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**Fire protection — Automatic sprinkler  
systems —**

**Part 6  
Requirements and test methods for check  
valves**

*Protection contre l'incendie — Systèmes d'extinction automatiques du  
type sprinkler —*

*Partie 6: Exigences et méthodes d'essai des postes de contrôle*



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## Contents

Page

Foreword.....	iv
Introduction .....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions.....	1
4 Requirements.....	3
5 Production testing and quality control.....	8
6 Tests.....	8
7 Marking .....	12
8 Instruction chart.....	13

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 6182-6 was prepared by Technical Committee ISO/TC 21, *Equipment for fire protection and fire fighting*, Subcommittee SC 5, *Fixed firefighting systems using water*.

ISO 6182 consists of the following parts, under the general title *Fire protection — Automatic sprinkler systems*:

- Part 1: *Requirements and test methods for sprinklers*
- Part 2: *Requirements and test methods for wet alarm valves, retard chambers and water motor alarms*
- Part 3: *Requirements and test methods for dry pipe valves*
- Part 4: *Requirements and test methods for quick-opening devices*
- Part 5: *Requirements and test methods for deluge valves*
- Part 6: *Requirements and test methods for check valves*
- Part 7: *Requirements and test methods for early suppression fast response (ESFR) sprinklers*
- Part 8: *Requirements and test methods for pre-action dry alarm valves*
- Part 9: *Requirements and test methods for water mist nozzles*
- Part 10: *Requirements and test methods for domestic sprinklers*
- Part 11: *Requirements and test methods for pipe hangers*
- Part 12: *Requirements and test methods for grooved end pipe couplings*
- Part 13: *Requirements and test methods for extended coverage sprinklers*

## Introduction

This part of ISO 6182 is one of a number of ISO International Standards prepared by ISO/TC 21 covering components for automatic sprinkler systems, including the following:

- a) carbon dioxide systems (ISO 6183),
- b) explosion suppression systems (ISO 6184),

An International Standard covering foam systems is planned.

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# Fire protection — Automatic sprinkler systems —

## Part 6: Requirements and test methods for check valves

### 1 Scope

This part of ISO 6182 specifies performance requirements, methods of test and marking requirements for check valves used in automatic fire protection systems.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Designation, dimensions and tolerances*

ISO 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs*

ISO 898-2, *Mechanical properties of fasteners — Part 2: Nuts with specified proof load values — Coarse thread*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **check valve**

valve that permits flow of water in one direction and prevents the flow of water in the reverse direction

NOTE These valves are manufactured with pipe connections or may be of the wafer type.

#### 3.2

##### **clapper**

type of sealing element

NOTE See 3.8.