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IS : 905 - 1980  
(Reaffirmed 2008)

*Indian Standard*  
SPECIFICATION FOR  
DELIVERY BREECHINGS, DIVIDING AND  
COLLECTING, INSTANTANEOUS PATTERN,  
FOR FIRE FIGHTING PURPOSES

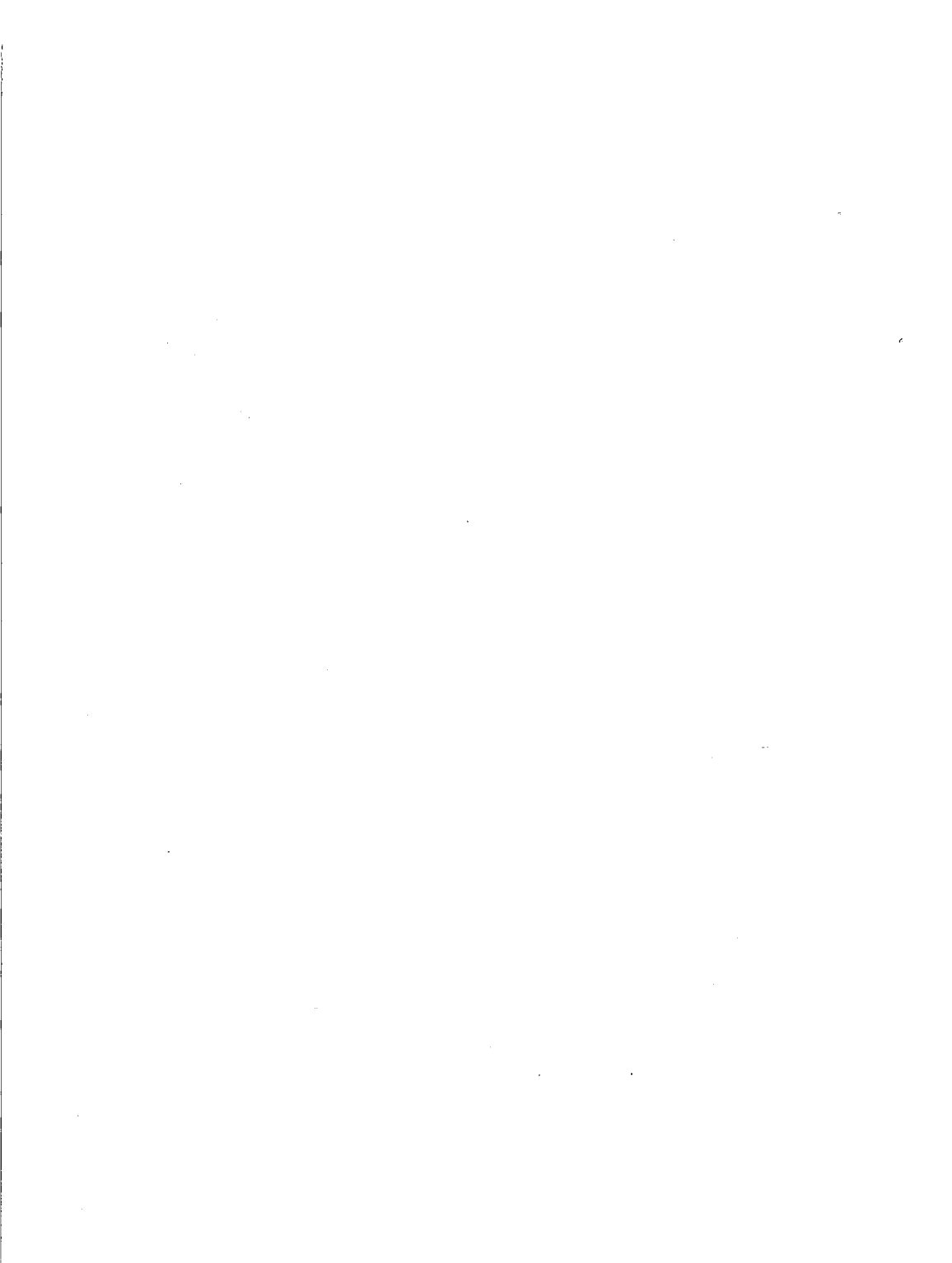
*( Second Revision )*

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**BUREAU OF INDIAN STANDARDS**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002



*Indian Standard*  
**SPECIFICATION FOR  
 DELIVERY BREECHINGS, DIVIDING AND  
 COLLECTING, INSTANTANEOUS PATTERN,  
 FOR FIRE FIGHTING PURPOSES**  
*( Second Revision )*

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( Continued on page 2 )

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( Continued on page 8 )

*Indian Standard*  
SPECIFICATION FOR  
DELIVERY BREECHINGS, DIVIDING AND  
COLLECTING, INSTANTANEOUS PATTERN,  
FOR FIRE FIGHTING PURPOSES  
( *Second Revision* )

0. FOREWORD

**0.1** This Indian Standard ( Second Revision ) was adopted by the Indian Standards Institution on 28 August 1980, after the draft finalized by the Fire Fighting Sectional Committee had been approved by the Civil Engineering Division Council.

