

IP Ratings



SOLIDS

IP[xx]

WATER

X	X means there is no data available to specify a protection rating with regard to this criterion.	X means there is no data available to specify a protection rating with regard to this criterion.	X
0	No protection against contact and ingress of objects	No protection against ingress of water	0
1	Effective against Any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part. > 50 mm / 2.0 in	Protection against dripping water. Tested for 10 minutes.	1
2	Effective against fingers or similar objects. > 12.5 mm / 0.49 in	Protection against dripping water when tilted at 15°. Tested for 10 minutes. Water equivalent to 3 mm (0.12 in) rainfall per minute	2
3	Effective against tools, thick wires, etc. > 2.5 mm / 0.098 in	Protection from water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect.	3
4	Effective against most wires, slender screws, large ants etc. > 1 mm / 0.039 in	Protection from water splashing against the enclosure from any direction shall have no harmful effect.	4
5	Effective against ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment. Dust protected.	Protection from water projected by a nozzle (6.3 mm (0.25 in) against enclosure from any direction shall have no harmful effects.	5
6	Effective against no ingress of dust; complete protection against contact (dust-tight). A vacuum must be applied. Test duration of up to 8 hours based on airflow. Dust-tight.	Protection from water projected in powerful jets (12.5 mm (0.49 in) against the enclosure from any direction shall have no harmful effects.	6
Sometimes on IP Ratings, there might be a letter at the end of the code IPXX. This is the supplementary letter and it is used to denote supplementary information from the product standard.		Protection from water projected in powerful jets (6.3 mm (0.25 in) nozzle) against the enclosure from any direction, under elevated pressure, shall have no harmful effects.	6K
D	Wire	Protection from ingress of water in harmful quantity not be possible when enclosure is immersed in water under defined conditions of pressure and time (up to 1 meter (3 ft 3 in) of submersion).	7
F	Oil Resistant	The equipment is suitable for continuous immersion in water under conditions that shall be specified by the manufacturer.	8
H	High Voltage Apparatus		
M	Device Is In Motion	Protected against close-range high pressure, high-temperature spray downs.	9K
S	Device Is Standing Still		
W	Certain Weather Conditions		