



IP ratings

Data Sheet

The IP rating system provides a means of classifying the degrees of protection from dust, water and impact afforded by electrical equipment and enclosures.

The system is recognised in most European countries and is set out in BS EN 60529: 1992 Degrees of protection provided by enclosures (IP code).

FIRST NUMBER Protection against solid objects		SECOND NUMBER Protection against liquids	
IP	TESTS	IP	TESTS
0	no protection	0	no protection
1	protected against solid objects over 50mm, eg. accidental touch by hands.	1	protected against vertically falling drops of water.
2	protected against solid objects over 12mm, eg. fingers.	2	protected against direct sprays of water up to 15° from the vertical.
3	protected against solid objects over 2.5mm (tools + wires).	3	protected against sprays to 60° from the vertical.
4	protected against solid objects over 1mm (tools, wires + small wires).	4	protected against water sprayed from all directions - limited ingress permitted.
5	protected against dust - limited ingress (no harmful deposit).	5	protected against low pressure jets of water from all directions - limited ingress permitted.
6	totally protected against dust.	6	protected against strong jets of water, eg. for use on shipdecks - limited ingress permitted.
		7	protected against the effects of temporary immersion between 15cm and 1m. Duration of test 30 minutes.
		8	protected against long periods of immersion under pressure.

Note: When an IP rating is included in the **RS** Catalogue, certain points should be taken into consideration as to its interpretation:

1. Although an enclosure has a high IP rating, the equipment being used in conjunction with it may reduce this (eg. through mounted components, accessories and methods of cable entry).
2. An IP rating may be quoted with regard to the maximum protection from the front of the enclosure (eg. a pushbutton may afford protection through the actuator and by means of sealing around the mounting hole). This rating may not apply to the rear of the component.

The following products are available from **RS** with IP ratings. Please refer to current **RS** Catalogue for full details.

ABS sealed boxes
 Appliance connectors
 Cable glands
 Cam switch enclosures
 Camera housings
 Camsafe switch
 Corrosion resistant fluorescent lighting
 Diecast boxes
 DIN rail enclosures and mounting boxes
 DOL starters
 Elapsed time meters
 Electrically operated bolt
 Emergency lighting
 Emergency stop buttons
 Equipment cases
 Flexible conduit
 Floodlighting
 Flush mounting enclosures
 Fuseholders
 General purpose tungsten lighting
 General purpose wall mounting enclosures
 Guard switches
 GRP enclosures
 Hazardous area enclosures
 Heavy duty equipment cases
 Impulse counters
 Industrial footswitch
 Industrial key switches
 Industrial latching switches
 Industrial lever switches
 Industrial microswitches
 Industrial pushbuttons
 Industrial pushbutton stations
 Industrial start/stop switches
 Industrial switch enclosures
 Industrial wall mounting enclosures
 In line RCD
 Intruder detectors
 Keypad switches
 Light sensitive switches

Light switches
 Limit switches
 Local isolators
 Manual motor starters
 Moulded enclosures
 Panel mounting counters
 Panel mounting tachometers
 Panel switches
 Pliable conduit
 Polycarbonate wall boxes
 Polyester enclosures
 Programmable 7-day timeswitch
 Proximity switches
 Rear mounting enclosures
 Rechargeable handlamp
 Rotary cam switches
 Rotating mirror beacons
 Sealed limit switches
 Security lighting
 Single path photo-relay systems
 Single phase soft starters
 Stainless steel wall boxes
 Sub-miniature limit switches
 Surface mounting enclosures
 Switch fuses
 Timeswitches
 Universal guard switch
 Wall mounting enclosures and housings
 Wall mounting RCCB/MCB enclosures
 Wall mounting RCCB/MCB socket outlet
 Weatherproof thermostats.

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