



# SLOVENSKI STANDARD SIST EN 560:2018

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Nadomešča:

SIST EN 560:2005

SIST EN 560:2005/AC:2008

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**Oprema za plamensko varjenje - Cevne spojke za opremo za varjenje, rezanje in sorodne tehnike**

Gas welding equipment - Hose connections for equipment for welding, cutting and allied processes

**iTeh STANDARD PREVIEW**

Gasschweißgeräte - Schlauchanschlüsse für Geräte und Anlagen für Schweißen, Schneiden und verwandte Prozesse

[SIST EN 560:2018](https://standards.itih.ai/catalog/standards/sist/611aa9d6-90b4-482d-8809-60b8c6569e61/sist-en-560-2018)

Matériel de soudage au gaz - Raccords pour tuyaux souples pour appareils de soudage, coupage et techniques connexes

**Ta slovenski standard je istoveten z: EN 560:2018**

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**ICS:**

25.160.30	Varilna oprema	Welding equipment
83.140.40	Gumene cevi	Hoses

**SIST EN 560:2018**

**en,fr,de**

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EUROPEAN STANDARD

EN 560

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2018

ICS 23.040.70; 25.160.30

Supersedes EN 560:2005

English Version

## Gas welding equipment - Hose connections for equipment for welding, cutting and allied processes

Matériel de soudage au gaz - Raccords pour tuyaux  
souples pour appareils de soudage, coupage et  
techniques connexes

Gasschweißgeräte - Schlauchanschlüsse für Geräte und  
Anlagen für Schweißen, Schneiden und verwandte  
Prozesse

This European Standard was approved by CEN on 27 May 2018.

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This European Standard 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



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 560:2018) has been prepared by Technical Committee CEN/TC 121 "Welding and allied processes", the secretariat of which is held by DIN.

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 2019, and conflicting national standards shall be withdrawn at the latest by March 2019.

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.

This document supersedes EN 560:2005.

Main changes in this new edition:

This edition differs from EN 560:2005 (which was impacted by EN 560:2005/AC:2007) as follows:

- a) Normative references have been updated;
- b) Clause 3, Terms and definitions, has been added;
- c) an upper pressure limit of 2 MPa for the hose connections has been added;
- d) the design requirements for the diameter " $d_7$ " have been updated.

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

**EN 560:2018 (E)****1 Scope**

This document lays down the dimensions and specifies the characteristics of the constituent parts of hose connections for welding, cutting and allied processes, for example for pressure regulators according to EN ISO 2503 and blowpipes. The suitability of the hose connections mentioned below will be considered according to the applied pressure range. This document does not cover the design of the hose tail inserted into the hose. This is specified in EN 1256.

**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 1256, *Gas welding equipment - Specification for hose assemblies for equipment for welding, cutting and allied processes*

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

EN ISO 9539, *Gas welding equipment - Materials for equipment used in gas welding, cutting and allied processes (ISO 9539)*

**3 Terms and definitions**

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For the purposes of this document the terms and definitions given in EN 1256 and the following 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 <http://www.iso.org/obp>

**3.1****coupling device**

part of the hose connection to connect the hose with the threaded union with a union nut

Note 1 to entry: See Figure 1.

**3.2****hose tail**

part of the coupling device inserted into the hose

**3.3****coupling device front end**

front part of the coupling device containing a bull nose

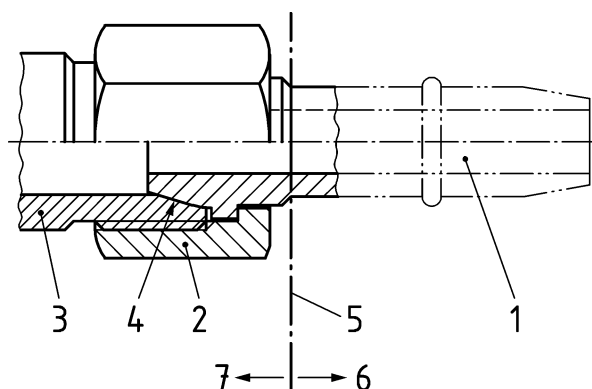
**3.4****bull nose**

part of the coupling device to establish a seal to the cone of the threaded union

**4 General**

The gas pipe threads shall be in accordance with the requirements of EN ISO 228-1. All other dimensions are given in millimetres.

The joint is made with a bull nose and cone seal (see Figure 1).



### Key

- 1 coupling device
- 2 union nut
- 3 threaded union
- 4 resulting seal between bull nose and cone of the threaded union
- 5 border of scopes
- 6 covered by EN 1256: hose tail
- 7 covered by this document: front end of the coupling device

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**Figure 1 — Hose connection**  
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The hose connections mentioned below apply to a pressure range of a maximum of 2 MPa (20 bar).

## 5 Material

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The material shall conform to EN ISO 9539.

