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 | _ |
| 0 | - | 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. | 6к | Powerful water jets with increased pressure | Water projected in powerful jets (6.3mm nozzle at 75 litres/minute) against the enclosure from any direction, under elevated pressure, shall have no harmful effects. |
| EXAMPLE: | | 68 | 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. |
| | | | 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. |
| | Ingress Protection S | First digit: Second digit: Solid particle Liquid ingress protection protection | 9к | Powerful high temperature water jets | Protected against close-range high pressure, high temperature (80°C) spray downs. |

QUALITY STANDARD

Brown & Watson International Pty Ltd is fully accredited to ISO9001.

We have an in house Environmental Laboratory which we use to test our products for Ingress Protection (IP) from dust, water and humidity to help ensure they withstand our harsh Australia conditions and international standards. Some of the tests and equipment we use to check the quality of our products include a Dust Chamber, Thermal Shock Chamber, Submersion Tank, Rain Chamber and Climate Chamber.

