Ingress Protection (IP) Rating

Example IP Rating

"Ingress Protection"

First Digit: **Solids Protection**

Second Digit: **Water Protection**

First Characteristic Numeral

Protection against solid objects Example



No protection.

Nonprotected. **Second Characteristic Numeral**

Protection against water			Effective
IP Level	Example	Tests	against



No protection.

Nonprotected.



Full penetration of 50mm diameter of sphere not allowed. Contact with hazardous parts not permitted.

Back of hand.

Protection against vertically falling drops of water.

Vertically dripping.



Full penetration of 12.5mm diameter of sphere not allowed. The jointed test finger shall have adequate clearance from hazardous parts.

Finger.



Protected against vertically falling drops of water with enclosure tilted 15° from the vertical.

Dripping up to 15° from the vertical.



The access probe of 2.5mm diameter shall not penetrate.

Tool.



Protected against sprays 60° from the vertical.

Limited spraying.



The access probe of 1mm diameter shall not penetrate.

Wire.



Protected against water splashed from all directions limited ingress permitted.

Splashing from all directions



Limited ingress of dust permitted (no harmful deposit). Dust protected.

Wire.

Protected against low pressure jets of water from all directions - limited ingress permitted.

Hosing jets from all directions.



No ingress of dust. Dust tight.

Wire.

Protected against strong jets of Strong hosing water, eg for use on ship decks - limited ingress permitted.

jets from all directions.



Protected against the effects of immersion between 150mm and 1m.

Temporary immersion.



Protected against continuous submersion at a specified depth.

Continuous immersion.