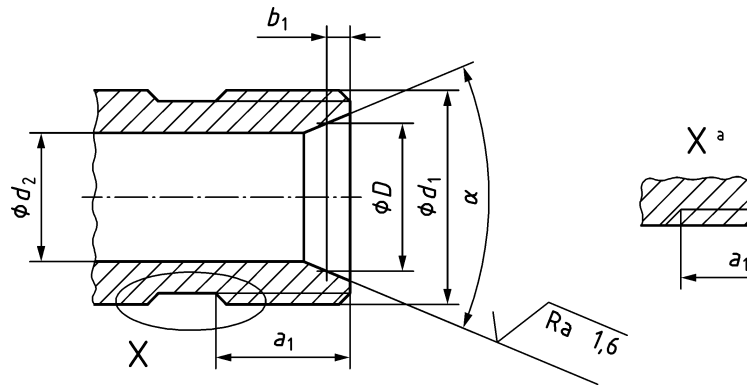
## 6 Dimensions

### 6.1 General

The dimensions of threaded union, union nut and hose tail shall be as specified in 6.2, 6.3 and 6.4.

## EN 560:2018 (E)

## 6.2 Threaded union



## Key

<sup>a</sup> alternative

Figure 2 — Threaded union

All values given in Table 1 are in millimetres except those of the " $d_1$ " column, which are thread sizes as specified in EN ISO 228-1. Tolerances for external thread according to class A of EN ISO 228-1.

Table 1 — Dimensions of threaded union

$d_1$	$D^a$ mm	$a_1^b$ min. mm	$b_1$ $_{S15}$ mm	$d_2$ max. mm	$\alpha$ degree
G 1/8	6,5	7,5	1,2	5	45 <sup>2</sup> <sub>-2</sub>
G 1/4	8,3	9,5	1,4	7	
G 3/8	11,5	10,5	1,8	10	
G 1/2	13,9	12	2	12	
G 3/4	18,5	13,5	2,2	16	
G 1	24	14,5	2,4	22	
<p><sup>a</sup> Datum diameter (nominal diameter of contact).</p> <p><sup>b</sup> Effective length of thread.</p>					

The dimensions not given are left to the discretion of the manufacturer.

Type of thread to be used:

- right-hand for oxygen and non-combustible gases;
- left-hand for combustible gases.



## 6.3 Union nut

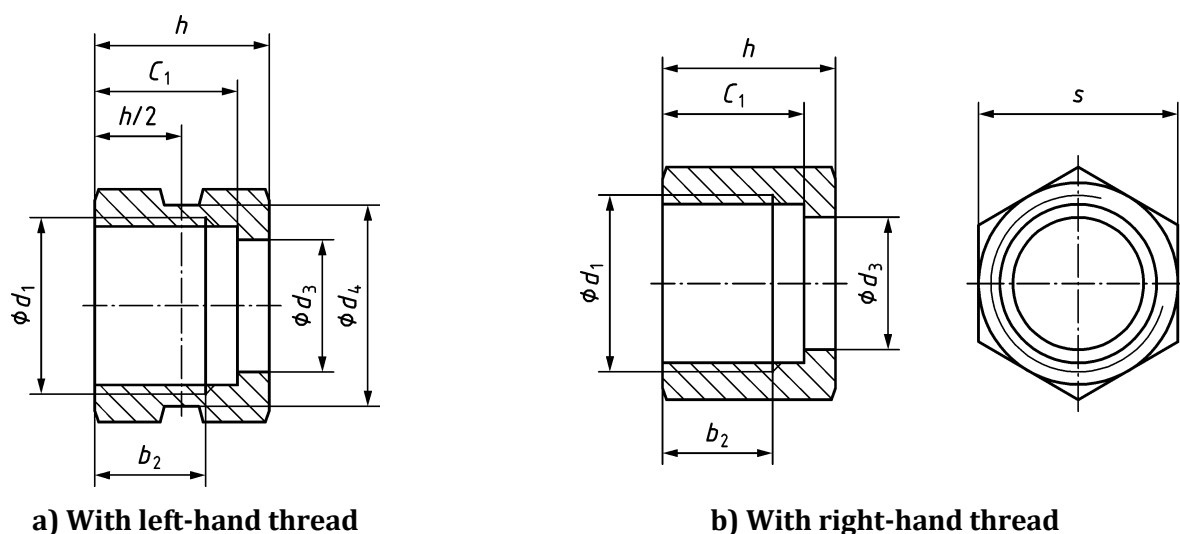


Figure 3 — Union nut

All values given in Table 2 are in millimetres except those of the " $d_1$ " column, which are thread sizes as specified in EN ISO 228-1.

**Table 2 — Dimensions of union nut**  
(standards.iteh.ai)

$d_1$	$b_2$ min. mm	$c_1$ J <sub>S</sub> 15 mm	$d_3$ H12 mm	$d_4$ h14 mm	$h$ h14 mm	$s$ h11 mm
G 1/8	8	10	6,5	11	12	11
G 1/4	10	12,5	9,5	17	15,5	17
G 3/8	10,5	13,5	12,5	19	16,5	19
G 1/2	13	16,5	14,5	24	20,5	24
G 3/4	15	18,5	19,5	30	22,5	30
G 1	17	21,5	25,5	41	26,5	41

The dimensions not given are left to the discretion of the manufacturer.

Type of thread to be used:

- right-hand for oxygen and non-combustible gases;
- left-hand for combustible gases.