SLOVENSKI STANDARD
SIST EN 1106:2022

01-december-2022

Nadomešča:
SIST EN 1106:2010

Ročne pipe za plinske aparate

Manually operated taps for gas burning appliances

Handbetätigte Einstellgeräte für Gasgeräte

Robinets à commande manuelle pour appareils à gaz

Ta slovenski standard je istoveten z: **EN 1106:2022**

ICS:

23.060.99	Drugi ventili	Other valves
27.060.20	Plinski gorilniki	Gas fuel burners

SIST EN 1106:2022 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1106

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English Version

Manually operated taps for gas burning appliances

Robinets à commande manuelle pour appareils à gaz

Handbetätigte Einstellgeräte für Gasgeräte

This European Standard was approved by CEN on 8 August 2022.

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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 1106:2022) has been prepared by Technical Committee CEN/TC 58 “Safety and control devices for burners and appliances burning gaseous or liquid fuels”, 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of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by October 2025.

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 1106:2010.

The following significant changes compared to the previous edition have been incorporated in this document:

a) alignment with EN 13611:2019;

b) requirements from EU Directive 2014/68/EU were not adopted;

c) controls which use auxiliary energy are not within the scope of this document;

d) reference to EN 437 removed;

e) updating of Clause 2, Normative references;

f) information on lifetime for safe function (designed lifetime) added to instructions.

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

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

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

This document is intended to be used in conjunction with EN 13611:2019.

EN 13611:2019 recognizes the safety level specified by CEN/TC 58 and is regarded as a horizontal standard dealing with the safety, construction, performance and testing of controls for burners and appliances burning gaseous and/or liquid fuels.

The general requirements for controls are given in EN 13611:2019, and methods for classification and assessment for new controls and control functions are given in EN 14459:2021 (see Figure 1). EN 126:2012 (see Figure 1) specifies multifunctional controls combining two or more controls and Application Control Functions, one of which is a mechanical control function. The requirements for controls and Application Control Functions are given in the specific control standard (see Figure 1, control functions).

