



Arrow Hart's pin & sleeve devices and mechanical interlocks

Pin & sleeve devices

Sturdy nylon construction, rugged design with corrosion resistant components for lasting electrical performance. Watertight sealing that provides IP69K protection so you can feel confident in even the most severe washdown environments.

IP69K
certified



Pin & sleeve mechanical interlocks

Factory-wired in a single unit for easy installation, our watertight pin & sleeve mechanical interlocks provide an interlocked switch and overload protection within an enclosure that prevents plugs from being engaged or disengaged under load.



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

IP69K testing

The IP69K test was designed specifically for rating protection against a high pressure jet stream (1160 to 1450 psi), high liquid temperature (176°F) and close nozzle distances (4" to 6") from the device surface

IP69K
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What does IP69K testing mean to you

The IP69K rating is designed to tackle high pressure, high temperature washdown applications. The "6" applies to external protection from dust. The "9" signifies protection from close-range high pressure spray downs, and the "K" applies to the high temperature of the water used. Arrow Hart's new pin & sleeve devices are designed to face some of the most severe operating conditions, often in the most challenging environments making them ideal for a wide range of markets, including food and beverage, mining, and industrial facilities.

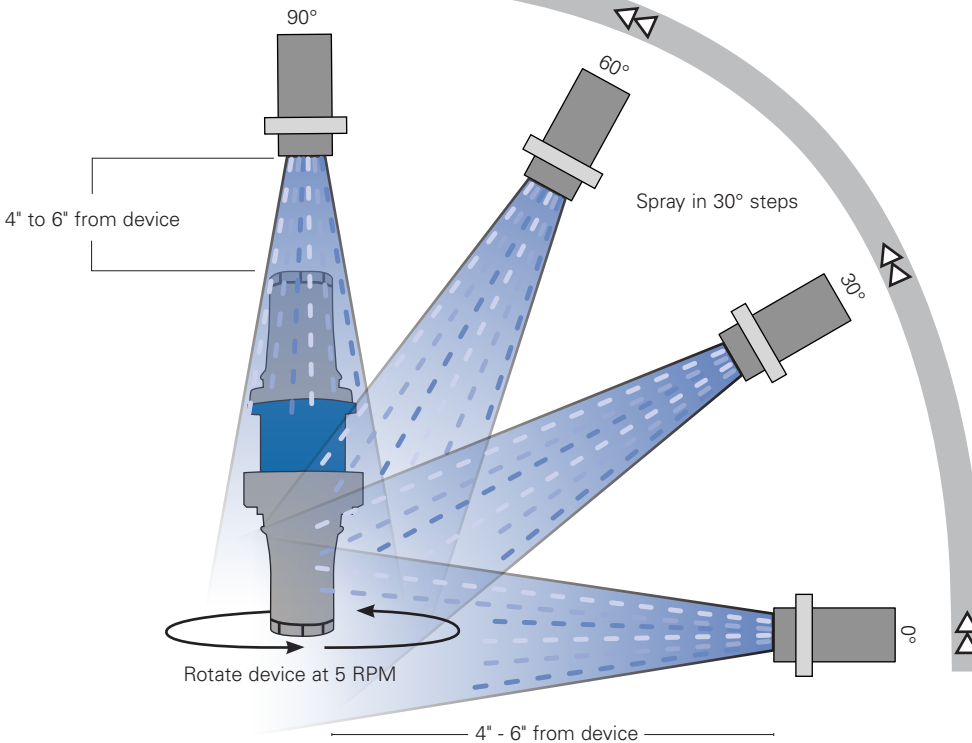
How IP69K testing works

To obtain an IP69K protection rating – a strong water jet is directed at the device from 4 directions and to achieve the rating it must not have any harmful effects. A jet nozzle at 0°, 30°, 60° and 90° to the rotating table at 176°F, 4–6 inches away at 1160–1450 psi. The test time is 2 minutes.

IP69K Test

Water temperature = 176°F (80°C)

Spray water at 1450 psi for 30 seconds



- 1 The IP69K standard requires the water pressure to be between 1160-1450 psi, at a rate of about 4 gallons/minute, and at the temperature of 176°F
- 2 The nozzle from which the water is sprayed is between 4 and 6 inches from device
- 3 Spray is applied at angles of 0°, 30°, 60°, and 90° for duration of 30 seconds at each angle, while the product is rotated at 5 RPM
- 4 IP69K ratings mean product is dust tight and protected against effects of high pressure, high temperature liquids

After testing, water must not be present inside the device

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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!

