

# INGRESS PROTECTION

The table below has been taken from BS775 defining IP numbers for luminaires. IP numbers are shown against the numbers to which they apply.

Protection of persons against contact with live or moving parts inside the enclosure and protection of equipment against ingress of solid foreign bodies. Protection against contact with moving parts inside the enclosure is limited to contact with moving parts inside the enclosure that might cause danger to persons.

## Protection of equipment against ingress of solids

### FIRST CHARACTERISTIC

NUMERAL	DEGREE OF PROTECTION
0	No protection of persons against contact with live or moving parts inside the enclosure. No protection of equipment against ingress of solid foreign bodies.
1	Protection against accidental or inadvertent contact with live or moving parts inside the enclosure by a large surface of the human body, e.g. a hand, but not protection against deliberate access to such parts. Protection against ingress of large solid foreign bodies
2	Protection against contact with live or moving parts inside the enclosure by fingers. Protection against ingress of medium size bodies.
3	Protection against contact with live or moving parts inside enclosure by tools, wires or such objects of thickness greater than 2.5mm. Protection against ingress of small solid foreign bodies.
4	Protection against contact with live or moving parts inside the enclosure by tools, wires or such objects of thickness greater than 1 mm. Protection against ingress of small solid foreign bodies.
5	Complete protection against contact with live or moving parts inside the enclosure. Protection against harmful deposits or dust. The ingress of dust is not totally prevented, but dust cannot enter in an amount sufficient to interfere with satisfactory operation of the equipment enclosed. (Dustproof)
6	Complete protection against contact with live or moving parts inside the enclosure. Protection against ingress of dust. (Dust tight)

## Protection of equipment against ingress of liquid

### SECOND CHARACTERISTIC

NUMERAL	DEGREE OF PROTECTION
0	No protection
1	Protection against drops of condensed water. of condensed water falling on the enclosure shall have no harmful effect. (Drip proof)
2	Protection against drops of liquid. Drops of falling liquid shall have no harmful effect when the enclosure is tilted at any angle up to 15° from the vertical.
3	Protection against rain. Water falling in rain at an angle equal to or smaller than 60° with respect to the vertical, shall have no harmful effect. (Rain proof)
4	Protection against splashing. Liquid splashed from any direction shall have no harmful effect. (Splash proof)
5	Protection against water jets. Water projected by a nozzle from any direction under stated conditions shall have no harmful effect. (Jet proof)
6	Protection against conditions on ships decks (deck watertight equipment). Water from heavy seas shall not enter the enclosure under prescribed conditions.
7	Protection against immersion in water. It shall not be possible for water to enter the enclosure under stated conditions of pressure and time. (Immersible)
8	Protection against indefinite immersion in water under specified pressure. It shall not be possible for water to enter the enclosure. (Submersible)