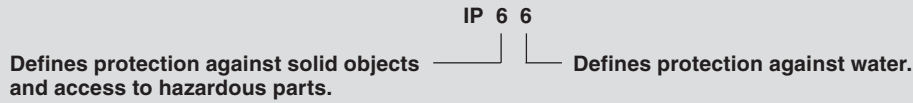
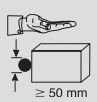

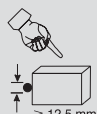
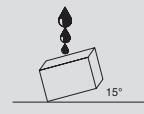
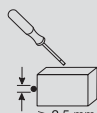
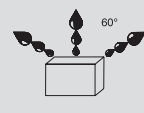
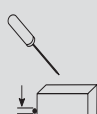
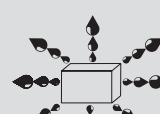
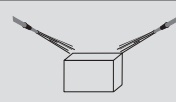
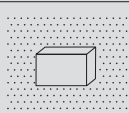
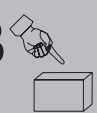
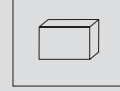
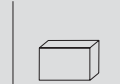


Degree of Protection / IP Codes

A coding system is defined by IEC 529 / EN60529 for the classification of degrees of protection provided by enclosures of electrical equipment against solid objects and water. This coding comprises the letters 'IP' followed by a two digit code as follows:



Degrees of protection indicated by a number up to and including "6" implies compliance with the requirements for all lower numbers. For a code with a second digit of 7 or 8, a second code must be stated to specify protection against water jets or spray, e. g. IP66/ IP67/ IP68.

1 st digit	Protection against solid objects and access to hazardous parts	2 nd digit	Protection against water
0	No protection.	0	No protection.
1	 No ingress by solid objects ≥ 50 mm dia nor access to hazardous parts with the back of the hand.	1	 Vertically falling drops of water shall have no harmful effect.
2	 No ingress by solid objects ≥ 12.5 mm dia nor access to hazardous parts with a finger.	2	 Vertically falling drops of water shall have no harmful effect when the enclosure is tilted at any angle up to 15° from vertical.
3	 No ingress by solid objects ≥ 2.5 mm dia nor access to hazardous parts with a tool.	3	 Water sprayed at up to 60° from the vertical shall have no harmful effect.
4	 No ingress by solid objects ≥ 1.0 mm dia nor access to hazardous parts with a wire.	4	 Water splashed from any direction shall have no harmful effect.
5	 Dust protected. Ingress of dust is not completely prevented, but there should be no harmful deposits. No access to hazardous parts with a wire.	5	 Jets of water projected from any direction shall have no harmful effect.
6	 Dust tight. No ingress of dust. No access to hazardous parts with a wire.	6	 Strong jets of water projected from any direction shall have no harmful effect.
1B	 Test finger penetration to a maximum of 80 mm must not contact hazardous parts.	7	 Temporary immersion in water shall not result in ingress of harmful quantities of water.
		8	 Continuous immersion in water shall not result in ingress of harmful quantities of water.