connectors

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Product Dimensions

20A Inlets

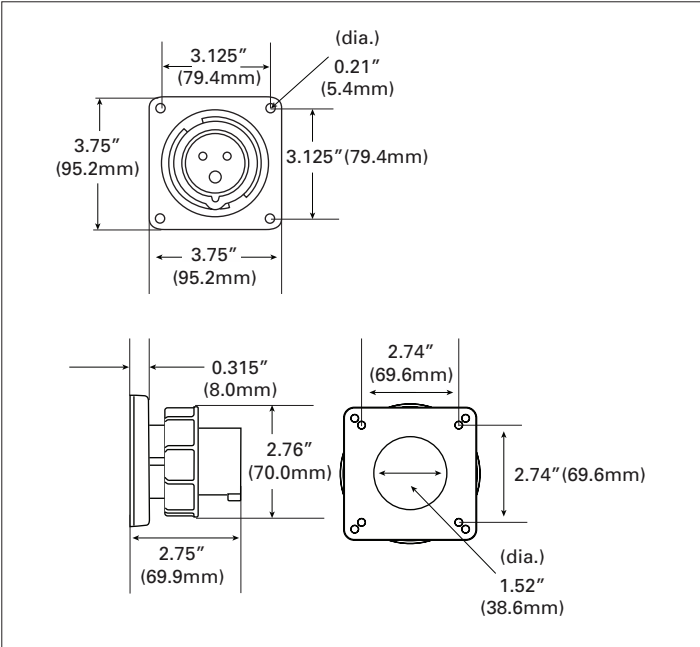


Figure 10. 20A 2-P, 3-W Front, Side & Back View Inlets

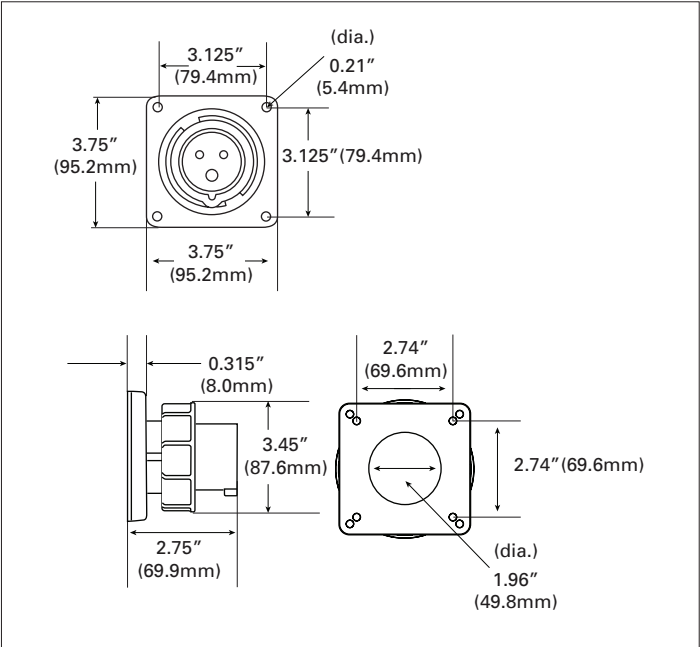


Figure 12. 20A 4-P, 5-W Front, Side & Back View Inlets

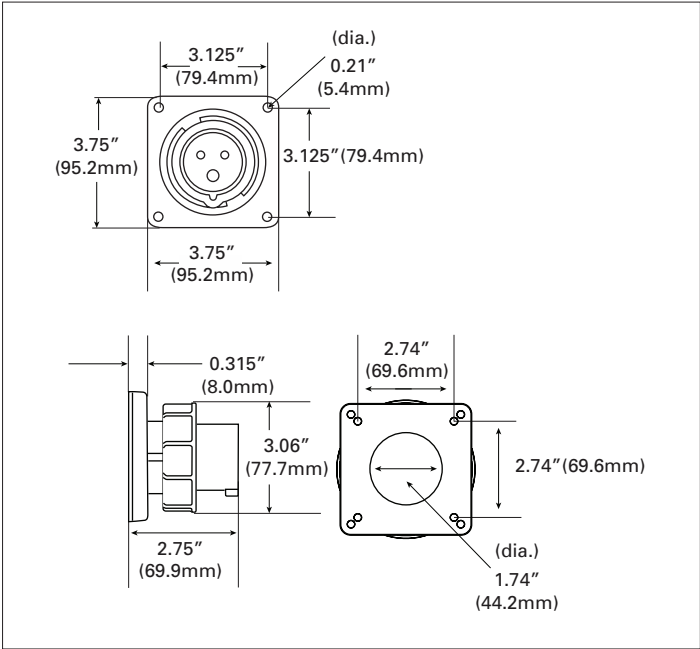


Figure 11. 20A 3-P, 4-W Front, Side & Back View Inlets

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Product Dimensions

30A Receptacles

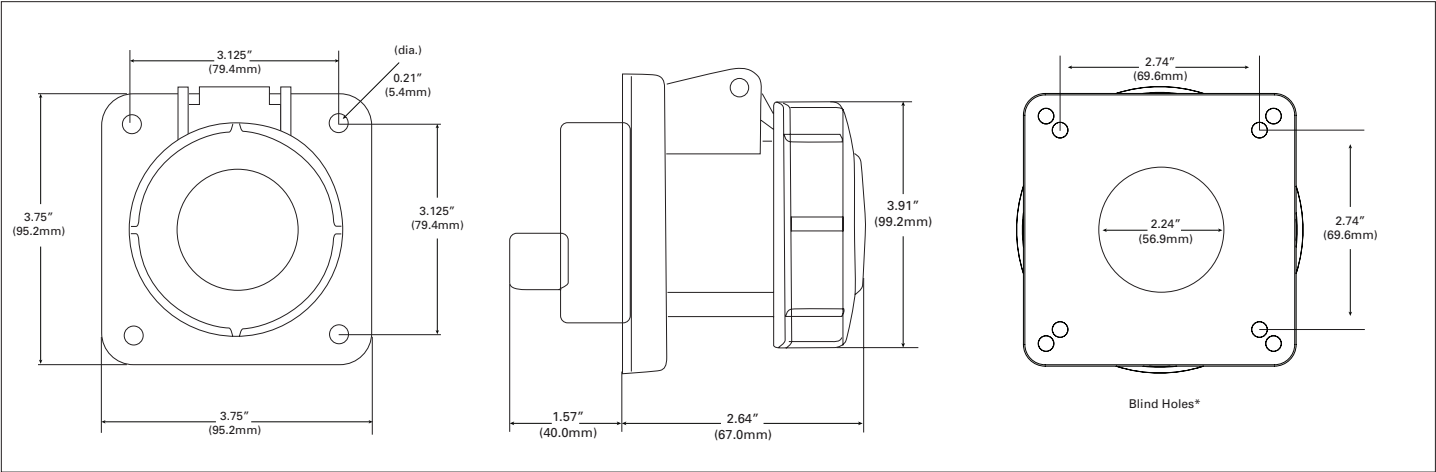


Figure 13. 30A 2-P, 3-W & 3-P, 4-W Receptacles, Front, Side & Back Views

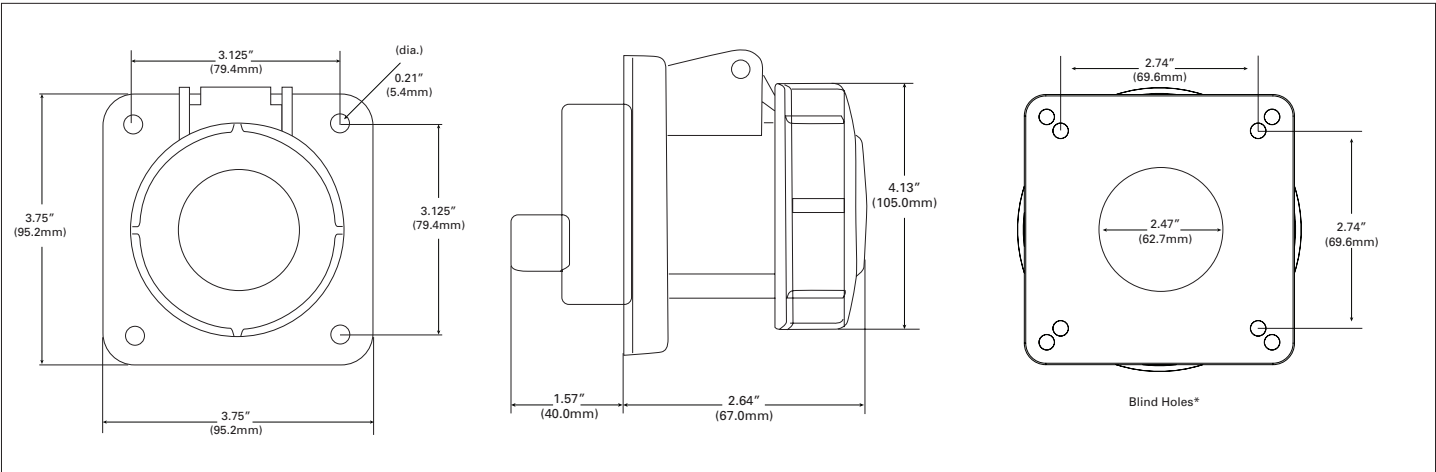


Figure 14. 30A 4-P, 5-W Receptacles, Front, Side & Back Views

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Product Dimensions

30A Plugs

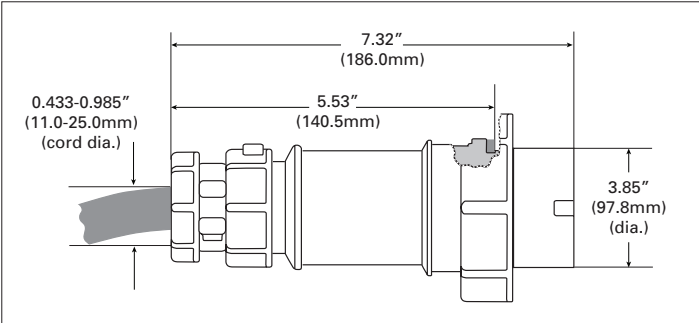


