

IP Rating Chart

IP stands for ingress protection, or the level of water and dust protection an enclosure provides an electronic device.

IP68

PROTECTION AGAINST SOLIDS

PROTECTION AGAINST WATER

- 0 Not protected
- 1 Protected against solids larger than 50 millimeters, around the size of a racquetball
- 2 Protected against solids larger than 12 millimeters, around the size of a finger
- 3 Protected against solids larger than 2.5 millimeters, the size of a headphone jack
- 4 Protected against solids larger than 1 millimeter
- 5 Protected against dust operationally, dust can still enter the enclosure
- 6 Dustproof

- 0 Not protected
- 1 Protected against vertically dripping water in the upright position
- 2 Protected against vertically dripping water at a 15-degree angle
- 3 Protected against direct sprays at angles up to 60 degrees
- 4 Protected against splashed water at any angle
- 5 Protected against low-pressure water jets at any angle
- 6 Protected against powerful water jets at any angle
- 7 Protected against quick immersion up to one meter in depth for up to 30 minutes
- 8 Protected against continuous immersion following manufacturer-defined terms



OUR CERTIFICATIONS

IP69K test
Water Temperature = 176°F (80°C)

Spray water at 1450 psi for 30 seconds

4" to 6" from device

Rotate device at 5 RPM

4" - 6" from device

After testing, water must not be present inside the device

IP69K certified

- 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

IK	Tests	Impact energy (in Joules)
IK 00		0
IK 01		0.15
IK 02		0.2
IK 03		0.35
IK 04		0.5
IK 05		0.7
IK 06		1
IK 07		2
IK 08		5
IK 09		10
IK 10		20