

IP Codes and their significance

Numeral		
0	Not protected	—
1	Protected against solid foreign objects of 50 mm diam. and greater.	The object probe, sphere of 50 mm diam. shall not fully penetrate. ¹
2	Protected against solid foreign objects of 12.5 mm diam. and greater.	The object probe, sphere of 12.5 mm diam., shall not fully penetrate. ¹
3	Protected against solid foreign objects of 2.5 mm diam. and greater.	The object probe of 2.5 mm diam., shall not penetrate at all. ¹
4	Protected against solid foreign objects of 1 mm diam. and greater.	The object probe of 1.0 mm diam., shall not penetrate at all. ¹
5	Dust-protected	Ingress of dust is not totally prevented, but dust shall not penetrate in a quantity to interfere with satisfactory operation of the apparatus or to impair safety.
6	Dust-tight	No ingress of dust.
The full diameter of the object probe shall not pass through an opening of the enclosure.		

Second Characteristic Numeral	DEGREE OF PROTECTION (Second Number in the Code)	
	Brief Description	Definition
0	Not protected	—
1	Protected against vertically falling water drops.	Vertically falling drops shall have no harmful effects.
2	Protected against vertically falling water drops when enclosures is tilted up to 15°.	Vertically falling drops 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 an 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 water jets.	Water projected in jets against the enclosure from any direction shall have no harmful effects.
6	Protected against powerful water jets.	Water projected in powerful jets against the enclosure from any direction shall have no harmful effects.
7	Protected against the effects of temporary immersion in water.	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed 1 meter in water under standardized conditions of pressure and time.
8	Protected against the effects of continuous immersion in water.	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be agreed between manufacturer and the user, but are more severe than for number 7.