



IP Ratings (Ingress protection)

IP-Ingress Protection Ratings

IP Ratings are developed by the European Committee for Electro Technical Standardization (CENELEC) (described IEC/EN 60529), specify the environmental protection an enclosure provides.

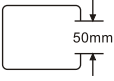

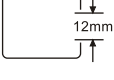


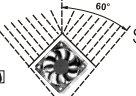
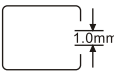







The IP rating normally has two (or three) digits:

1. Protection from solid objects or materials
2. Protection from liquids
3. Protection against mechanical impacts (commonly omitted)

The IP Rating system(see the table below)

Example - IP Rating: IP 55

The first digit "5" : the fan is protected from the total touch protection and no harmful ingress of dust.
 the second digit "5": the fan is protected from the water jets from any direction and no harmful ingress of water.

IP Rating: IP 55=IP Letter Code _____ IP First digit _____ 5 Second digit _____ 5			
First digit	Protection from solid objects	Second digit	Protection from solid objects
0	Non Protection	0	Non Protection
1	 Touching by finger or 50mm dia. objects	1	 Vertical water droplets No harmful ingress
2	 Touching by finger or 12mm dia. objects	2	 Showering at 15° No harmful ingress
3	 Touching by tools or wire 2.5mm dia. or 2.5mm dia. objects	3	 Showering at 60° No harmful ingress
4	 Touching by tools or wire 1.0mm dia. or 1.0mm dia. objects	4	 Splashing from any directions No harmful ingress
5	 Total touch protection or no harmful ingress of dust	5	 Water jets from any directions No harmful ingress
6	 Total touch protection or no ingress of dust	6	 Large volumes of water No ingress
Note: EN 60529 does not specify sealing effectiveness against the following : Mechanical damage of the equipment; The risk of explosions; Certain types of moisture conditions: e.g. those that are produced by condensation; corrosive vapours; fungus; vermin		7	 Immersion up to 1 meter No ingress
		8	 Submersion at specified depths exceeding 1 meter No ingress