

## IP Rating Chart

IP Number	First Digit-Refers to SOLIDS	Second Digit - Refers to LIQUIDS
IP00	Not protected from solids	Not protected from liquids
IP01	Not protected from solids	Protected from condensation
IP02	Not protected from solids	Protected from water spray less than 15 degrees from vertical
IP03	Not protected from solids	Protected from water spray less than 60 degrees from vertical
IP04	Not protected from solids	Protected from water spray in any direction
IP05	Not protected from solids	Protected from low pressure water jets from any direction
IP06	Not protected from solids	Protected from high pressure water jets from any direction
IP07	Not protected from solids	Protected from immersion between 15 centimeters and 1 meter in depth
IP08	Not protected from solids	Protected from long term immersion up to a specified pressure
IP10	Protected from touch by hands greater than 50 millimeters	Not protected from liquids
IP11	Protected from touch by hands greater than 50 millimeters	Not protected from condensation
IP12	Protected from touch by hands greater than 50 millimeters	Protected from water spray less than 15 degrees from vertical
IP13	Protected from touch by hands greater than 50 millimeters	Protected from water spray less than 60 degrees from vertical
IP14	Protected from touch by hands greater than 50 millimeters	Protected from water spray in any direction
IP15	Protected from touch by hands greater than 50 millimeters	Protected from low pressure water jets from any direction
IP16	Protected from touch by hands greater than 50 millimeters	Protected from high pressure water jets from any direction
IP Number Continued	First Digit-Refers to SOLIDS	Second Digit - Refers to LIQUIDS
IP17	Protected from touch by hands greater than 50 millimeters	Protected from immersion between 15 centimeters and 1 meter in depth
IP18	Protected from touch by hands greater than 50 millimeters	Protected from long term immersion up to a specified pressure
IP20	Protected from touch by hands greater than 12 millimeters	Not protected from liquids
IP21	Protected from touch by hands greater than 12 millimeters	Protected from condensation
IP22	Protected from touch by hands greater than 12 millimeters	Protected from water spray less than 15 degrees from vertical
IP23	Protected from touch by hands greater than 12 millimeters	Protected from water spray less than 60 degrees from vertical
IP24	Protected from touch by hands greater than 12 millimeters	Protected from water spray in any direction
IP25	Protected from touch by hands greater than 12 millimeters	Protected from low pressure water jets from any direction
IP26	Protected from touch by hands greater than 12 millimeters	Protected from high pressure water jets from any direction
IP27	Protected from touch by hands greater than 12 millimeters	Protected from immersion between 15 centimeters and 1 meter in depth
IP28	Protected from touch by hands greater than 12 millimeters	Protected from long term immersion up to a specified pressure
IP30	Protected from touch by hands greater than 2.5 millimeters	Not protected from liquids

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IP31	Protected from touch by hands greater than 2.5 millimeters	Protected from condensation
IP32	Protected from touch by hands greater than 2.5 millimeters	Protected from water spray less than 15 degrees from vertical
IP33	Protected from touch by hands greater than 2.5 millimeters	Protected from water spray less than 60 degrees from vertical
IP34	Protected from touch by hands greater than 2.5 millimeters	Protected from water spray in any direction
IP35	Protected from touch by hands greater than 2.5 millimeters	Protected from low pressure water jets from any direction
IP36	Protected from touch by hands greater than 2.5 millimeters	Protected from high pressure water jets from any direction
IP37	Protected from touch by hands greater than 2.5 millimeters	Protected from immersion between 15 centimeters and 1 meter in depth
IP38	Protected from touch by hands greater than 2.5 millimeters	Protected from long term immersion up to a specified pressure
IP40	Protected from touch by hands greater than 1 millimeter	Not protected from liquids
IP41	Protected from touch by hands greater than 1 millimeter	Protected from condensation
IP42	Protected from touch by hands greater than 1 millimeter	Protected from water spray less than 15 degrees from vertical
IP44	Protected from touch by hands greater than 1 millimeter	Protected from water spray in any direction
IP45	Protected from touch by hands greater than 1 millimeter	Protected from low pressure water jets from any direction
IP46	Protected from touch by hands greater than 1 millimeter	Protected from high pressure water jets from any direction
IP47	Protected from touch by hands greater than 1 millimeter	Protected from immersion between 15 centimeters and 1 meter in depth
IP48	Protected from touch by hands greater than 1 millimeter	Protected from long term immersion up to a specified pressure
IP50	Protected from limited dust ingress	Not protected from liquids
IP51	Protected from limited dust ingress	Protected from condensation
IP52	Protected from limited dust ingress	Protected from water spray less than 15 degrees from vertical
IP53	Protected from limited dust ingress	Protected from water spray less than 60 degrees from vertical
IP54	Protected from limited dust ingress	Protected from water spray in any direction
IP55	Protected from limited dust ingress	Protected from low pressure water jets from any direction
IP56	Protected from limited dust ingress	Protected from high pressure water jets from any direction
IP57	Protected from limited dust ingress	Protected from immersion between 15 centimeters and 1 meter in depth
IP58	Protected from limited dust ingress	Protected from long term immersion up to a specified pressure
IP60	Protected from total dust ingress	Not protected from liquids
IP61	Protected from total dust ingress	Protected from condensation
IP62	Protected from total dust ingress	Protected from water spray less than 15 degrees from vertical
IP63	Protected from total dust ingress	Protected from water spray less than 60 degrees from vertical
IP64	Protected from total dust ingress	Protected from water spray in any direction
IP65	Protected from total dust ingress	Protected from low pressure water jets from any direction
IP66	Protected from total dust ingress	Protected from high pressure water jets from any direction
IP67	Protected from total dust ingress	Protected from immersion between 15 centimeters and 1 meter in depth
IP68	Protected from total dust ingress	Protected from long term immersion up to a specified pressure
IP69K	Protected from total dust ingress	Protected from steam jet cleaning