

ISO 20653:2013-02 (E)

Road vehicles - Degrees of protection (IP code) - Protection of electrical equipment against foreign objects, water and access

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Structure and meaning of the IP code	2
4.1	Structure of the IP code	2
4.2	Meaning of IP code	2
4.3	Examples for the use of letters in the IP code	3
5	Degrees of protection against foreign objects and against access	4
6	Degrees of protection against water	5
7	Designation examples	6
7.1	General	6
7.2	Example IP34K	6
7.3	Example IP16KB	6
7.4	Example IP2X/IP5KX	7
8	Requirements and testing	7
8.1	Atmospheric conditions	7
8.2	Device under test (DUT)	7
8.3	Requirements and tests for degrees of protection against foreign objects and access	7
8.4	Requirements and test for degrees of protection against water	13
9	Notes on the assignment of degrees of protection	14
9.1	Assignment of degrees of protection against foreign objects and access	14
9.2	Assignment of degrees of protection against water	14
Bibliography		23