**0.2** Delivery breechings are normally used for fire fighting operations along with the hoses. Dividing breeching is employed to meet those cases where it is necessary to divide or breach a line of hose under good pressure into two lines so that two branches may be used. A collecting breeching is employed in cases where the pressure is not adequate and it is required to step up the same by an additional feed.

**0.2.1** In the case of dividing breeching, there shall be a male fitting ( single ) on the inlet side and female fittings on the two outlets. In the case of collecting breeching, there shall be a female fitting ( single ) on the outlet side and male fittings on the two inlets.

**0.3** This standard was prepared to ensure compatibility of breechings with other standard fire fighting equipment. It was first published in 1958 and revised in 1965. In this revision complete drawings of items are given and the other provisions are up-dated.

**0.4** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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\*Rules for rounding off numerical values ( revised ).

## 1. SCOPE

1.1 This standard lays down the requirements regarding materials, shape, dimensions and performance requirements of delivery breechings, dividing and collecting types.

## 2. DESCRIPTION

2.1 The delivery breechings shall consist of the following components:

- a) Body,
- b) Female outlet(s), and
- c) Male half coupling(s).

## 3. MATERIALS

3.1 Castings and forgings of breechings shall be made of any one of the materials given under 3.1.1 and 3.1.2.

3.1.1 *Copper Alloys* — Copper alloys used for castings or forgings shall conform to the requirements given below:

- a) Sand castings — Grade 2 of IS : 318-1962\* or Grade 3 of IS : 304-1961†.
- b) Die castings — Grade 3 of IS : 292-1961‡.
- c) Hot forgings — Grade 1 of IS : 291-1977§.

3.1.2 *Aluminium Alloy* — Aluminium alloy used for castings shall conform to IS Designation 4450 or 4225 of IS : 617-1975||.

3.2 *Springs* — The spring shall be of wire conforming to IS : 7608-1975¶ for copper alloy breechings and IS : 6528-1972\*\* for aluminium alloy breechings.

3.3 The washer shall be made of rubber conforming to IS : 937-1965††.

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\*Specification for leaded tin bronze ingots and castings ( *revised* ).

†Specification for high tensile brass ingots and castings ( *revised* ).

‡Specification for brass ingots and castings ( *revised* ).

§Specification for naval brass rods and sections ( suitable for machining and forging ) ( *second revision* ).

||Specification for aluminium and aluminium alloy ingots and castings for general engineering purposes ( *second revision* ).

¶Specification for phosphor bronze wires ( for general engineering purposes ).

\*\*Specification for stainless steel wire.

††Specification for washers for water fittings for fire fighting purposes ( *revised* ).



#### 4. TYPES AND DIMENSIONS

4.1 The delivery breechings shall be of two types as under:

- a) Dividing ( *see* Fig. 1 ), and
- b) Collecting ( *see* Fig. 2 ).

4.2 The general shape and principal dimensions of each type shall be as given in Fig. 1 and 2.

#### 5. FINISH

5.1 All parts shall be of good finish, and clear of burrs and sharp edges. All castings shall be clean and sound, and shall be free from plugging, welding or repair of any defects.

#### 6. PERFORMANCE REQUIREMENTS

6.1 **Hydraulic Test** — The assembled fitting shall be subjected to a hydraulic pressure test for a period of 2 minutes for the purpose of locating porosity in the casting and testing leakage at joints. The hydraulic pressure to be applied shall be  $2.1 \text{ MN/m}^2$  (  $21 \text{ kgf/cm}^2$  ). The fitting, when so tested, shall not show any sign of leakage.

