

Arrow Hart 16A & 20A IEC 309 Watertight pin & sleeve devices

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



AH320R4W

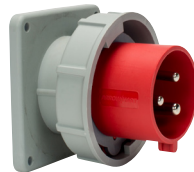
IP69K
certified



AH420P9WDR



AH520C6WDR



AH330B7W

Product Description - North American & International

16A & 20A;
2-pole, 3-wire grounding;
3-pole, 4-wire grounding;
4-pole, 5-wire grounding

Pin & sleeve plugs features & benefits

- Products with a DR suffix are dual rated for International and North American amperages
- 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.

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Powering Business Worldwide

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Table 1. 16A & 20A Pin & sleeve devices for receptacles, plugs, connectors & inlets

Poles/ wires	Rating A	V/AC, color coding & configurations	Receptacle catalog no.	Plug catalog no.	Connector catalog no.	Inlet catalog no.
2-P, 3-W	20	125	AH320R4W	AH320P4W	AH320C4W	AH320B4W
	16/20	250	AH320R6WDR	AH320P6WDR	AH320C6WDR	AH320B6WDR
	20	480	AH320R7W	AH320P7W	AH320C7W	AH320B7W
3-P, 4-W	20	125/250	AH420R12W	AH420P12W	AH420C12W	AH420B12W
	16/20	3Ø 250	AH420R9WDR	AH420P9WDR	AH420C9WDR	AH420B9WDR
	16/20	380-415V	AH420R6WDR	AH420P6WDR	AH420C6WDR	AH420B6WDR
	20	3Ø 480	AH420R7W	AH420P7W	AH420C7W	AH420B7W
	20	3Ø 600	AH420R5W	AH420P5W	AH420C5W	AH420B5W
	16/20	3ØY 120/208	AH520R9WDR	AH520P9WDR	AH520C9WDR	AH520B9WDR
4-P, 5-W	16/20	220/380 - 200/415	AH520R6WDR	AH520P6WDR	AH520C6WDR	AH520B6WDR
	20	3ØY 277/480	AH520R7W	AH520P7W	AH520C7W	AH520B7W
	20	3ØY 347/600	AH520R5W	AH520P5W	AH520C5W	AH520B5W
	20					

Catalog numbers with a DR suffix are certified for dual rating at North American and International amperages

Table 2. Ordering matrix

Pin & sleeve device sample number: AH420P7W			
# of wires 3 = 3-wire 4 = 4-wire 5 = 5-wire Amperage 20 = 20 amps 30 = 30 amps 60 = 60 amps 100 = 100 amps Pin & sleeve devices product type P = Plug C = Connector R = Receptacle B = Inlet Clock position of female grounding contact 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.			

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Applications

Eaton's Arrow Hart series of Pin & Sleeve products have been expanded to include dual rating for both North American and European amperages. These products are ideal for the data center industry as customers now only need one part number to power server assemblies in the US and overseas. Our dual rated devices carry an IP69K rating and Arrow Hart's signature features that make installation fast and reliable. Arrow Hart's pin and sleeve devices were unlike other brands – our devices were 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	16A & 20A pin & sleeve receptacles	16A & 20A pin & sleeve plugs	16A & 20A pin & sleeve connectors	16A & 20A 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 - Dual rated devices are TUV listed	Base device: - Classified to IEC standards 60309-1 and 60309-2 - cULus listed to UL1682 & UL1686 and CSA 22.2 no. 182.1 - Dual rated devices are TUV listed	Base device: - Classified to IEC standards 60309-1 and 60309-2 - cULus listed to UL1682 & UL1686 and CSA 22.2 no. 182.1 - Dual rated devices are TUV listed	Base device: - Classified to IEC standards 60309-1 and 60309-2 - cULus listed to UL1682 & UL1686 and CSA 22.2 no. 182.1 - Dual rated devices are TUV listed
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	16A & 20A pin & sleeve receptacles	16A & 20A pin & sleeve plugs	16A & 20A pin & sleeve connectors	16A & 20A 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

