

## IP Ratings

The IP rating system provides a means of classifying the degrees of protection from dust, water and impact afforded by electrical equipment and enclosures. The system is recognised in most European countries and is set out in BS EN 60529:1992 Degrees of Protection provided by enclosures (IP Code).

<b>FIRST NUMBER</b> Protection against solid objects		<b>SECOND NUMBER</b> Protection against liquids	
<b>IP</b>	<b>Tests</b>	<b>IP</b>	<b>Tests</b>
<b>0</b>	No protection	<b>0</b>	No protection
<b>1</b>	Protected against solid objects over 50mm e.g. accidental touch by hands	<b>1</b>	Protected against vertically falling drops of water
<b>2</b>	Protected against solid objects over 12mm e.g. fingers	<b>2</b>	Protected against direct sprays of water up to 15° from the vertical
<b>3</b>	Protected against solid objects over 2.5mm (tools and wires)	<b>3</b>	Protected against sprays up to 60° from the vertical
<b>4</b>	Protected against solid objects over 1mm (tools, wires and small wires)	<b>4</b>	Protected against water sprayed from all directions – limited ingress permitted
<b>5</b>	Protected against dust – limited ingress (no harmful deposit)	<b>5</b>	Protected against low pressure jets of water from all directions – limited ingress permitted
<b>6</b>	Totally protected against dust	<b>6</b>	Protected against strong jets of water e.g. for use on ship decks – limited ingress protected
		<b>7</b>	Protected against the effects of temporary immersion between 15cm and 1m. Duration of test 30 minutes
		<b>8</b>	Protected against long periods of immersion under pressure