

New ratings are ... MAKING A SPLASH

ABB's Compact range of pilot devices and enclosures are now approved for the IP69K rating! This **high-pressure spray down** protection rating is different from the NEMA 4X rating, and *a* is applicable to many markets.



²Pushbuttons only if used with a protective silicone boot

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With these IP ratings, ABB's Compact pilot devices are even more advantageous in environments requiring a high degree of protection from dust, submersion, and high-pressure, high-temperature spray-down. This level of protection is essential in many food & beverage, pharmaceutical, and petrochemical markets.

What is IP69K?

The IP69K rating is designed to address high pressure, high temperature wash down 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.

The IP69K rating was established in 1993 as an extension to the IEC 60529 standard. It was originally intended to be a standard for road vehicles that would provide protection against foreign objects such as dust, dirt, high-pressure water, heat, and inadvertent touch.

The IP69K standard requires the water pressure to be between 1160-1450 psi, at a rate of about 4 gallons/minute,



and at a temperature of 176°F. The nozzle from which the water is sprayed is between 4 and 6 inches from the product. The spray is applied at the angles of 0°, 30°, 60°, and 90°, for duration of 30 seconds at each angle, while the product is rotated at 5 rpm.

IP69K is different from NEMA Type 4

The IP69K and NEMA Type 4 standards both require the product to protect against the entry of water during a wash/ spray down, but this is where the similarities end. The Type 4 test is mainly concerned with hose conditions involving lower pressure water at greater water volume (65 gallons/ minute), and longer distances (10-12ft). The Type 4 rating can be compared with spray from a firehose. In contrast, the IP69K test is at a very close range (5.9" max), low volume, and very high pressure/high temperature. Because in reality many operators are sprayed down at distances much closer than the approved 10-12 feet, NEMA 4X rated product can allow ingress in instances where IP69K rated product can withstand it.



Compact Pilot Devices IP69K Rating







Benefits of high-pressure wash down:

- Much less water can be used to obtain the same results as low pressure sprays, meaning – literally – "less money down the drain"
- Detergent used for cleaning is mixed per unit of water, so less detergent is used also, reducing sanitation and treatment costs
- It has been found that it is easier for an employee to effectively clean an enclosure using a high-pressure system rather than a low-pressure spray down process
- High temperatures allow for better removal of matter and bacteria on surfaces

Some markets requesting the IP69K rating:

- Food processing
- Pharmaceutical
- Petrochemical
- Waste Treatment
- Bottling
- Trucking/Transportation



ABB offers two complete ranges of pilot devices, each range completely covered by additional protection ratings, including NEMA Types 1, 12, 13, 3R, 4, and 4X.

Request your free sample today by contacting your local ABB sales representative!

If you need help locating a rep in your area, visit **www.abb-control.com**, and click **Customer Care > Rep & Distributor Finder**.



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