



Sealite®

www.sealite.com



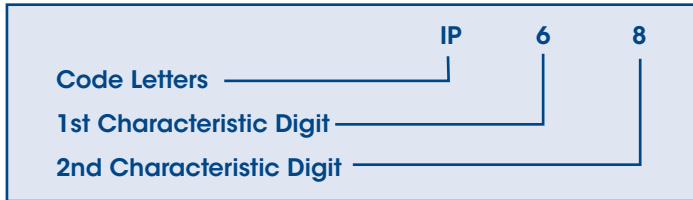
IP (Ingress Protection) Ratings



IP (Ingress Protection) Ratings

An IP Rating or IP Code is an international numerical standard used to classify the degree of protection provided against the intrusion of solid objects and water in electrical enclosures. This standard provides users with a more detailed explanation for products other than the vague term 'waterproof'.

The IP rating is listed as 'IP' followed by two digits. The first digit indicates a protection level against solid objects such as dust, and the second digit indicates the degree of protection against the ingress of water. The lower the number the lower the protection and the higher the number the harsher environment the item can withstand.



Sealite lanterns have an IP rating of IP68, the highest waterproof rating for lanterns required by the marine industry.

The IP ratings are defined in the Australian standard AS 60529-2004, 'Degrees of protection provided by enclosures (IP Code)' and in the International standard IEC 60529 Ed 2.1:2004.

1st Characteristic Digit	Brief Description	Definition
0	Non-protected	-
1	Protected against access to hazardous parts with the back of a hand. Protected against solid foreign objects of $\geq 50\text{mm } \varnothing$.	The probe, sphere of $50\text{mm } \varnothing$, shall not fully penetrate and shall have adequate clearance from hazardous parts.
2	Protected against access to hazardous parts with a finger. Protected against solid foreign objects of $\geq 12.5\text{mm } \varnothing$.	The jointed test finger of $12\text{mm } \varnothing$, 80mm length, shall have adequate clearance from hazardous parts. The probe, sphere of $12.5\text{mm } \varnothing$, shall not fully penetrate.
3	Protected against access to hazardous parts with a tool. Protected against solid foreign objects of $\geq 2.5\text{mm } \varnothing$.	The probe of $2.5\text{mm } \varnothing$ shall not penetrate at all.
4	Protected against access to hazardous parts with a wire. Protected against solid foreign objects of $\geq 1\text{mm } \varnothing$.	The probe of $1\text{mm } \varnothing$ shall not penetrate at all.
5	Protected against access to hazardous parts with a wire. Dust-protected.	The probe of $1\text{mm } \varnothing$ shall not penetrate. Intrusion of dust is not totally prevented, but dust shall not penetrate in a quantity to interfere with satisfactory operation of the device or to impair safety.
6	Protected against access to hazardous parts with a wire. Dust-tight.	The probe of $1\text{mm } \varnothing$ shall not penetrate. No intrusion of dust.

2nd Characteristic Digit	Brief Description	Definition
0	Non-protected	-
1	Protected against vertically falling water drops.	Vertically falling drops shall have no harmful effects.
2	Protected against vertically falling water drops when enclosure tilted up to 15° .	Vertically falling drops shall have no harmful effects when the enclosure is tilted at any angle up to 15° on either side of the vertical.
3	Protected against spraying water.	Water sprayed at an angle up to 60° on either side of the vertical shall have no harmful effects.
4	Protected against splashing water.	Water splashed against the enclosure from any direction shall have no harmful effects.
5	Protected against water jets.	Water projected in jets against the enclosure from any direction shall have no harmful effects.
6	Protected against powerful water jets.	Water projected in powerful jets against the enclosure from any direction shall have no harmful effects.
7	Protected against the effects of temporary immersion in water.	Intrusion of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water for 30 minutes in 1 metre depth.
8	Protected against the effects of continuous immersion in water.	Intrusion of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be agreed between manufacturer and user but which are more severe than for number 7.
9K	Protected against water during high pressure/steam jet cleaning.	Water projected in powerful jets with high pressure against the enclosure from any direction shall have no harmful effects.

All Sealite products are manufactured to exacting standards under strict quality control procedures.

Sealite's commitment to research and development, investing in modern equipment and advanced manufacturing procedures has made the company an industry leader in aids to marine navigation.

Sealite solar LED lanterns have an IP rating of IP68, the highest water/rust/dust proof rating available. Don't trust anything less than an IP68 rated product.

By choosing Sealite you can rest assured you have chosen the very best.



Sealite®

www.sealite.com

SL15 solar marine lantern
Vigo, Spain



Sealite Pty Ltd

11 Industrial Drive,
Somerville Vic 3912
AUSTRALIA

t: +61 (0)3 5977 6128

f: +61 (0)3 5977 6124

172 Lily Pond Road
Gilford New Hampshire 03249
USA

t: (603) 737 1311

f: (603) 737 1320

w: www.sealite.com

e: info@sealite.com