



(IP) Rating IEC 60529

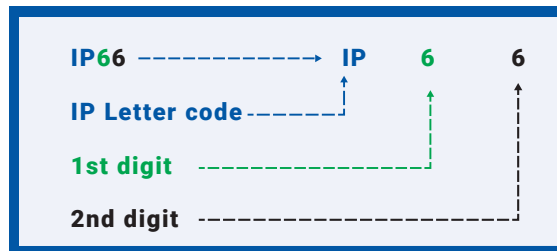
What is ingress protection (IP) code:

The IP Code refers to the different levels of protection the enclosure provides and gives a means of classifying the degrees of protection from dust, water and impact afforded by electrical equipment and enclosures.

Degree Of Protection:

Degrees of Protection (Foreign Bodies) - 1st Digit: The first digit of the IP code indicates the degree of protection against solid foreign objects from entering the electrical device. The table below outlines the level of protection against foreign objects for each level.

Degrees of Protection (Moisture) - 2nd Digit: The second digit of the IP code indicates the degree of protection against the ingress of various forms of moisture (e.g. drip, spray, submersion, etc.) into the component. Tests to determine the level of protection are carried out with fresh water and do not take into account the use of solvents.












FIRST DIGIT

Protection against solid objects

0	No Protection	
1	Protected against a solid object of 50 mm diameter and greater.	
2	Protected against a solid object of 12,5 mm diameter and greater.	
3	Protected against solid object of 2,5 mm diameter and greater.	
4	Protected against solid object of 1,0 mm diameter and greater.	
5	Dust protected. Prevents ingress of dust sufficient to cause harm.	
6	Dust tight.	

SECOND DIGIT

Protection against liquids / moisture

0	No Protection.	
1	Protected against vertically falling water drops.	
2	Protected against vertically falling water drops when enclosure is tilted up to 15°.	
3	Protected against water sprayed at an angle up to 60° on either side.	
4	Protected against water splashed against the component from any direction.	
5	Protected against water projected in jets from any direction.	
6	Protected against water projected in powerful jets from any direction.	
7	Protected against temporary immersion in water between 150 mm to 1 meter.	
8	Protected against continuous immersion water.	



The IP rating of an Ex cable gland should include the interface seal specified by the manufacturer. Even with a good IP rating, water or other liquids may enter an apparatus through unfilled cable. The use of a CCG barrier gland can stop this. If water ingress cannot be avoided then use a CCG breather drain plug or CCG breather adaptor or CCG drain adaptor.