



**SLOVENSKI STANDARD**  
**SIST EN 12259-3:2001/A2:2006**

**01-april-2006**

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J[ fU^bY^bUdfUj Y^nU[ UýYb^Y^È^GYghUj b]^XY]^gdf]b\_`Yfg\_] \ `g]ghYa cj `]b`g]ghYa cj `g  
dfýY c`j cXc`È' "XY. `Gi \ ]^Ufa b]^j Ybh]^]

Fixed firefighting systems - Components for sprinkler and water spray systems - Part 3:  
Dry alarm valve assemblies

Ortsfeste Löschanlagen - Bauteile für Sprinkler- und Sprühwasseranlagen - Teil 3:  
Trockenalarmventile mit Zubehör

Installations fixes de lutte contre l'incendie - Composants des systemes d'extinction du  
type sprinkleur et a pulvérisation d'eau - Partie 3 : Systemes de clapet d'alarme sous air

**Ta slovenski standard je istoveten z: EN 12259-3:2000/A2:2005**

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**ICS:**

13.220.10	Gašenje požara	Fire-fighting
13.320	Alarmni in opozorilni sistemi	Alarm and warning systems

**SIST EN 12259-3:2001/A2:2006**                      **en**



EUROPEAN STANDARD

**EN 12259-3:2000/A2**

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ICS 13.220.20; 13.320

English Version

## Fixed firefighting systems - Components for sprinkler and water spray systems - Part 3: Dry alarm valve assemblies

Installations fixes de lutte contre l'incendie - Composants des systèmes d'extinction du type sprinkleur et à pulvérisation d'eau - Partie 3 : Systèmes de clapet d'alarme sous air

Ortsfeste Löschanlagen - Bauteile für Sprinkler- und Sprühwasseranlagen - Teil 3: Trockenalarmventile mit Zubehör

This amendment A2 modifies the European Standard EN 12259-3:2000; it was approved by CEN on 19 October 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

This European Standard (EN 12259-3:2000/A2:2005) has been prepared by Technical Committee CEN/TC 191 "Fixed firefighting systems", the secretariat of which is held by BSI.

This Amendment to the European Standard EN 12259-3:2000 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2006, and conflicting national standards shall be withdrawn at the latest by August 2007.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this European Standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

**EN 12259-3:2000/A2:2005 (E)****2 Normative references**

Delete the following references:

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads – Part 1: Dimensions, tolerances and designation.*

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads – Part 1: Designations, dimensions and tolerances.*

**4 Dry alarm valve assembly construction and performance****4.4 Body and cover**

Replace 4.4.1.1 with the following text:

**4.4.1.1** The body and any cover shall be made of cast iron, bronze, brass, monel metal, stainless steel, titanium or other materials with equivalent physical and mechanical properties.

Insert new subclause 4.4.1.2 as follows and renumber the old 4.4.1.2 as a new subclause 4.4.1.3:

**4.4.1.2** Cover fasteners shall be made of steel, stainless steel, titanium or other materials with equivalent physical and mechanical properties.

Replace 4.4.3.2 with the following text:

**4.4.3.2** The normal design load of any fastener, excluding the force required to compress the gasket, shall not exceed the minimum tensile strength specified in EN ISO 898-1 and ISO 898-2 or other appropriate European Standards for materials not covered by ISO 898, when the dry alarm valve is pressurised to four times the rated working pressure. The area of the application of pressure shall be calculated as follows:

- a) if a full-face gasket is used, the area of force application is that extending out to a line defined by the inner edge of the bolts;
- b) if a toroidal sealing ring or ring gasket is used, the area of force application is that extending out to the centre line of the toroidal sealing ring or ring gasket.

Replace 4.5.1.1 with the following text:

**4.5.1.1** The dry alarm valve shall be provided with a connection to drain water from the valve body downstream of the sealing assembly when the valve is installed in any position specified or recommended by the supplier. The minimum nominal size shall be 20 mm.

**4.9 Clearances**

Replace 4.9.1 with the following text:

**4.9.1** The radial clearance (see Figure 1 a)) between the sealing assembly, including the hinge boss areas, and the inside walls of the body (excluding moving catches and latching mechanisms) in every position except the wide open position shall be not less than 12 mm if the body is cast iron or 6 mm if the body and sealing assembly are of non-ferrous metal, stainless steel, titanium or materials having at least equivalent physical, mechanical and corrosion resistant properties.