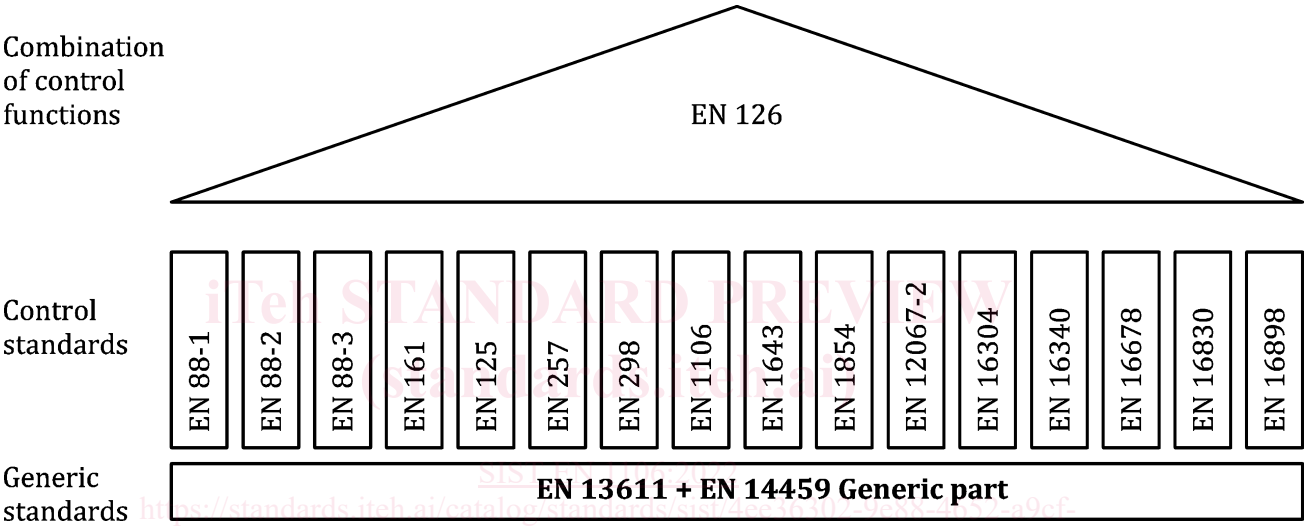


Figure 1 — Interrelation of control standards

EN 13611:2019 should be used in conjunction with the specific standard for a specific type of control (e.g. EN 88-1:2022, EN 88-2:2022, EN 88-3:2022, EN 125:2022, EN 126:2012, EN 161:2022, EN 257:2022, EN 298:2022, EN 1106:2022, EN 1643:2022, EN 1854:—[1], EN 12067-2:2022, EN 16304:2022, EN 16340:2014, EN 16678:2022 and EN 16898:2022), or for controls for specific applications.

EN 13611:2019 can also be applied, so far as reasonable, to controls not mentioned in a specific standard and to controls designed on new principles, in which case additional requirements can be necessary. EN 14459:2021 provides methods for classification and assessment of new control principles.

Primarily in industrial applications it is common practice to rate the safety of a plant based on values describing the likelihood of a dangerous failure. These values are being used to determine Safety Integrity Levels or Performance Levels when the system is being assessed in its entirety.

CEN/TC 58 standards for safety relevant controls do go beyond this approach, because for a certain life time for which the product is specified, designed and tested a dangerous failure is not allowed at all. Failure modes are described and assessed in greater detail.

[1] Under preparation. Stage at the time of publication: FprEN 1854:2022.

Measures to prevent from dangerous situations are defined. Field experience over many decades is reflected in the CEN/TC 58 standards. Requirements of EN 13611:2019 can be considered as proven in practice.

This document refers to clauses of EN 13611:2019 or adapts clauses by stating “with the following modification”, “with the following addition”, “is replaced by the following” or “is not applicable” in the corresponding clause.

This document adds clauses or subclauses to the structure of EN 13611:2019 which are particular to this document. Subclauses which are additional to those in EN 13611:2019 are numbered starting from 101. Additional Annexes are designated as Annex AA, Annex BB, Annex CC, etc. It should be noted that these clauses, subclauses and Annexes are not indicated as an addition.

If by reference to EN 13611:2019 the term “control” is given, this term should be read as “tap”.

1 Scope

EN 13611:2019, Clause 1 applies with the following modification and addition:

Modification:

The 1st paragraph of EN 13611:2019, Clause 1 is replaced by:

This document specifies the safety, design, construction, and performance requirements and testing for manually operated taps and presetting taps for burners and appliances burning one or more gaseous fuels, hereafter referred to as “taps”.

This document is applicable to taps with declared maximum inlet pressures up to and including 50 kPa and of nominal connection sizes up to and including DN 50 for use with one or more fuel gases.

Addition:

This document is not applicable to:

a) manual operated shut-off valves conforming to EN 331:2015;

b) controls which use auxiliary energy (e.g. electrical energy supplied externally).

The 4th paragraph of EN 13611:2019, Clause 1 is removed.

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 30-1-1:2021, *Domestic cooking appliances burning gas — Part 1-1: Safety — General*

EN 331:2015, *Manually operated ball valves and closed bottom taper plug valves for gas installations for buildings*

EN 13611:2019[2], *Safety and control devices for burners and appliances burning gaseous and/or liquid fuels — General requirements*

EN 14543:2017, *Specification for dedicated liquefied petroleum gas appliances — Parasol patio heaters — Flueless radiant heaters for outdoor or amply ventilated area use*

[2] As impacted by EN 13611:2019/AC:2021.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13611:2019 and the following apply.

