

IP protection classes

Overview table of the degrees of protection against dust and water

Definition of the protection classes against DUST and WATER:

According to EN 60529 the protection against the penetration of foreign bodies and humidity is characterized according to a fixed code.

This code consists of the letters IP followed by 2 numerals.

The first numeral indicates the degree of protection against dust, the second numeral informs on the protection against water. The numerals indicate the degree of protection as per the table below.

1. numeral	Degrees of protection against dust	2. numeral	Degrees of protection against water
0	Not protected	0	Not protected
1	Protected against solid foreign bodies of 50 mm Ø and larger	1	Protected against dripping water
2	Protected against solid foreign bodies of 12,5 mm Ø and largergrösser	2	Protected against dripping water if the housing is inclined at an angle of up to 15°
3	Protected against solid foreign bodies of 2,5 mm Ø and larger	3	Protected against spray water
4	Protected against solid foreign bodies of 1,0 mm Ø and larger	4	Protected against splash water
5	Protected against dust	5	Protected against jets of water
6	Dust-tight	6	Protected against strong jets of water
		7	Protected against the effects of temporary immersion in water
		8	Protected against the effects of long-term immersion in water

Example: A device with the degree of protection (protection class) IP 66 is protected against dust-tight (6) and strong jets of water (6). The higher the numeral, the better the protection.