










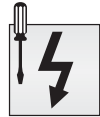
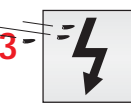








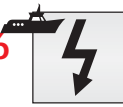


General information

IP Environmental ratings



IP ratings

indicate the degree of protection against dust, liquids and impacts. The IP degrees of protection are defined by the French standard NFC 20-010. To rate a device's degrees of protection, the letters IP are followed by up to three numbers. These numbers are defined as follows:

first number protection against solid objects	second number protection against liquids	third number protection against mechanical impacts
IP 0  no protection	IP 0  no protection	IP 0  no protection
1  protected against solid objects over 50mm (e.g. accidental touch by hands.)	1  protected against vertically falling rain or condensation	1  impact 0.225 joule 150g falling from 15cm
2  protected against solid objects over 12mm (e.g. fingers)	2  protected against direct sprays of water up to 15° from vertical	2  impact 0.375 joule 250g falling from 15cm
3  protected against solid objects over 2.5mm (tools & wires)	3  protected against sprays to 60° from vertical	3  impact 0.50 joule 250g falling from 20cm
4  protected against solid objects over 1mm (small tools & small wires)	4  protected against water sprayed from all directions	5  impact 2.00 joule 500g falling from 40cm
5  protected against dust (no harmful deposit)	5  protected against low pressure jets of water from all directions	7  impact 6.00 joule 1.5kg falling from 40cm
6  totally protected against dust	6  protected from strong jets of water (e.g. for use on ship decks)	9  impact 20.00 joule 5 kg falling from 40cm
	7  protected against the effects of immersion between 15cm and 1m	