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Product Dimensions

16A & 20A Receptacles, Front, Side & Back Views

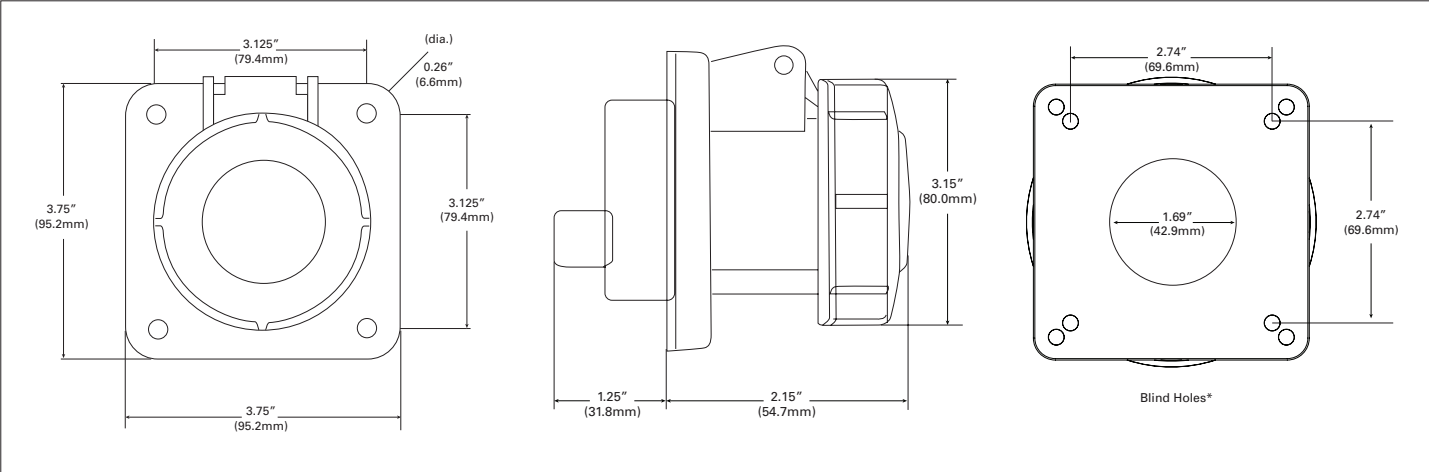


Figure 1. 16A & 20A 2-P, 3-W Receptacles, Front, Side & Back Views

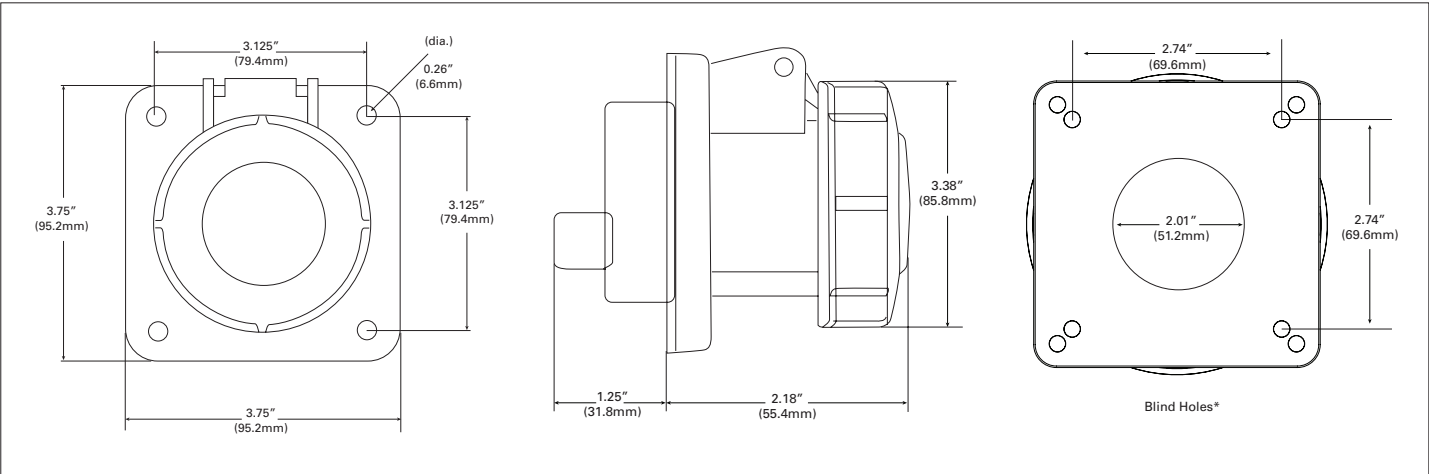


Figure 2. 16A & 20A 3-P, 4-W Receptacles, Front, Side & Back Views

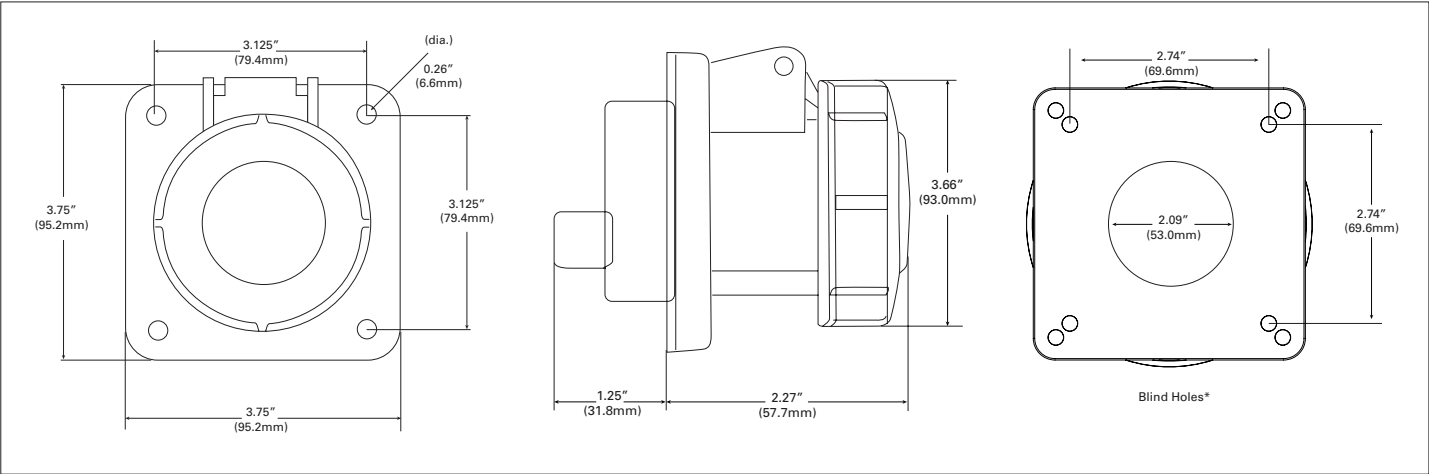


Figure 3. 16A & 20A 4-P, 5-W Receptacles, Front, Side & Back Views

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

Product Dimensions

16A & 20A Plugs

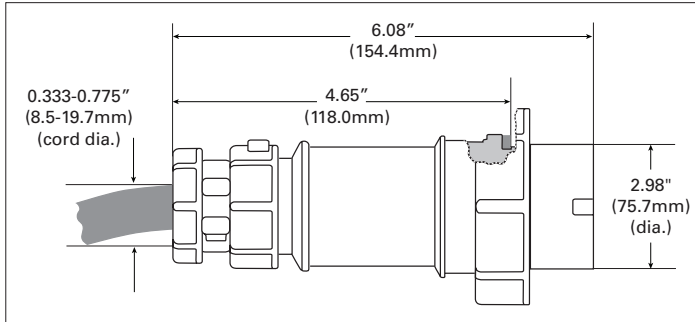


Figure 4. 16A & 20A 2-P, 3-W Plugs

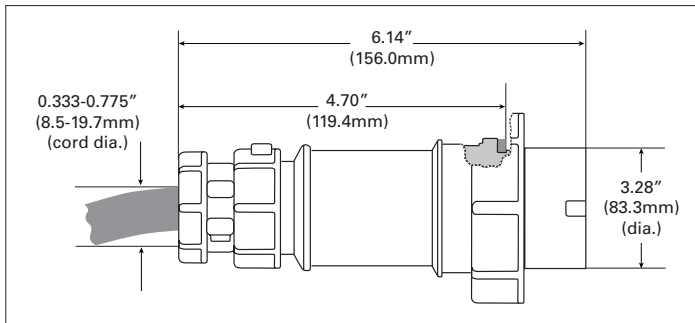


Figure 6. 16A & 20A 3-P, 4-W Plugs