IP69K
certified

Pin & sleeve plugs features & benefits

Mechanical cord clamp with silicone 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

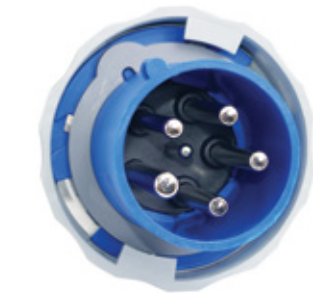
Color-coded front housing for easy and accurate identification of voltages

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 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



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Pin & sleeve receptacles features & benefits

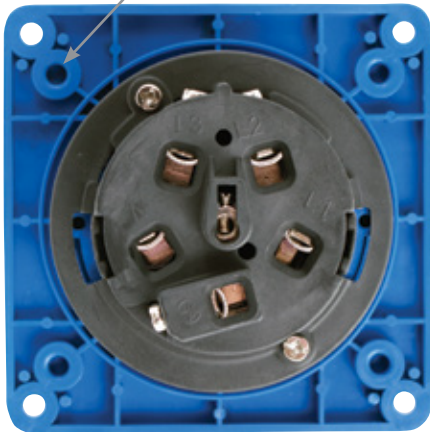
Spring-loaded self-closing cap with silicone gasket protects contacts when not in use. Watertight cap meets IP67 and IP69K protection standards

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

Standard mounting footprints and blind holes provide interchangeability with major brands



IP69K
certified



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*

*Does not include 20/30A inlets



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

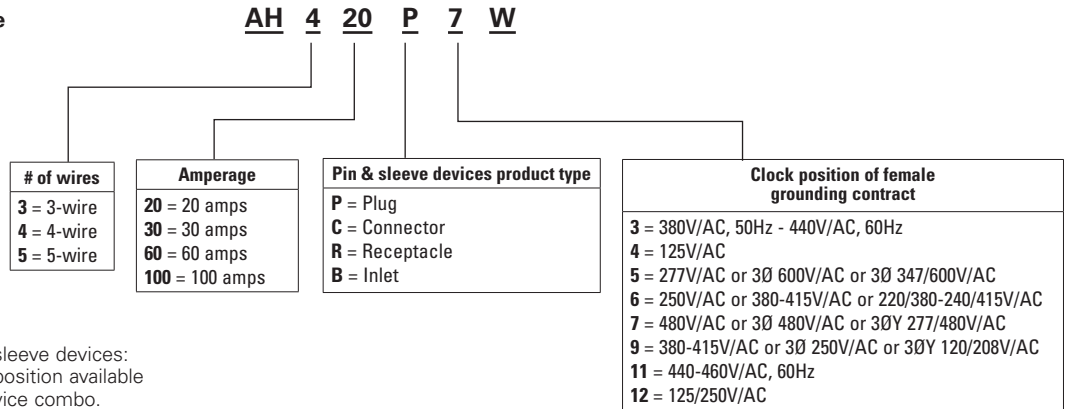
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How to order from the complete line of pin & sleeve products

Understanding IEC 309 pin & sleeve device and mechanical interlock catalog numbers

Pin & sleeve devices

**Pin & sleeve device
sample number:**
AH420P7W

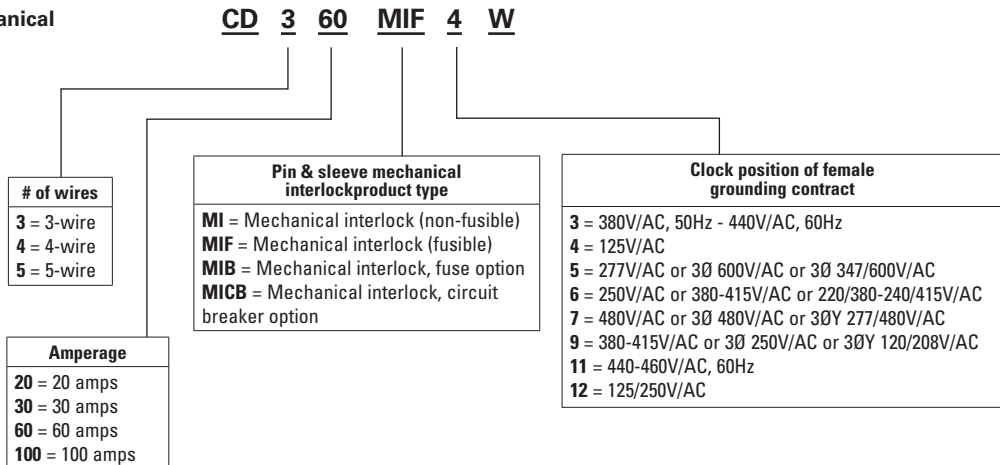


Note:

