

## DEGREE OF PROTECTION PROVIDED BY CASING (IP CODE)

IP degree ranks and evaluates the degree of protection provided by casings against the intrusion of solid particles (such as objects and dust) and the access of fluids, according to EN 60529. The IP degree is given by the combination of the first and the second digit of the following tables.

1° DIGIT GRADE OF PROTECTION AGAINST SOLID OBJECTS			2° DIGIT DEGREE OF PROTECTION AGAINST WATER	
MEANING FOR THE PROTECTION OF EQUIPMENT	DEGREE	MEANING FOR THE PROTECTION OF PEOPLE	DEGREE	MEANING FOR THE PROTECTION OF EQUIPMENT
No protection	0		0	No protection
Protection against solid objects with a diameter up to 50 mm	1	Protection against contact with large areas of the body (e.g. back of the hand)	1	Protection against vertically falling drops of water (e.g. condensation) for 10 minutes
Protection against solid objects with a diameter up to 12.5 mm	2	Protection against contact with fingers	2	Protection against direct sprays of water up to 15 degrees from the vertical for 2.5 minutes for each position
Protection against solid objects with a diameter up to 2.5 mm	3	Protection against tools and wires with a diameter over 2.5 mm	3	Protection against direct sprays of water up to 60 degrees from the vertical for 10 minutes
Protection against solid objects with a diameter up to 1 mm	4	Protection against tools and wires with a diameter over 1 mm	4	Protection against water sprayed from all directions for 10 minutes
Protection against dust: limited ingress (i.e. no harmful deposit)	5	Dust protection	5	Protected against low-pressure jets of water from all directions for at least 3 minutes
Total protection against dust	6	Dust protection	6	Protected against strong jets of water from all directions for at least 3 minutes
			7	Protected against the effect of immersion between 15 cm and 1 m for 30 minutes
			8	Protected against the conditions given by the manufacturer, which must be stricter than for digit 7