
**Fire protection — Foam fire
extinguishing systems —**

**Part 3:
Medium expansion foam equipment**

*Protection contre l'incendie — Systèmes d'extinction d'incendie à
mousse —*

Partie 3: Équipement pour mousse à moyen foisonnement

Sample Document

get full document from standards.iteh.ai



Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Requirements	2
4.1 Connections.....	2
4.1.1 Permanent connections and joints.....	2
4.1.2 Bolting of pressure-retaining parts.....	2
4.2 Parts for removal during routine field maintenance.....	2
4.2.1 Removal.....	2
4.2.2 Re-assembly.....	2
4.3 Corrosion resistance of metal parts.....	2
4.4 Elastomeric joint rings.....	3
4.4.1 General.....	3
4.4.2 Resistance to aging.....	3
4.4.3 Resistance to exposure to liquids.....	3
4.5 Plastics and reinforced resin materials.....	3
4.5.1 General.....	3
4.5.2 Resistance to ageing.....	3
4.5.3 Resistance to exposure to liquids.....	4
4.6 Strength.....	4
4.7 Leak resistance.....	4
4.8 Discharge coefficient (K factor).....	4
4.9 Foam quality.....	4
4.10 Water flow.....	5
4.11 Operation reliability.....	5
4.12 Stress corrosion.....	5
4.13 Salt-spray corrosion.....	5
4.14 Light and water exposure.....	5
4.15 Heat and fire resistance.....	5
5 Test methods	5
5.1 General.....	5
5.2 Ageing test for plastics and reinforced resin materials.....	6
5.3 Liquid exposure test.....	6
5.4 Equipment pressurization test.....	6
5.5 Leak resistance test.....	6
5.6 Flow coefficient measurement.....	6
5.7 Measurement of expansion ratio and drainage time.....	6
5.8 Water flow test.....	7
5.9 Operation reliability test.....	7
5.10 Stress corrosion test.....	7
5.11 Salt-spray corrosion test.....	8
5.12 Light and water exposure test.....	8
5.13 Heat and fire resistance test.....	8
6 Marking	8
7 Manufacturer's installation and operation instructions	9
Annex A (normative) Tolerances	10
Bibliography	11

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 21, *Equipment for fire protection and fire fighting*, Subcommittee SC 6, *Foam and powder media and firefighting systems using foam and powder*.

ISO 7076 consists of the following parts, under the general title *Fire protection — Foam fire extinguishing systems*:

- *Part 1: Foam proportioning equipment*
- *Part 2: Low expansion foam equipment*
- *Part 3: Medium expansion foam equipment*
- *Part 4: High expansion foam equipment*
- *Part 5: Fixed compressed air foam equipment*
- *Part 6: Vehicle mounted compressed air foam systems*

Fire protection — Foam fire extinguishing systems —

Part 3: Medium expansion foam equipment

1 Scope

This part of ISO 7076 specifies requirements and test methods for medium expansion foam equipment of fixed-foam extinguishing systems for indoor or outdoor use or both.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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: Dimensions, tolerances and designation*

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

ISO 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

ISO 175, *Plastics — Methods of test for the determination of the effects of immersion in liquid chemicals*

ISO 179-1, *Plastics — Determination of Charpy impact properties — Part 1: Non-instrumented impact test*

ISO 180, *Plastics — Determination of Izod impact strength*

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

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 272, *Fasteners — Hexagon products — Widths across flats*

ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles*

ISO 885, *General purpose bolts and screws — Metric series — Radii under the head*

ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs with specified property classes — Coarse thread and fine pitch thread*

ISO 898-2, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 2: Nuts with specified property classes — Coarse thread and fine pitch thread*

ISO 1179-1, *Connections for general use and fluid power — Ports and stud ends with ISO 228-1 threads with elastomeric or metal-to-metal sealing — Part 1: Threaded ports*

ISO 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 4759-1, *Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C*

ISO 7005-1, *Pipe flanges — Part 1: Steel flanges for industrial and general service piping systems*