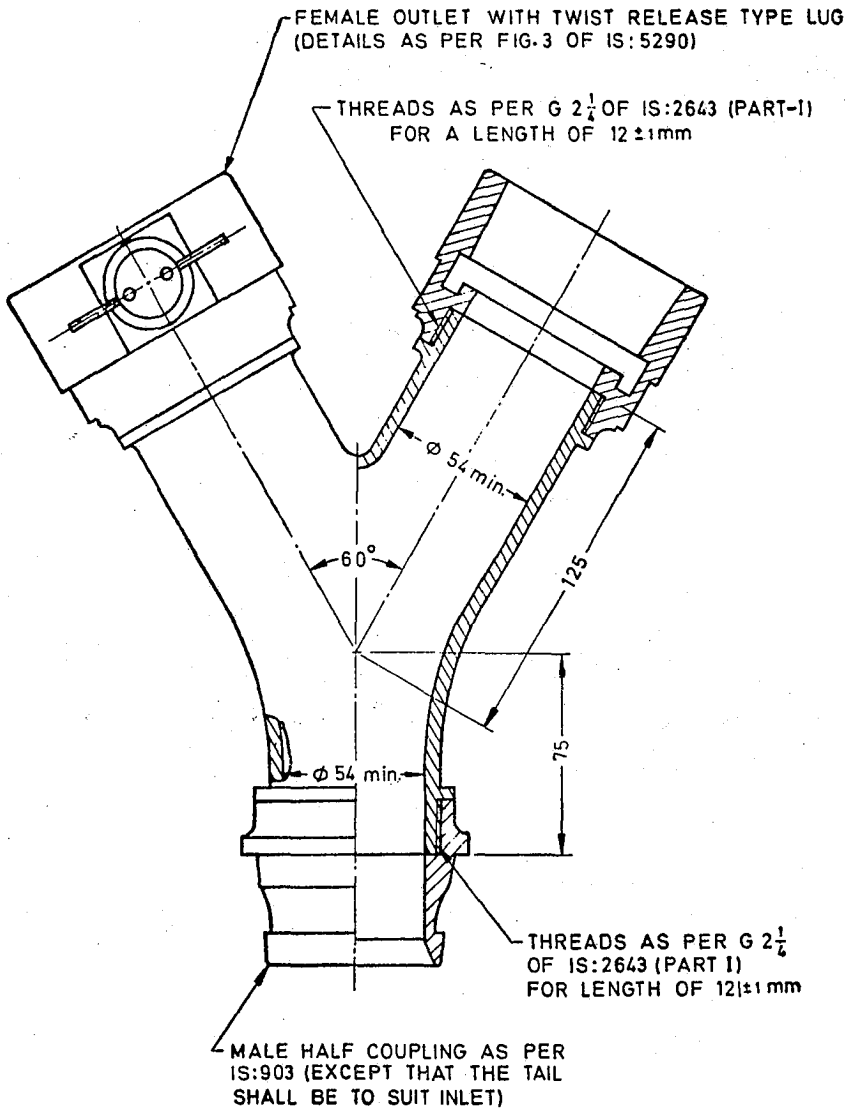
#### 7. MARKING

7.1 Each breeching shall be clearly and permanently marked with the following information:

- a) Manufacturer's name or trade-mark,
- b) Type of breechings, and
- c) Year of manufacture.

7.1.1 The product may also be marked with Standard mark.

7.2 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.



All dimensions in millimetres.

