Ex) IP 6 5

PROTECTION CLASS

PROTECTION AGAINIST SOLID

PROTECTION AGAINIST LIQUIDS

Ex) IK 08

PROTECTION CLASS

MECHANICAL IMPACT RESISTANCE

The IP Code consists of the letters IP followed by two digits and an optional letter. As defined in international standard IEC 60529, it classifies the degrees of protection provided against the intrusion of solid objects (including body parts like hands and fingers), dust, accidental contact, and water in electrical enclosures.
The standard aims to provide users more detailed information than vague marketing terms such as waterproof.

FIRST NUMBER	PROTECTION AGAINIST SOLID	SECOND NUMBER	PROTECTION AGAINIST LIQUIDS	IK CODE	MECHANICAL IMPACT RESISTANCE
0	Unprotected	0	Unprotected	00	Unprotected
1	>50 mm Any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part	1	Dripping water Dripping water (vertically falling drops) shall have no harmful effect	01	200g 7.5cm Impact = 0.15 joule
2	>12.5 mm Fingers or similar objects	2	Dripping water when tilted up to 15° Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position	02	200g 10cm Impact = 0.20 joule
3	>2.5 mm Tools, thick wires, etc.	3	Spraying water Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect	03	200g 17.5cm Impact = 0.35 joule
4	>1.0 mm Tools, thick wires, etc.	4	Splashing water Water splashing against the enclosure from any direction shall have no harmful effect	04	200g 25cm Impact = 0.50 joule
5	Dust protected Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity tointerfere with the satisfactory operation of the equipment; complete protection against contact	5	Water jets Water projected by a nozzle against enclosure from any direction shall have no harmful effects	05	200g 35cm Impact = 0.70 joule
6	Dust tight No ingress of dust; complete protection against contact.	6	Powerful water jets Water projected in powerful jets against the enclosure from any direction shall have no harmful effects	06	500g 20cm Impact = 1 joule
		7	Immersion up to 1 m Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1 m of submersion)	07	500g 40cm Impact = 2 joule
		8	Immersion beyond 1 m The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer NOTE: Normally, this will mean that the equipment is hermetically sealed. However, with certain types of equipment, it can mean that water can enter but only in such a manner that produces no harmful effects	08	1.7kg 29.5cm Impact = 5 joule
				09	5kg 20cm Impact = 10 joule
				10	5kg 40cm Impact = 20 joule