

Using Ingress Protection (IP) Ratings to help select proper equipment for your application...

For load cell sealing techniques, Rice Lake Weighing Systems uses the Ingress Protection (IP) rating system. We find the IP numbers and their definitions are suitable for the classification of load cells and only apply IP numbers to such cells. The IP numbers on a load cell further specify the treatment a specific cell can endure in environments more severe than simple washdown.

Example: Protection level offered
by an IP67 rated product — **IP 67**

Protection against solid objects
First number (in this case 6)

- 0 No protection
- 1 Protected from solid objects up to 50 mm (e.g., accidental touch by hands)
- 2 Protected from solid objects up to 12 mm (e.g., fingers)
- 3 Protected from solid objects more than 2.5 mm (e.g., tools and small wires)
- 4 Protected from solid objects more than 1 mm (e.g., small wires)
- 5 Protected from dust; limited entrance (no harmful deposit)
- 6 Totally protected from dust

Protection against liquids
Second number (in this case 7)

- 0 No protection
- 1 Protected from vertically-falling drops of water (e.g., condensation)
- 2 Protected from direct sprays of water up to 15° from vertical
- 3 Protected from direct sprays of water up to 60° from vertical
- 4 Protected from water sprayed from all directions; limited entrance allowed
- 5 Protected from low pressure jets of water from all directions; limited entrance allowed
- 6 Protected from strong jets of water (e.g., for use on ship decks); limited entrance allowed
- 7 Protected from the effects of immersion between 15 cm and 1 m for 30 minutes
- 8 Protected from extended periods of immersion under pressure

IP Numbers with Hermetically Sealed (HS) or Environmentally Protected (EP) Ratings

Rating	Protection
EP	Dust proof, not protected from moisture or water
IP65	Dust proof, protected from splashes and low-pressure jets
IP66	Dust proof, protected from strong water jets
IP67	Dust proof, protected from temporary immersion in water 1 meter deep for 30 minutes
IP68	Dust proof, protected from continuous immersion in water under more severe conditions than IP67
IP66/68	Dust proof, protected from strong water jets and/or constant immersion
IP69	Dust proof, protected from high pressure washing and steam cleaning