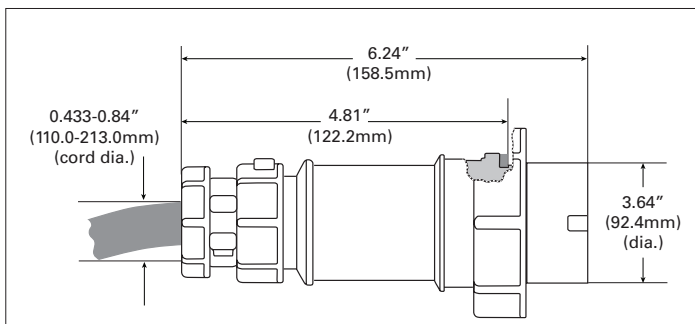


Figure 8. 16A & 20A 4-P, 5-W Plugs

20A Inlets

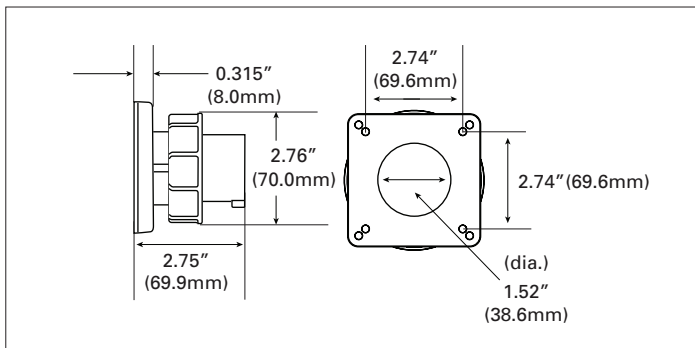


Figure 10. 16A & 20A Front, Side & Back view Inlets

16A & 20A Connectors

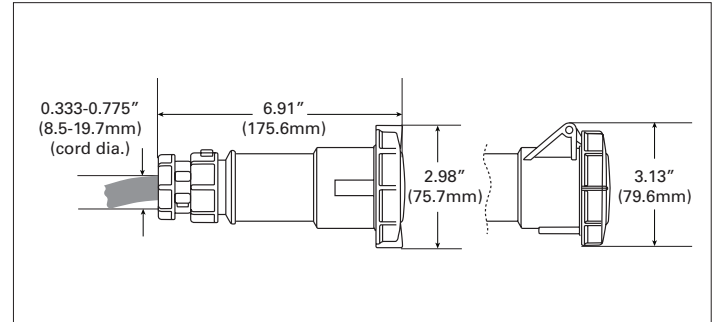


Figure 5. 16A & 20A 2-P, 3-W Underside & Side View Connectors

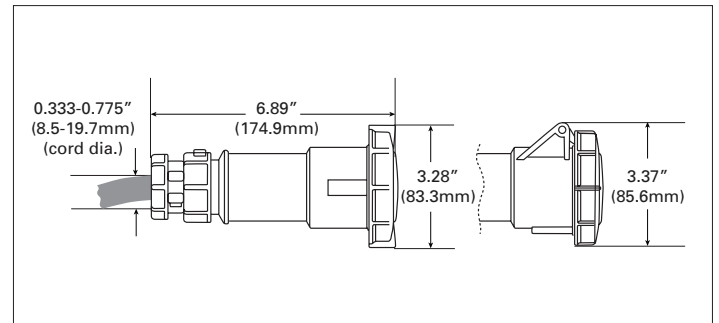


Figure 7. 16A & 20A 3-P, 4-W Underside & Side View Connectors

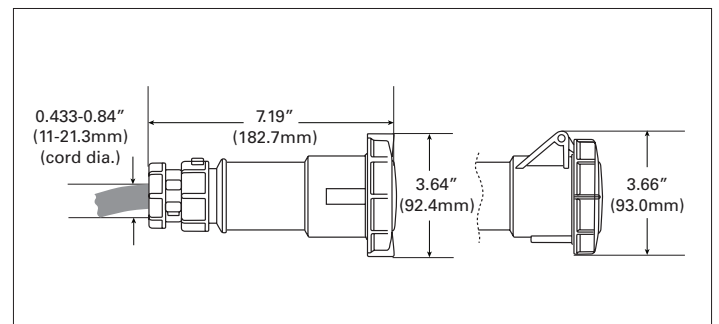


Figure 9. 16A & 20A 4-P, 5-W Underside & Side View Connectors

Project Name:	Prepared By:
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Certifications & Compliances

Catalog No.						
☐ AH320R4W	☐ AH320P4W	☐ AH320C4W	☐ AH320B4W	•	•	
