

## IP RATINGS FOR ELECTRICAL EQUIPMENT

**Many of our products have IP Ratings – e.g. our LED Rebel Lights are rated IP 68**  
 The first number defines the level of protection against penetration of solid objects into the housing of the product. The second number defines the level of protection against penetration of liquids into the housing.

First Number	Degree of Protection SOLIDS	Second Number	Degree of Protection LIQUIDS
0	No protection against contact or entry of solids	0	No protection
1	Protection against – - Accidental contact by hand, but not deliberate contact. - Large objects (> 50mm)	1	Protection against drops of condensed water. Condensed water falling on housing shall have no effect.
2	Protection against – - Contact by fingers - Medium sized foreign objects (> 12mm)	2	Protection against drops of liquid. Drops of falling liquid shall have no effect when housing is tilted to 15 degrees from vertical.
3	Protection against – - Contact by tools, wire, etc. - Small foreign objects (> 2.5mm)	3	Protection against rain. No harmful effect from rain at angle less than 60 degrees from vertical.
4	Protection against – - Contact by small tools and wires - Small foreign objects (> 1mm)	4	Protection against splashing from any direction.
5	Complete protection against – - Contact with live or moving parts Protection against – - Harmful deposits of dust	5	Protection against water jets from any direction
6	Complete protection against – - Live or moving parts Protection against – - Penetration of dust	6	Protection against conditions on a ship's deck. Water from heavy seas will not enter.
		7	Protection against immersion in water. Water will not enter under stated conditions of pressure and time.
		8	Protection against indefinite immersion in water under a specified pressure.

