

The European IP-Code

IP 55 W

To help the design engineer identify the degree of protection provided by an enclosure, EN 60.529(10/91 / IEC 529 (11/89) (International Electrotechnical Commission) was introduced.

Both harmonised standards classify the extent to which an enclosure will resist the ingress of solid bodies and water under designated tests.

After successful testing the enclosure will be allocated a classification code with the letters IP (International Protection) prefixing that code.



Code letters International Protection

First Characteristic numeral (dust protection, numerals 0-6, or letter X)

Second Characteristic numeral (water protection, numerals 0-8, or letter X)

Optional letter for application in specified weather conditions (normally agreed between user and manufacturer, example: Rain hood)

1st numeral: Degree of protection with respect to persons and solid objects.	2nd numeral: Degree of protection with respect to harmful ingress of water.								
	0	1	2	3	4	5	6	7	8
	Non pro- tected	Protected against drip- ping water		Protected against drip- ping water of +/- 60° angle	Protected against splashing water	Protected against water jets	Protected against heavy seas	Protected against immersion	Protected against sub-mersion
		Test time 10mins.	Test time 10mins.	Test time 10mins. max 200	Test time 10mins.	Test time 1min/m² minimum 3 mins.	Test time 1min/m² minimum 3 mins.	Test time 30mins.	Test time 30mins.
		380	88 08 08 15°			min. 3mm 3m	min. 3mm 3m	\(\(\frac{1}{2}\) min 0.15m \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Non protect. 0	IP 00	IP 01	IP 02	10I/min 80kN:m²	10I/min 80kN:m²	12.5I/min 30kN:m²	100l/min 100kN:m²		
Protected against solid objects greater than Dia. 50 mm. 1	IP 10	IP 11	IP 12	IP 13					
Protected against solid objects greater than Dia. 12 mm. 2	IP 20	IP 21	IP 22	IP 23					
Protected against solid objects greater than Dia. 2.5 mm. 3	IP 30	IP 31	IP 32	IP 33	IP 34				
Protected against solid objects greater than Dia. 1.0 mm. 4	IP 40	IP 41	IP 42	IP 43	IP 44	IP 45	IP46		
Dust protected. 5					IP 54	IP 55	IP 56		
Dust-tight 6						IP 65	IP 66	IP 67	IP 68