

ISO 6182-2:2025-07 (E)

Fire protection - Automatic sprinkler systems - Part 2: Requirements and test methods for sprinkler system alarm valves, check valves, water motor alarms, retard devices and accelerators

Contents		Page
Foreword		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Production testing and quality control	6
4.1	Responsibility	6
4.2	Production body strength test	6
4.3	Production operation test	6
4.4	Production leakage test	6
5	Requirements	6
5.1	Overview	6
5.2	Nominal size	6
5.3	Connections	6
5.4	Rated working pressure	7
5.5	Body and cover	7
5.6	Strength (see 6.2)	7
5.7	Access for maintenance	7
5.8	Components (see 6.3, 6.4 and 6.12)	7
5.9	Leakage (see 6.5)	8
5.10	Non-metallic components (excluding gaskets, seals and other elastomeric parts) (see 6.5, 6.6, 6.7 and 6.11)	9
5.11	Sealing assembly elements (see 6.8)	9
5.12	Clearances (see 6.9)	9
5.13	Hydraulic friction loss (see 6.10)	13
5.14	Endurance (see 6.11)	13
5.15	Operational performance (see 6.12)	13
5.16	Equilibrium time (see 6.15)	14
5.17	Drains (see 6.4)	15
5.18	Alarms (see 6.11)	15
5.19	Retard devices (6.16)	15
5.19.1	General	15
5.19.2	Strength	15
5.19.3	Strainer	15
5.19.4	Support	16
5.19.5	Retard chamber drain	16
5.19.6	Components (see 6.6, 6.7, 6.12)	16
5.20	Height limitations for wet pilot lines (see 6.12)	16
5.21	Water motor alarms (see 6.17)	17
5.22	Water motor alarm connections (see 6.17)	17
5.23	Water motor alarm nozzles and strainers	17
5.24	Water motor alarm operation (see 6.17)	17
5.25	Water motor alarm bodies and covers	17
5.26	Water motor alarm audibility (see 6.17)	18

6	Tests	19
6.1	Samples	19
6.2	Body strength (see 5.6)	20
6.3	Spring and diaphragm test (see 5.8.5)	20
6.4	Anti-reseating test of dry, preaction and deluge valves (see 5.8.6)	20
6.5	Leakage and deformation tests (see 5.9)	21
6.5.1	Body leakage test	21
6.5.2	Sealing assembly test	21
6.5.3	Wet and check valve leakage	21
6.6	Warm water ageing test for non-metallic components (excluding gaskets and seals and other elastomeric parts) (see 5.10, 5.19 and 5.21)	21
6.7	Air ageing test for non-metallic components (excluding gaskets and seals and other elastomeric parts) (see 5.9, 5.18 and 5.20)	22
6.8	Sealing element tests for valves (see 5.11)	22
6.9	Salt mist corrosion test (see 5.12.2 and 5.12.7)	23
6.9.1	Reagents	23
6.9.2	Apparatus	23
6.9.3	Procedure	23
6.10	Hydraulic friction loss test for valves (see 5.13)	23
6.11	Endurance test (see 5.14, 5.18)	23
6.12	Operational tests (see 5.15, 5.20)	24
6.12.1	General	24
6.12.2	Installation	25
6.12.3	Dry and preaction valve differential	25
6.12.4	Preaction valve operation	25
6.12.5	Preaction operational test in the dry mode (sprinkler operation with detection fault)	27
6.13	Wet valve alarm and sensitivity test (see 5.15)	27
6.14	Wet and check valve ratio test (see 5.15.5)	27
6.15	Equilibrium time test (see 5.16)	27
6.16	Retard chamber (see 5.19)	28
6.16.1	Strength	28
6.16.2	Drainage	28
6.17	Water motor alarm tests (see 5.21)	28
6.17.1	Durability	28
6.17.2	Audibility	28
6.17.3	Strength of inlet connection	28
6.17.4	Water resistance	28
7	Marking	28
7.1	Body	28
7.2	Cast markings	28
7.3	Information to be marked	29
8	Manufacturer's installation instructions	29
8.1	Instructions	29
8.2	Care and maintenance	29