

SLOVENSKI STANDARD SIST EN 17407:2020

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Prenosna oprema za črpanje in uporabo gasilnega sredstva iz gasilskih črpalk - Zbiralne in razdelilne zapore PN16

Portable equipment for projecting extinguishing agents supplied by firefighting pumps - Collecting heads and dividing breechings PN16

Tragbare Geräte zum Ausbringen von Löschmitteln, die mit Feuerlöschpumpen gefördert werden - Sammelstücke und Verteiler PN 16 RD PREVIEW

Équipement portable de projection d'agents d'extinction alimenté par des pompes à usage incendie - Collecteurs et divisions PN16

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ICS:

13.220.10 Gašenje požara Fire-fighting

SIST EN 17407:2020 en,fr,de

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English Version

Portable equipment for projecting extinguishing agents supplied by firefighting pumps - Collecting heads and dividing breechings PN 16

Équipement portable de projection d'agents d'extinction alimenté par des pompes à usage incendie - Collecteurs et divisions PN 16 Tragbare Geräte zum Ausbringen von Löschmitteln, die mit Feuerlöschpumpen gefördert werden -Sammelstücke und Verteiler PN 16

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 17407:2020) has been prepared by Technical Committee CEN/TC 192 "Fire and rescue service equipment", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2021, and conflicting national standards shall be withdrawn at the latest by March 2021.

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

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Introduction

The collecting head PN 16 is primarily intended for use during firefighting operations to connect one or more lines of hose.

The dividing breeching PN 16 with outlet valves is primarily intended for use during firefighting operations to divide one or more inlets into two or more outlets and fight the fire with more than one branchpipe.

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1 Scope

- **1.1** This document defines requirements and tests which apply to:
- collecting heads with a nominal pressure of 16 bar (1,6 MPa) PN 16 which are used by fire and rescue services to combine two or more inlets into one or more outlets;
- dividing breechings with a nominal pressure of 16 bar (1,6 MPa) PN 16 which are used by fire and rescue services to divide one or more inlets into two or more outlets.
- NOTE 1 In this document "ColDiv" is used to refer both to <u>col</u>lecting heads and <u>div</u>iding breechings.
- NOTE 2 In this document, drawings of collecting heads and dividing breechings are shown inlets downwards and outlet upwards.
- **1.2** This document is not applicable to collecting heads or dividing breechings which have been manufactured before its date of publication as European standard.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 837-1, Pressure gauges — Part 1: Bourdon tube pressure gauges — Dimensions, metrology, requirements and testing (Standards.iteh.ai)

EN 837-3, Pressure gauges — Part 3: Digphragmand_capsule pressure gauges — Dimensions, metrology, requirements and testing/standards.iteh.ai/catalog/standards/sist/c0c04263-4e4f-4bce-b5aa-3090d704660a/sist-en-17407-2020

EN 12266-1, Industrial valves — Testing of metallic valves — Part 1: Pressure tests, test procedures and acceptance criteria — Mandatory requirements

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

3.1

collecting head collecting breeching

device used to connect two or more inlets to one outlet

3.2

dividing breeching

device used to divide one inlet into two or more outlets equipped or not with shut off valves

3.3

combined collecting head and dividing breeching

device used to connect two or more inlets to two or more outlets equipped or not with shut off valves

3.4

pressures

Note 1 to entry: Pressures are expressed in bar, measured with respect to atmospheric pressure.

Note 2 to entry: 1 bar = $0.1 \text{ MPa} (10^5 \text{ Pa})$.

3.4.1

outlet working pressure

 p_2

pressure measured at the outlet of the dividing breeching

3.4.2

inlet working pressure

 p_1

pressure measured at the inlet of the dividing breeching

3.4.3

nominal pressure

 p_{N}

maximum working pressure measured at the inlet of the ColDiv

3.4.4 test pressure

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test pressure

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static pressure used for leakage tests

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3.4.5

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burst pressure 3090

 $p_{\rm B}$

static pressure used for burst test

3.4.6

dividing breeching pressure loss

pressure difference between the inlet of the dividing breeching and the outlet of the dividing breeching

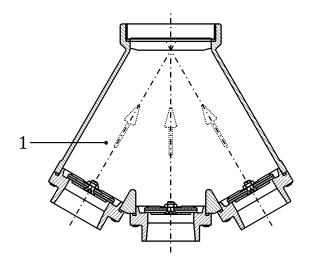
4 Description

4.1 Collecting head

A collecting head comprises at least the following components (see Figure 1):

- a body with several inlets and one outlet;
- fitting system;
- gripping device, optional;
- pressure gauge, optional;
- clapper/non return valve(s) when more than one inlet.

