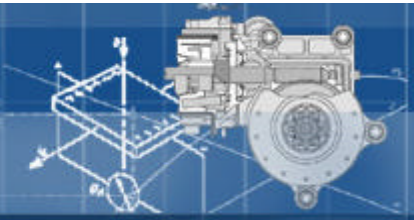


Explanation of technical data



IP degrees of protection

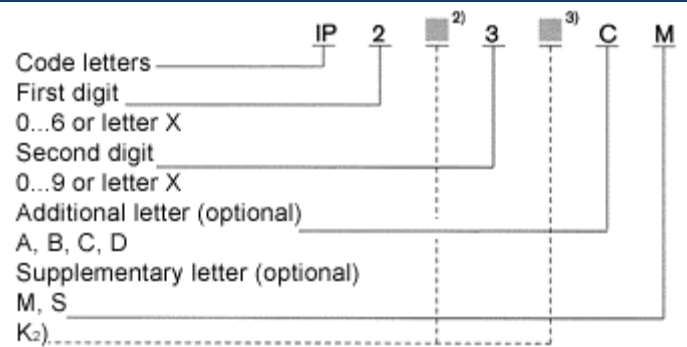
Degrees of protection valid to DIN 40 050 are indicated by the IP code. The IP code consists of the letters IP (internal protection) followed by two digits indicating the degree of protection.

Valid for electrical equipment used in road vehicles to DIN 40 050 (part 9).

- Protection of the electrical equipment inside the housing against the effects of solid foreign bodies including dust.
- Protection of the electrical equipment inside the housing against ingress of water.
- Prevention of personnel touching hazardous parts¹⁾ inside the housing.

¹⁾ Moving, mechanical parts.

Fig.:
Elements of the IP code



If a digit is not given, it must be replaced by the letter "X" (i.e. "XX" if both digits are not given). Additional and/or supplementary letters can be omitted without having to be replaced.

2) The supplementary letter „K“ stands either immediately after the first digits 5 and 6 or immediately after the second digits 4, 6, and 9.

3) With the water test. Example: IP16KB protection against the penetration of solid foreign bodies with diameter ≥ 50 mm, protection against heavy jet water with high pressure, protection against contact with fingers.

Explanation of the IP code

1st digit and supplementary letter K	Protection of electrical equipment against penetration by foreign bodies	Personnel	2nd digit and supplementary letter K	Protection of electrical equipment against ingress of water	Letter (optional)	Protection of personnel against contact with hazardous parts	Letter (optional)	
0	Not protected	Not protected	0	Not protected	A	Protection against contact with back of hand	M	Movement of moving parts ³⁾
1	Protection against foreign bodies $\varnothing \geq 50$ mm	Protection against being touched by back of hand	1	Protection against vertically dripping water	B	Protection against contact with fingers	S	Standstill of moving parts ³⁾
2	Protection against foreign bodies $\varnothing \geq 12.5$ mm	Protection against being touched by fingers	2	Protection against dripping water, 15° inclined	C	Protection against contact with tools		
3	Protection against foreign bodies $\varnothing \geq 2.5$ mm	Protection against being touched by tools	3	Protection against spray water	D	Protection against contact with wires		
4	Protection against foreign bodies $\varnothing \geq 1.0$ mm	Protection against being touched by wires	4	Protection against splash water				
5K	Protected against dust	Protection against being touched by wires	4K	Protection against splash water with high pressure				
6K	Dust-tight	Protection against being touched by wires	5	Protection against jet water				
			6	Protection against heavy jet water				
			6K	Protection against heaving jet water with high pressure				
			7	Protection against short-term immersion				
			8	Protection against long-term immersion				
			9K	Protection against high pressure/ steam-pressure cleaning				