















IP-Schutzklassen

IP Ingress Protection ("Eindringenschutz") gem. Norm DIN EN 60529 (IEC 60529).

1. Ziffer Schutz des Geräts gegen Eindringen von festen Fremdkörpern folgender Größen:

0	Nicht geschützt	Ohne Symbol
1	ab 50,0 mm Durchmesser (Handrückenschutz)	
2	ab 12,5 mm Durchmesser (Fingerschutz)	
3	ab 2,5 mm Durchmesser (Werkzeugschutz)	
4	ab 1,0 mm Durchmesser (Drahtschutz)	
5	staubgeschützt (vollständiger Berührungsschutz)	
6	staubdicht (vollständiger Berührungsschutz)	

2. Ziffer Schutz des Geräts gegen Eindringen von Wasser mit schädlichen Auswirkungen durch:

0	Nicht geschützt	Ohne Symbol
1	senkrecht Tropfen	
2	Tropfen mit einem Winkel zur Senkrechten von 15°	
3	Sprühwasser (bis 60° gegenüber der Senkrechten)	
4	Spritzwasser	
5	Strahlwasser (aus allen Richtungen)	
6	Vorübergehende Überflutung	
7	Zeitweiliges Untertauchen in Wasser	
8	Dauerndes Untertauchen in Wasser	
9	Wasser aus jeder Richtung bei stark erhöhtem Druck (Hochdruck-/Dampfstrahlreiniger, 80 ... 100 bar)	

IP Explanation and Ratings

EN 60529 outlines an international classification system for the sealing effectiveness of enclosures of electrical equipment against the intrusion into the equipment of foreign bodies (i.e. tools, dust, fingers) and moisture. This classification system utilizes the letters "IP" ("Ingress Protection") followed by two or three digits. (A third digit is sometimes used. An "x" is used for one of the digits if there is only one class of protection; i.e. IPX4 which addresses moisture resistance only.)

Degrees of Protection - First Digit

The first digit of the IP code indicates the degree that persons are protected against contact with moving parts (other than smooth rotating shafts, etc.) and the degree that equipment is protected against solid foreign bodies intruding into an enclosure.

0	No special protection
1	Protection from a large part of the body such as a hand (but no protection from deliberate access); from solid objects greater than 50mm in diameter.
2	Protection against fingers or other object not greater than 80mm in length and 12mm in diameter.
3	Protection from entry by tools, wires, etc., with a diameter of thickness greater than 1.0mm
4	Protection from entry by solid objects with a diameter or thickness greater than 1.0mm
5	Protection from the amount of dust that would interfere with the operation of the equipment
6	Dust tight

Degrees of Protection - Second Digit

The second digit indicates the degree of protection of the equipment inside the enclosure against the harmful entry of various forms of moisture (e.g. dripping, spraying, submersion, etc.)

0	No special protection
1	Protection from dripping water.
2	Protection from vertically dripping water.
3	Protection from sprayed water
4	Protection from splashed water.
5	Protection from water projected from a nozzle
6	Protection against heavy seas, or powerful jets of water.
7	Protection against immersion
8	Protection against immersion.
9	Protection against complete, continuous submersion in water.