Replace 4.9.2 with the following text:

**4.9.2** There shall be diametrical clearance (see Figure 1 b)) between the inner edge of the seat ring and the metal parts of the sealing assembly when in the close position, excluding any latching mechanisms, as follows:

- a) for sealing assemblies of bronze, brass, monel metal stainless steel or titanium or materials having equivalent physical and mechanical properties, the diametrical clearance shall not be less than 0,7 mm;
- b) for sealing assemblies of other materials, the diametrical clearance shall not be less than 3,0 mm.

Replace 4.9.4 with the following text:

**4.9.4** Valves with a diametrical clearance (see Figure 1 b)) between any pins and their bearings less than 0,125 shall operate correctly when tested in accordance with E.3, E.1 and E.2, following exposure to a salt mist corrosion test in accordance with Annex M.

Replace 4.9.5 with the following text:

**4.9.5** The axial clearance ( $L_2-L_1$ , see Figure 1c) between any clapper hinge and the adjacent dry alarm valve body bearing surfaces shall not be less than the value in Table 2.

Where applicable, as indicated in Table 2, a means, employing bronze, brass, stainless steel, titanium or materials having at least equivalent physical, mechanical and corrosion resistant properties shall be provided to maintain dimension A (see Figure 1 c)) at not less than the appropriate value in Table 2.

NOTE Shoulder or projecting straight bushings, projecting hinge pin bearings, or spacers are typically employed as a means of maintaining dimension A.

Delete 4.9.7 (which has been replaced by the second paragraph of 4.9.5).

Add a new Table 2 after 4.9.6:

**Table 2 — Axial clearance ( $L_2 - L_1$ ) and dimension 'A' values for differing body and sealing assembly construction materials <sup>a</sup>**

Body and sealing assembly materials of construction	Axial clearance ( $L_2-L_1$ ) (see Figure 1 c)) mm	Dimension A (see Figure 1 c)) mm	Additional testing requirements
Body and sealing assembly made of bronze, brass, stainless steel, titanium or materials having at least equivalent physical, mechanical and corrosion resistant properties	$\geq 0,25$	Not applicable	None
Bodies and or sealing assemblies made of materials other than above (for example, cast iron)	$\geq 0,25$ mm	$\geq 3,0$ mm	None
	$\geq 1,50$ mm	$\geq 2,0$ mm	See table footnote

<sup>a</sup> The valve shall operate correctly when tested in accordance with E.3, E.1 and E.2 following exposure to a salt mist corrosion test in accordance with Annex M.

**EN 12259-3:2000/A2:2005 (E)**

Replace the "Key" in Figure 1 with the following:

- 1 Sealing assembly (clapper)
- 2 Valve body
- 3 Pin
- 4 Bushing (typical arrangement depicted)

**5 Quick opening device construction and performance****5.3.2 Strength and leak resistances**

Replace 5.3.2.2 with the following text:

**5.3.2.2** The normal design load of any fastener, excluding the force required to compress the gasket, shall not exceed the minimum tensile strength specified in ISO 898-1 and ISO 898-2 or other appropriate standards for materials not covered by ISO 898, when the quick opening device and any flooding device is pressurised to two times the rated working pressure. The area of the application of pressure shall be calculated as follows:

- a) if a full-face gasket is used, the area of force application is that extending out to a line defined by the inner edge of the bolts;
- b) if a toroidal sealing ring or ring gasket is used, the area of force application is that extending out to the centre line of the toroidal sealing ring or ring gasket.

**5.4 Connections**

Replace 5.4.2 with the following text:

**5.4.2** A connection suitable for a pressure gauge shall be provided to any holding chamber of the quick opening device.

**5.5 Components**

Correct the subclause number from 1.5 to 5.1.

**6 Marking****6.1 General**

Replace 6.1 with the following text and renumber Table 2 as Table 3:

The minimum dimensions of the marked characters shall be as specified in Table 3.



Table 3 — Minimum dimensions of marked characters <sup>a</sup>

Type of marking	Minimum character height, except for 6.2 g) and 6.3 e) <sup>a</sup> mm	Minimum depression or projection of characters mm
Cast directly on a dry alarm valve	9,5	0,75
Cast directly on a quick opening device	4,7	0,75
Cast label	4,7	0,5
Non-cast label	2,4	Not applicable
Printed label	2,4	Not applicable
Stamped directly on dry alarm valve	4,7	0,1
<sup>a</sup> The minimum character height for item 6.2 g), and 6.3 e) serial number or year of manufacture, shall be 3 mm.		

*Insert new Annex M as follows:*