

IP Rating Chart

IP Number	First Digit - SOLIDS	Second Digit - 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 from 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.	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 from 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.
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 fingers and objects greater than 12 millimeters.	Not protected from liquids.
IP21	Protected from touch by fingers and objects greater than 12 millimeters.	Protected from condensation.
IP22	Protected from touch by fingers and objects greater than 12 millimeters.	Protected from water spray less than 15 degrees from vertical.
IP23	Protected from touch by fingers and objects greater than 12 millimeters.	Protected from water spray less than 60 degrees from vertical.
IP24	Protected from touch by fingers and objects greater than 12 millimeters.	Protected from water spray from any direction.
IP25	Protected from touch by fingers and objects greater than 12 millimeters.	Protected from low pressure water jets from any direction.
IP26	Protected from touch by fingers and objects greater than 12 millimeters.	Protected from high pressure water jets from any direction.
IP27	Protected from touch by fingers and objects greater than 12 millimeters.	Protected from immersion between 15 centimeters and 1 meter in depth.
IP28	Protected from touch by fingers and objects greater than 12 millimeters.	Protected from long term immersion up to a specified pressure.
IP30	Protected from tools and wires greater than 2.5 millimeters.	Not protected from liquids.
IP31	Protected from tools and wires greater than 2.5 millimeters.	Protected from condensation.
IP32	Protected from tools and wires greater than 2.5 millimeters.	Protected from water spray less than 15 degrees from vertical.
IP33	Protected from tools and wires greater than 2.5 millimeters.	Protected from water spray less than 60 degrees from vertical.
IP34	Protected from tools and wires greater than 2.5 millimeters.	Protected from water spray from any direction.
IP35	Protected from tools and wires greater than 2.5 millimeters.	Protected from low pressure water jets from any direction.
IP36	Protected from tools and wires greater than 2.5 millimeters.	Protected from high pressure water jets from any direction.
IP37	Protected from tools and wires greater than 2.5 millimeters.	Protected from immersion between 15 centimeters and 1 meter in depth.
IP38	Protected from tools and wires greater than 2.5 millimeters.	Protected from long term immersion up to a specified pressure.
IP40	Protected from tools and small wires greater than 1 millimeter.	Not protected from liquids.
IP41	Protected from tools and small wires greater than 1 millimeter.	Protected from condensation.
IP42	Protected from tools and small wires greater than 1 millimeter.	Protected from water spray less than 15 degrees from vertical.
IP43	Protected from tools and small wires greater than 1 millimeter.	Protected from water spray less than 60 degrees from vertical.
IP44	Protected from tools and small wires greater than 1 millimeter.	Protected from water spray from any direction.
IP45	Protected from tools and small wires greater than 1 millimeter.	Protected from low pressure water jets from any direction.
IP46	Protected from tools and small wires greater than 1 millimeter.	Protected from high pressure water jets from any direction.
IP47	Protected from tools and small wires greater than 1 millimeter.	Protected from immersion between 15 centimeters and 1 meter in depth.
IP48	Protected from tools and small wires 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 from 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 from 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.