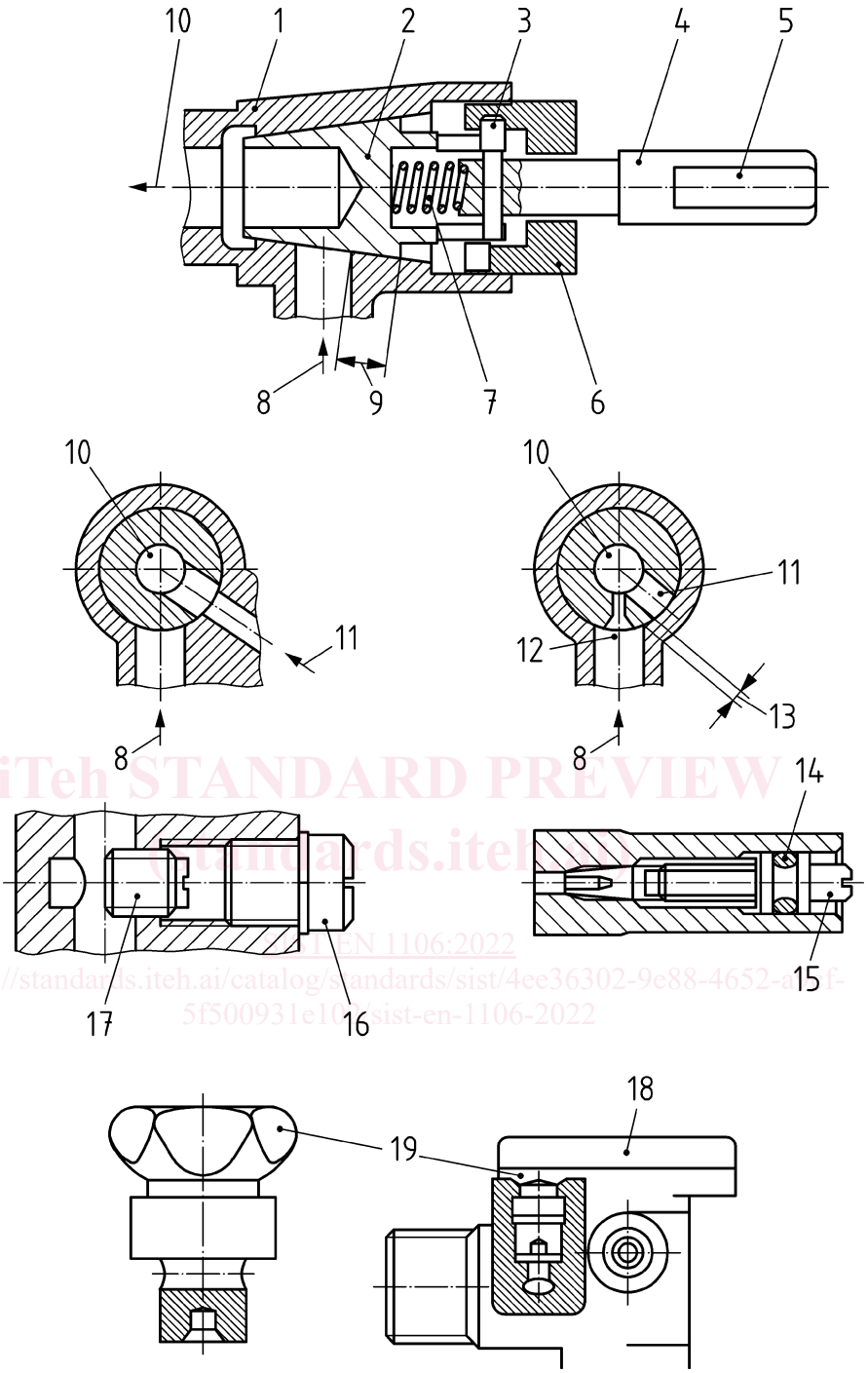
ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.101
control tap
direct or indirect manually operated device with one or more outlets for the control of the flow of gas from an off to an on position and vice versa

