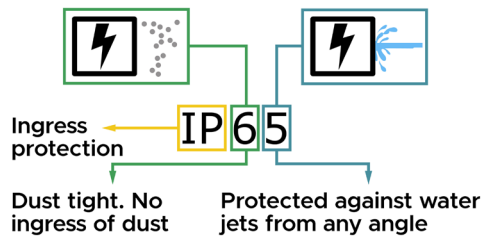


# DEGREES OF IP PROTECTION

IP is an acronym “Ingress Protection”. It is a measurement of the protection an item will have against solid objects (dust, sand, dirt, etc.) and liquids. An IP rating is comprised of 2 numbers. The first number refers to the protection against solid objects (dust, etc.) and the second number refers to protection against liquids.



## What is an IP Rating?















Each IP rating has two numbers, both of which give you information about the protection level. A higher number means greater protection against solids and liquids.

- The first number (0-6) refers to the level of protection against solid objects and moving parts, such as dust, debris, or other solid matter.
- The second number (0-8) references the level of liquid and moisture protection.

Take a look at the chart below to better understand the protection offered with each number.

## IP rating chart

IP ratings are represented by combining the first and second digits of the following columns.

1 <sup>st</sup> DIGIT - SOLID	DEGREE OF PROTECTION AGAINST SOLID OBJECTS	2 <sup>nd</sup> DIGIT- WATER	DEGREE OF PROTECTION AGAINST WATER
0	No protection	0	No protection
1	 Protected against a solid object greater than 50mm, such as a hand	1	 Protected against water drops
2	 Protected against a solid object greater than 12.5mm, such as a finger	2	 Protected against water drops at a 15-degree angle
3	 Protected against a solid object greater than 2.5mm, such as a small tool	3	 Protected against water spray at a 60-degree angle
4	 Protected against a solid object greater than 1.0mm, such as a wire	4	 Protected against water splashing from any angle
5	 Dust protected. Prevents ingress of dust sufficient to cause harm	5	 Protected against water jets from any angle
6	 Dust tight. No ingress of dust	6	 Protected against powerful jets from any angle and temporary flooding
		7	 Protected against the effects of temporary submersion in water (30 minutes at 0.15 to 1 meter)
		8	 Protected against the effects of permanent submersion in water (up to 3 meters). Depth specified by manufacturer