Figure 15. 30A 2-P, 3-W & 3-P, 4-W Plugs

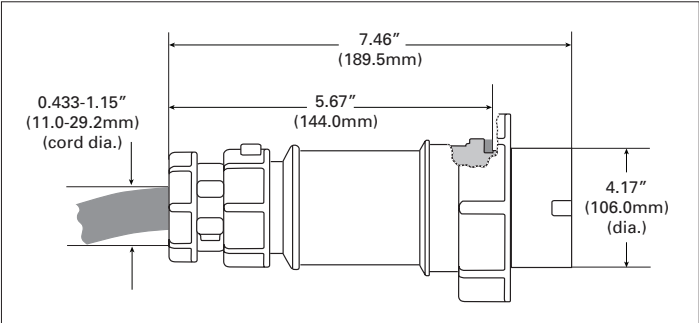


Figure 16. 30A 4-P, 5-W Plugs

30A Connectors

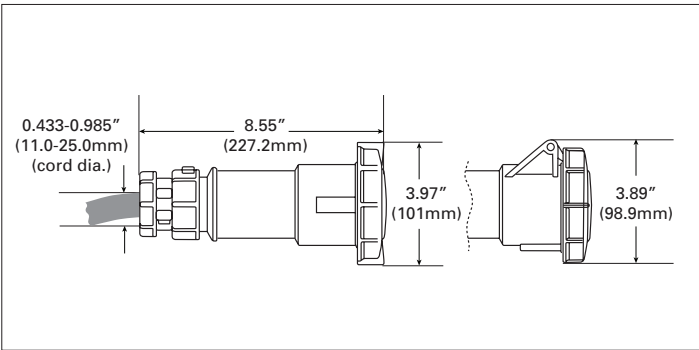


Figure 17. 30A 2-P, 3-W & 3-P, 4-W Underside & Side View Connectors

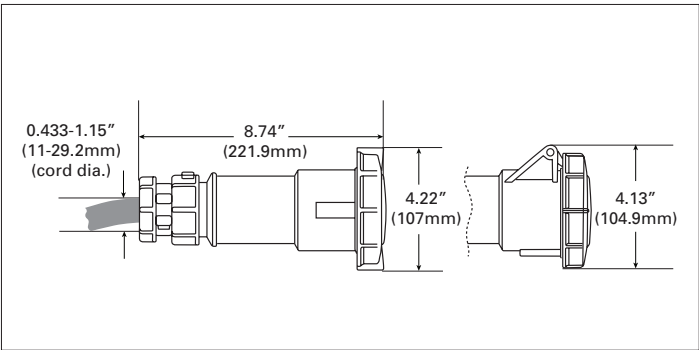


Figure 18. 30A 4-P, 5-W Underside & Side View Connectors

30A Inlets

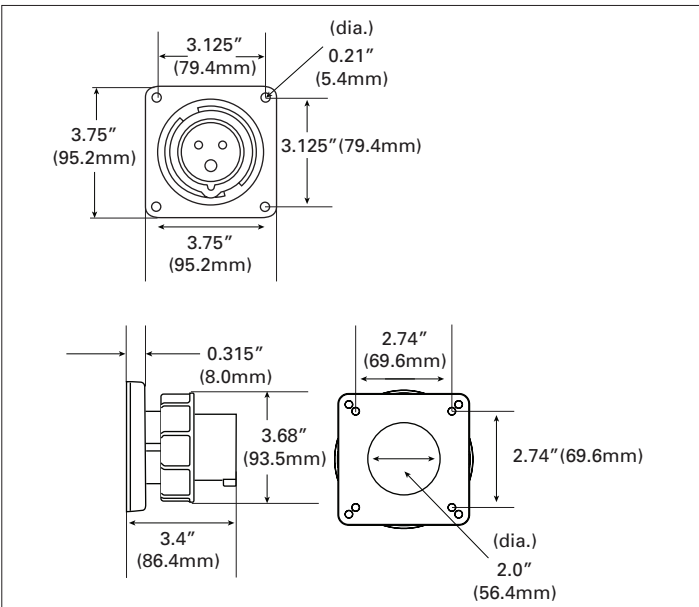


Figure 19. 30A 2-P, 3-W & 3-P, 4, Front, Side & Back View Inlets

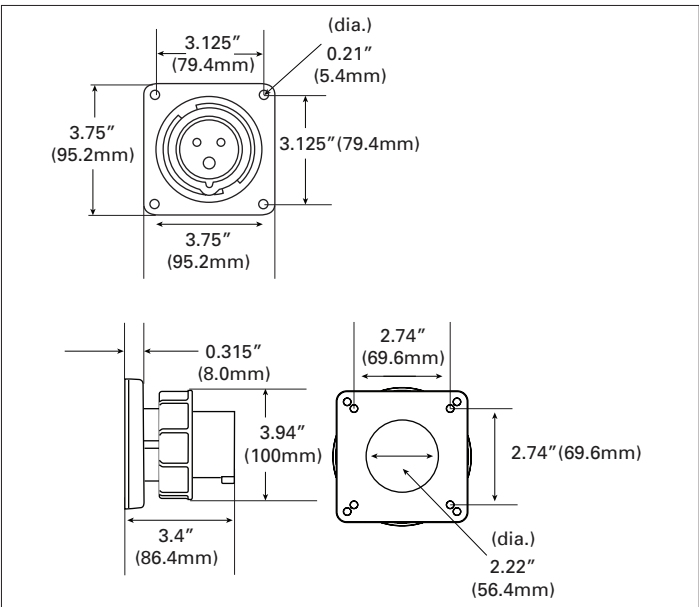


Figure 20. 30A 4-P, 5-W Front, Side & Back View Inlets

20A & 30A IEC 309
Watertight pin & sleeve devices

Technical Data
Effective November 2014

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Certifications & Compliances

Catalog No.				 
AH320R4W	AH320P4W	AH320C4W	AH320B4W	•
AH320R6W	AH320P6W	AH320C6W	AH320B6W	•
