



Ingress Protection (IP) Ratings Guide

INGRESS
PROTECTION
MARKING

IP 66

SOLID PROTECTION

0	No protection
1	Protected against a solid object greater than 50 mm, such as a hand
2	Protected against a solid object greater than 12 mm, such as a finger
3	Protected against a solid object greater than 2.5mm, such as a screwdriver
4	Protected against a solid object greater than 1 mm, such as most wires or
5	Dust protected. Prevents ingress of dust sufficient to cause harm.
6	Dust tight. No ingress of dust

WATER PROTECTION

0	No protection
1	Protected against vertical dripping water
2	Protected against vertical dripping water when tilted up to 15°.
3	Protected against spraying water at an angle of 60°.
4	Protected against splashes of water at any angle.
5	Protected against low pressure water jets from any direction.
6	Protected against high pressure water jets from any direction.
7	Protected against the effects of immersion in water between 15cm and
8	Protected against the effects of immersion in water deeper than 1m
9	Protected from close-range, powerful, high-temperature water jets



The IP rating system is defined in international standard IEC 60529. IP ratings are used to classify and define ingress protection of electrical devices such as luminaires against solids and water.