## IP RATING GUIDE



## INGRESS PROTECTION

LEVEL	EFFECTIVE AGAINST	DESCRIPTION		LEVEL	PROTECTIVE AGAINST	EFFECTIVE AGAINST
X	-	X means there is no data available to specify a protection rating with regard to one of the criteria.		0	None	-
	1	No protection against contact and ingress of objects.		1	Dripping water	Dripping water (vertically falling drops) shall have no harmful effect on the specimen when mounted in its normal operating position onto a turntable and rotated at 1 RPM.
1	>50mm	Any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part.		2	Dripping water when tilted at 15°	Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle of 15° from its normal position. A total of 4 positions are tested within 2 axes.
2	>12.5mm	Fingers or similar objects.		3	Spraying water	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect (utilising an oscillating fixture, or a spray nozzle with a counterbalanced shield).
3	>2.5mm	Tools, thick wires, etc.		4	Splashing of water	Water splashing against the enclosure from any direction shall have no harmful effect (utilising an oscillating fixture or a spray nozzle with no shield).
4	>1mm	Most wires, slender screws, large ants etc.		5	Water jets	Water projected by a nozzle (6.3mm at 12.5 litres/minute) against enclosure from any direction shall have no harmful effects.
5	Dust protected	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment.		6	Powerful water jets	Water projected in powerful jets (12.5mm nozzle at 100 litres/minute) against the enclosure from any direction shall have no harmful effects.
6	Dust tight	No ingress of dust; complete protection against contact (dust tight). A vacuum must be applied. Test duration of up to 8 hours based on air flow.		7	Immersion, 1m depth	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water of 1m depth for 30 minutes.
EXAMPLE	Ingress Protection	First digit: Solid particle protection  Second digit: Liquid ingress protection	•	8	Immersion, 1m or more depth	The equipment is suitable for continuous immersion in water under conditions specified by the manufacturer with depth & duration greater than requirements for IPX7.





