The IP Code (or International Protection Rating, also interpreted as Ingress Protection Rating, consists of the letters IP followed by two digits.

As defined in international standard IEC 60529, it classifies the degrees of protection provided against the intrusion of solid objects (including body parts like hands and fingers), dust, accidental contact, and water in electrical enclosures.

The standard aims to provide users more detailed information than vague marketing terms such as waterproof.

The digits (characteristic numerals) indicate conformity with the conditions summarized in the tables below.

First Digit

The first digit indicates the level of protection that the enclosure provides against access to hazardous parts (e.g., electrical conductors, moving parts) and the ingress of solid foreign objects.

Level	Object size protected against	Effective against
0	-	No protection against contact and ingress of objects
1	>50 mm	Accidental touch by hands
2	>12.5 mm	Fingers or similar objects
3	>2.5 mm	Tools, thick wires, etc.
4	>1 mm	Most wires, screws, etc.
5	>1 mm	Protected against dust - limited ingress (no harmful deposits)
6	Dust tight	No ingress of dust; complete protection against contact

Second Digit

Protection of the equipment inside the enclosure against harmful ingress of water.

Level	Protected against	Details
0	Not protected	-
1	Dripping water	Protected against vertically falling drops of water
2	Dripping water when tilted up to 15°	Protected against direct sprays of water up to 15° from the vertical
3	Spraying water	Protected against sprays up to 60° from the vertical
4	Splashing water	Protected against water from all directions - limited ingress permitted
5	Water jets	Protected against low pressure jets of water from all directions - limited ingress permitted
6	Powerful water jets	Protected against strong jets of water, eg, for use on ship decks - limited ingress permitted
7	Immersion up to 1m	Protected against the effects of temporary immersion between 15cm & 1m. Duration of test, 30mins.
8	Immersion beyond 1m	Protected against long periods of immersion under pressure