FIG. 1 DIVIDING BREECHING

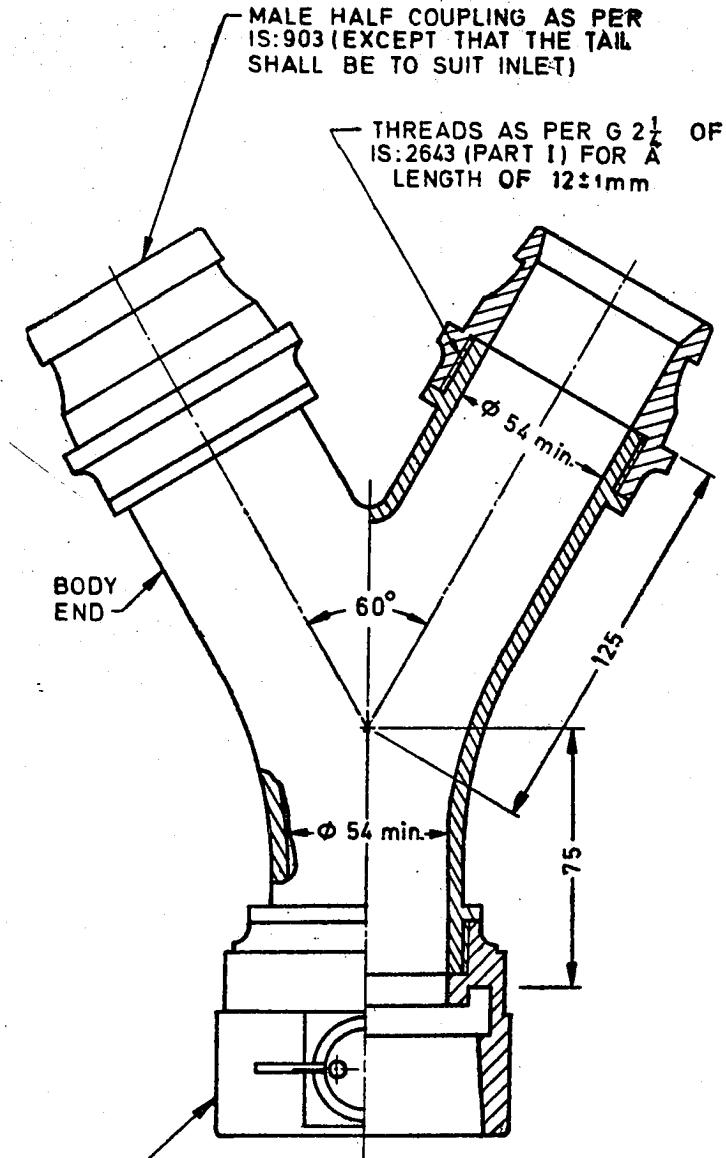


FIG. 2 COLLECTING BREECHINGS

**IS : 905 - 1980**

*(Continued from page 2)*

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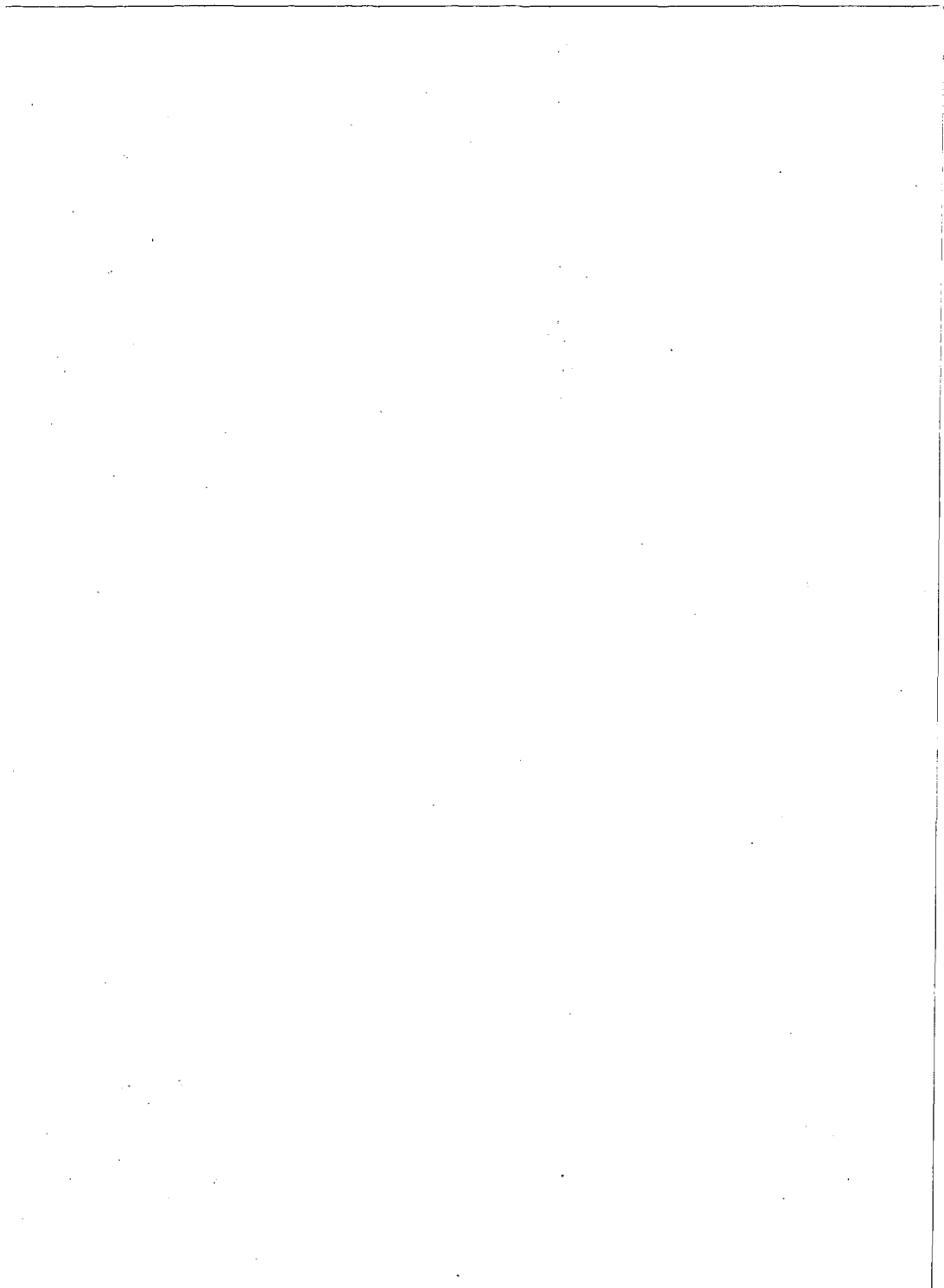
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