

INGRESS PROTECTION RATINGS

The IP Code is published by the International Electrotechnical Commission (IEC).

What it does:

Classifies and rates the degree of protection provided against the intrusion (including body parts such as hands and fingers), dust, accidental contact, and water by mechanical casings and electrical enclosures.

For example, a product rated IP67 means that:

- The product is protected against access to hazardous parts and is dust-tight
- It is also protected against the effects of temporary submersion in water (testing requires 30 minutes at 1-meter depth)



1ST DIGIT DEFINITION

- 0** No protection against contact and ingress of objects.
- 1** Protected against any large surface of the body, such as the back of a hand. Protected against solid objects greater than 50mm in size.
- 2** Protected against access to hazardous parts by a finger or similar object. Protected against solid objects greater than 12.5mm in size.
- 3** Protected against access to hazardous parts with a tool or thick wire. Protected against solid objects greater than 2.5mm in size.
- 4** Protected against access to hazardous parts with a wire, screw, etc. Protected against solid objects greater than 1mm in size.
- 5** Protected against access to hazardous parts. Dust protected.
- 6** Protected against access to hazardous parts. Dust-tight.

2ND DIGIT DEFINITION

- 0** No protection.
- 1** Protected against water drops.
- 2** Protected against water drops at a 15 degree angle.
- 3** Protected against water spray at a 60 degree angle.
- 4** Protected against water sprayed from all directions. Limited ingress permitted.
- 5** Protected against low pressure jets from all directions.
- 6** Protected against strong jets of water. For use on ship decks. Limited ingress permitted.
- 7** Protected against the effects of temporary submersion in water. Test requires 30 minutes at 1 meter depth.
- 8** Protected against the effects of long term submersion. Customer specification applies to a specified pressure and specific testing maybe required.
- 9** Protected against high pressures associated with steam cleaning.