



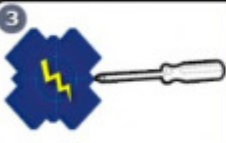

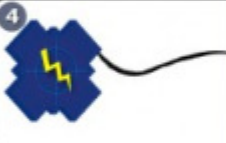

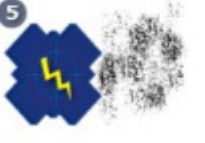

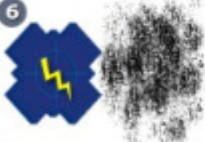





# IP RATINGS

IP indication	Solid particle protection	Liquid ingress protection	Mechanical impact resistance	Other protections
IP	Single numeral: 0-6	Single numeral: 0-8	Single numeral: 0-9	Single letter
Mandatory	Mandatory	Mandatory	No longer used	Optional

First number is the Solid Particle Protection; Second Number is the Liquid Ingress Protection

## IP RATINGS CHART

IP	EXAMPLE	SOLID PROTECTION	IP	EXAMPLE	LIQUID PROTECTION
1		Protected against a solid object greater than 50mm, such as a hand	1		Protected against vertically falling drops of water. Limited ingress permitted
2		Protected against a solid object greater than 12.5mm, such as a finger	2		Protected against vertically falling drops of water w/ enclosure tilted 15° from vertical. Limited ingress permitted
3		Protected against a solid object greater than 2.5mm, such as a screwdriver	3		Protected against sprays to 60° from the vertical. Limited ingress permitted
4		Protected against a solid object greater than 1.0mm, such as a wire	4		Protected against water splashed from all directions. Limited ingress permitted
5		Dust Protected. Limited ingress of dust permitted	5		Protected against jets of water. Limited ingress permitted
6		Dust Tight. Zero ingress of dust permitted	6		Protected against strong jets of water. Limited ingress permitted
			7		Protected against the effects of immersion between 15cm and 1m
			8		Protected against long periods of immersion under pressure