

## IP (Ingress Progress) Codes in accordance with IEC 529

There are several different uses of IP Codes, as described in IEC 529. IP Codes can have the following arrangement:

1. First character only, such as IP 3X,
2. Second character only, such as IP X4, or
3. Both characters, such as IP 34.

The first character indicates the degree of protection against the ingress of solid foreign objects. First character definitions are as follows:

- 0 - Non-protected
- 1 - Protected against solid foreign objects of 50 mm diameter and greater
- 2 - Protected against solid foreign objects of 12.5 mm diameter and greater
- 3 - Protected against solid foreign objects of 2.5 mm diameter and greater
- 4 - Protected against solid foreign objects of 1.0 mm diameter and greater
- 5 - Dust-protected
- 6 - Dust-tight

The second character of the IP Code indicates the degree of protection against the ingress of water with harmful effects. Second character definitions are as follows:

- 0 - Non-protected
- 1 - Protected against vertically falling water drops
- 2 - Protected against vertically falling water drops as the enclosure is tilted 15 degrees
- 3 - Protected against spraying water
- 4 - Protected against splashing water
- 5 - Protected against water jetting
- 6 - Protected against powerful water jetting
- 7 - Protected against temporary immersion (1meter, 30 minutes)
- 8 - Protected against continuous immersion (1meter, > 30 minutes)