AH320R7W	AH320P7W	AH320C7W	AH320B7W	•
AH420R12W	AH420P12W	AH420C12W	AH420B12W	•
AH420R9W	AH420P9W	AH420C9W	AH420B9W	•
AH420R7W	AH420P7W	AH420C7W	AH420B7W	•
AH420R5W	AH420P5W	AH420C5W	AH420B5W	•
AH520R9W	AH520P9W	AH520C9W	AH520B9W	•
AH520R7W	AH520P7W	AH520C7W	AH520B7W	•
AH520R5W	AH520P5W	AH520C5W	AH520B5W	•
AH330R4W	AH330P4W	AH330C4W	AH330B4W	•
AH330R6W	AH330P6W	AH330C6W	AH330B6W	•
AH330R7W	AH330P7W	AH330C7W	AH330B7W	•
AH430R12W	AH430P12W	AH430C12W	AH430B12W	•
AH430R9W	AH430P9W	AH430C9W	AH430B9W	•
AH430R7W	AH430P7W	AH430C7W	AH430B7W	•
AH430R5W	AH430P5W	AH430C5W	AH430B5W	•
AH530R9W	AH530P9W	AH530C9W	AH530B9W	•
AH530R7W	AH530P7W	AH530C7W	AH530B7W	•
AH530R5W	AH530P5W	AH530C5W	AH530B5W	•

KEY:  IEC  cULus

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Peachtree City, GA 30269
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Eaton.com
Cooperwiringdevices.com

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Canada Operations
5925 McLaughlin Road
Mississauga, Ontario, L5R 1B8
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EatonCanada.ca
Cooperwiringdevices.com

Electrical Sector
Mexico Operations
Carr. Tlalnepantla -
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Col. Villa Jardin esq.
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Cuautitlan, Mexico CP 54800
Mexico
Eaton.mx
Cooperwiringdevices.com

IEC 309 watertight pin & sleeve devices

Product description

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



Receptacle



Plug



Connector



Inlet



AH560R9W-5

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

Compliances, specifications and availability are subject to change without notice.