

Technical information

IP Code (International Protection Rating)

Table 1 – Degrees of protection against access to hazardous parts indicated by the first characteristic numeral

First characteristic numeral	Degree of protection		Test conditions, see
	Brief description	Definition	
0	Non-protected	–	–
1	Protected against access to hazardous parts with the back of a hand	The access probe, sphere of 50 mm Φ , shall have adequate clearance from hazardous parts	12.2
2	Protected against access to hazardous parts with a finger	The jointed test finger of 12 mm Φ . 80 mm length, shall have adequate clearance from hazardous parts	12.2
3	Protected against access to hazardous parts with a tool	The access probe of 2,5 mm ID shall not penetrate	12.2
4	Protected against access to hazardous parts with a wire	The access probe of 1,0 mm Φ shall not penetrate	12.2
5	Protected against access to hazardous parts with a wire	The access probe of 1,0 mm Φ shall not penetrate	12.2
6	Protected against access to hazardous parts with a wire	The access probe of 1,0 mm Φ shall not penetrate	12.2

NOTE: In the case of the first characteristic numerals 3, 4, 5 and 6, protection against access to hazardous parts is satisfied if adequate clearance is kept. The adequate clearance should be specified by the relevant product committee in accordance with 12.3.
Due to the simultaneous requirement specified in table 2, the definition "shall not penetrate" is given in table 1.

Protection against solid foreign objects

Table 2 gives brief descriptions and the definitions for the degrees of protection against the penetration of solid foreign objects including dust.

Degrees of protection listed in this table shall only be specified by the first characteristic numeral and not by reference to the brief description or definition.

The protection against the ingress of solid foreign objects implies that the object probes up to numeral 2 in table 2 shall not fully penetrate the enclosure. This means that the full diameter of the sphere shall not pass through an opening in the enclosure. Object probes for numerals 3 and 4 shall not penetrate the enclosure at all.

Dust-protected enclosures to numeral 5 allow a limited quantity of dust to penetrate under certain conditions.

Dust-tight enclosures to numeral 6 do not allow any dust to penetrate.

NOTE: Enclosures assigned the first characteristic numeral of 1 to 4 generally exclude both regularly and irregularly shaped solid foreign objects provided that three mutually perpendicular dimensions of the object exceed the appropriate figure in column 3 of table 2.