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IP 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
- 8 - Protected against continuous immersion

UL Sample Requirements

Some UL testing chambers are limited in size. Please note that these size restrictions apply only for the tests specified below. If your sample will not fit into the test chambers, a smaller prototype may be used as long as the same type of hinges, gaskets, and other mechanisms are used at the same pressures.

IP 5X/6X - Sample must fit into dust chamber measuring 3 1/2 ft. wide by 3 ft. tall by 7 ft. long. The door to the chamber measures 2 ft. by 3 1/2 ft.

IP X7/X8 - Sample must fit into container measuring 23 in. diameter by 6 ft. deep.

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