

IP Ratings

The IP 'Ingress Protection' rating system provides a means of classifying the Degrees of protection from dust and water afforded by electrical equipment and enclosures. The system is recognised in most countries and is set out in BS EN60529 1992 Degrees of Protection.

First Number

Protection Against **Solids**

IP

Test

0



No protection

1



Protection against solid objects over 50mm eg accidental touch by hands

2



Protection against solid objects over 12mm eg fingers

3



Protection against solid objects over 2.5mm (tools & wires)

4



Protection against solid objects over 1mm (tools, wires & small wires)

5



Protection against dust - limited Ingress (no harmful deposit)

6



Totally protected against dust

Second Number

Protection Against **Liquids**

IP

Test

0



No protection

1



Protection against vertically falling drops of water

2



Protection against direct sprays of water up to 15° from the vertical

3



Protection against sprays 60° from the vertical

4



Protection against water sprayed from all directions - limited Ingress permitted

5



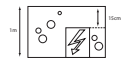
Protection against low pressure jets of water sprayed from all directions - limited Ingress permitted

6



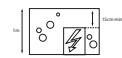
Protection against strong pressure jets of water eg for use on shipdecks - limited Ingress permitted

7



Protection against the effects of temporary immersion between 15cm and 1m. Duration of test 30 minutes

8



Protection against long periods of immersion under pressure

9k



Protection againsts strong pressures jets of water (80-100 bar) at a temperature of 80°C for durations of 30 seconds. Simulating pressure cleaning conditions on a plan floor (Food Industry etc)