NOTE These components can consist of a single piece or several parts.



Key

1 body

Figure 1 — Components of a collecting head shown without fitting systems

4.2 Dividing breeching

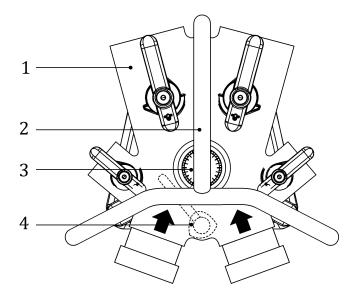
A dividing breeching comprises at least the following components (see Figure 2):

- a body with one inlet and several outlets, with or without shut off device (e.g. operated by a valve handle, a lever); (standards.iteh.ai)
- fitting system; SIST EN 17407:2020
 - https://standards.iteh.ai/catalog/standards/sist/c0c04263-4e4f-4bce-b5aa-gripping device, optional; 3090d704660a/sist-en-17407-2020
- 3090d704660a/sist-en-17407-2020
- pressure gauge, optional.

NOTE These components can consist of a single piece or several parts.

4.3 Combined collecting head and dividing breeching

A combined collecting head and dividing breeching is composed of elements described in 4.1 and 4.2 and illustrated in Figure 2.



Key

- 1 body
- 2 gripping device
- 3 pressure gauge
- 4 clapper/non return valve

Figure 2 — Components of a combined collecting head and dividing breeching shown without fitting systems (standards.iteh.ai)

5 Mechanical characteristics

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$\textbf{5.1 ColDiv types and classification} \\ \begin{array}{l} \text{https://standards.iteh.ai/catalog/standards/sist/c0c04263-4e4f-4bce-b5aa-3090d704660a/sist-en-17407-2020} \end{array}$

The ColDiv are classified by letters depending on nominal sizes of inlets and outlets as specified in Table 1 and given in a clockwise manner starting from the left inlet.

Table 1 — Nominal size designation

Nominal bore metric size	Nominal bore imperial size		Hose size (ranges)	Denominating code
mm	inch		mm	
25	1		19 to 25,4	D
50	1,5	2	38 to 55	С
75	2,5	3	65 to 75	В
110	4	4,5	100 to 110	A
125	5		125	E
150	6		150	F

Possible combination inlets/outlets are specified in Table 2 (see examples 1 to 5).

EXAMPLE 1 A dividing breeching with 1 inlet (75 mm) and 3 outlets (52 mm – 75 mm – 52 mm) is classified as follows: B-CBC (see Figure 3).

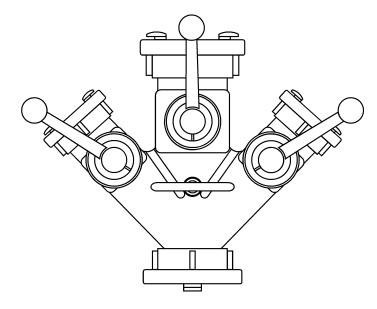


Figure 3 — Example of a dividing breeching type B-CBC with couplings

EXAMPLE 2 A combined collecting head and dividing breeching with 2 inlets (75 mm) and 3 outlets (52 mm – 75 mm – 52 mm) is classified as follows: BB-CBC (see Figure 4).

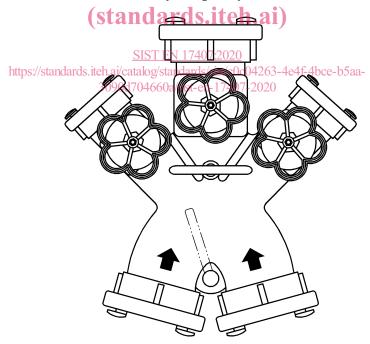


Figure 4 — Example of a combined collecting head and dividing breeching type BB-CBC with couplings