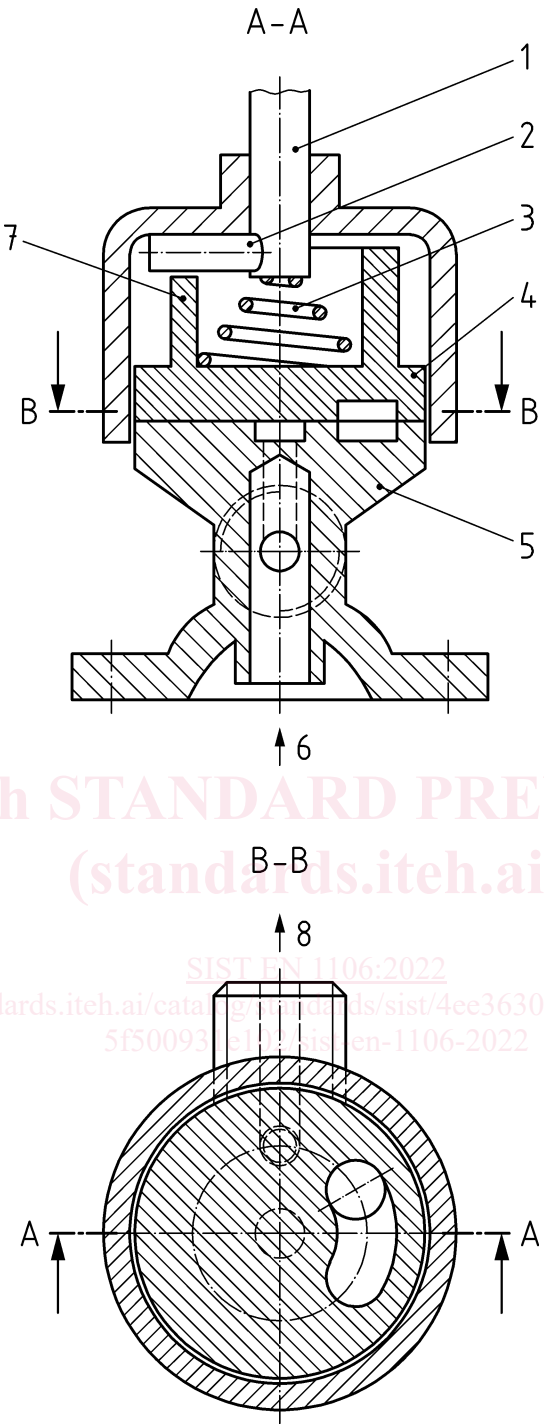
Note 1 to entry: Parts commonly used in taps are shown as examples in Figures 2 to 6.



Key

1	body	11	reduced flow rate gas inlet
2	plug	12	reduced flow rate gas way
3	latch pin	13	overlapping seal
4	operating spindle	14	sealing ring
5	flats for handle	15	restricting screw
6	latch pin guide	16	sealing screw for presetting screw
7	spring for operating spindle	17	presetting screw
8	gas inlet	18	tap
9	bearing seal	19	reduced flow rate screw
10	gas outlet		

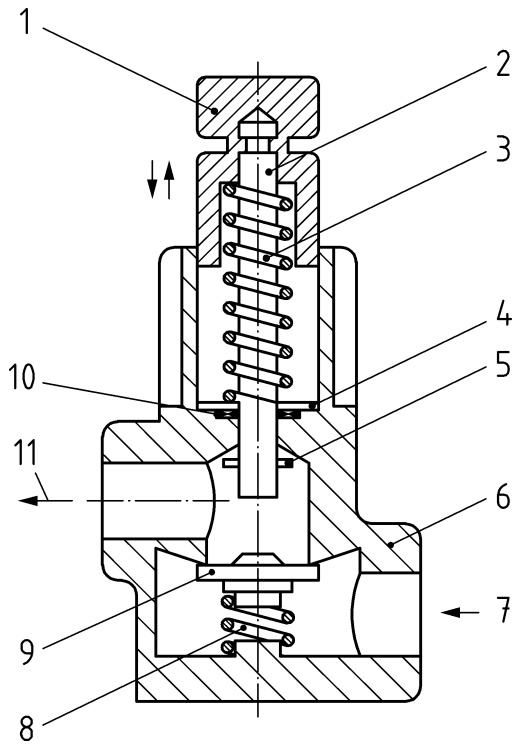
Figure 2 — Taper plug tap



Key

1 operating spindle
2 latch pin
3 spring for operating spindle
4 disc
5 body
6 gas inlet
7 latch pin guide
8 gas outlet

Figure 3 — Disc tap



Key

1 operating spindle
2 valve rod
3 spring for operating spindle
4 washer
5 spindle stop
6 tap body
7 gas inlet
8 disk spring
9 tap disk
10 O-ring seal
11 gas outlet

Figure 4 — Linear disc tap