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

Pin & sleeve mechanical interlock devices

**Pin & sleeve mechanical interlock device
sample number:**
CD360MIF4W



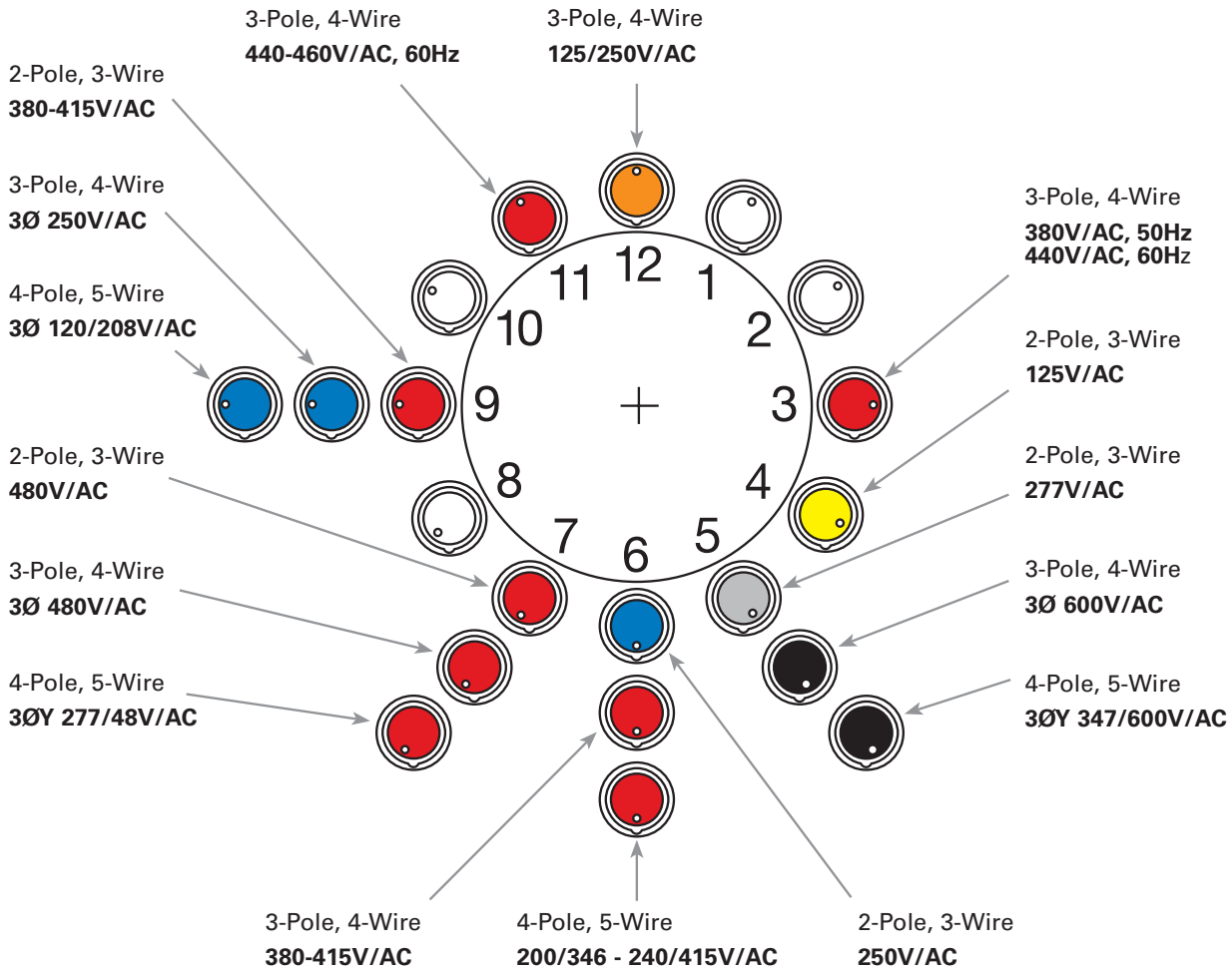
Note:

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.
Consult your Eaton wiring devices representative for details.

Understanding pin & sleeve configurations

Arrow Hart's full line of pin & sleeve products meet or exceed the rigorous IEC 309-1 and 309-2 watertight requirements, and as such are interchangeable 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



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