☐ AH320R6WDR	☐ AH320P6WDR	☐ AH320C6WDR	☐ AH320B6WDR	•	•	•
☐ AH320R7W	☐ AH320P7W	☐ AH320C7W	☐ AH320B7W	•	•	
☐ AH420R12W	☐ AH420P12W	☐ AH420C12W	☐ AH420B12W	•	•	
☐ AH420R9WDR	☐ AH420P9WDR	☐ AH420C9WDR	☐ AH420B9WDR	•	•	•
☐ AH420R6WDR	☐ AH420P6WDR	☐ AH420C6WDR	☐ AH420B6WDR	•	•	•
☐ AH420R7W	☐ AH420P7W	☐ AH420C7W	☐ AH420B7W	•	•	
☐ AH420R5W	☐ AH420P5W	☐ AH420C5W	☐ AH420B5W	•	•	
☐ AH520R9WDR	☐ AH520P9WDR	☐ AH520C9WDR	☐ AH520B9WDR	•	•	•
☐ AH520R6WDR	☐ AH520P6WDR	☐ AH520C6WDR	☐ AH520B6WDR	•	•	•
☐ AH520R7W	☐ AH520P7W	☐ AH520C7W	☐ AH520B7W	•	•	
☐ AH520R5W	☐ AH520P5W	☐ AH520C5W	☐ AH520B5W	•	•	

KEY:  IEC  cULus  TÜV Rheinland

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

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