

The protection class is indicated by two digits

IP 6 5

Code letter	
IP	International protection

Protection against entry of solid objects, indicated by the first digit

First digit	Degree of protection	
	Short description	Definition
0	No protection	-
1	Protected against entry of solid 50 mm objects 50 mm or larger in diam.	The test probe, a 50 mm diameter ball, may not fully penetrate. *)
2	Protected against entry of solid objects 12.5 mm or larger in diam.	The test probe, a 12.5 mm diameter ball, may not fully penetrate. *)
3	Protected against entry of solid objects 2.5 mm or larger in diam.	The test probe, a 2.5 mm diameter ball, may not penetrate at all. *)
4	Protected against entry of solid objects 1.0 mm or larger in diam.	The test probe, a 1.0 mm diameter ball, may not penetrate at all. *)
5	Protected against dust	Ingress of dust is not totally prevented, but dust may not enter in sufficient quantity to interfere with satisfactory operation or security of the equipment.
6	Dust tight	Protection against any ingress of dust

*) Note: The full diameter of the test probe shall not pass through an opening of the enclosure.

Protection against ingress of water, indicated by the second digit

Second digit	Degree of protection	
	Short description	Definition
0	No protection	-
1	Protected against falling water drops	Vertically falling drops shall have no harmful effects.
2	Protected against falling water drops when enclosure is tilted at any angle up to 15°	Vertically falling drops shall have no harmful effects, when the enclosure is tilted at any angle up to 15° on either side of the vertical.
3	Protected against spraying water	Water sprayed at any angle up to 60° on either side of the vertical shall have no harmful effects.
4	Protected against splashing water	Water splashed against the enclosure from any direction shall have no harmful effects.
5	Protected against low jets of water	Water directed at the enclosure from any direction in low jets shall have no harmful effects.
6	Protected against powerful jets of water	Water directed at the enclosure from any direction in powerful jets shall have no harmful effects.
7	Protected against the effects of temporary immersion in water	Water may not ingress in such quantities as to cause harmful effects when the enclosure is temporarily immersed in water under standardized pressure and time conditions.
8	Protected against the effects of continuous immersion in water	Water may not ingress in such quantities as to cause harmful effects when the enclosure is continuously immersed in water under conditions to be agreed between the manufacturer and the user. However, the conditions must be more severe than those for digit 7.
9	Protected against water under high pressure and jets of water with excessive temperatures	Water directed at the enclosure from any direction under considerably high pressure and temperatures shall have no harmful effects.