

BS EN 12760:2016



BSI Standards Publication

# Industrial valves — Socket welding ends for steel valves

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**National foreword**

This British Standard is the UK implementation of EN 12760:2016. It supersedes BS EN 12760:1999 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PSE/18/1, Industrial valves, steam traps, actuators and safety devices against excessive pressure - Valves - Basic standards.

A list of organizations represented on this committee can be obtained on request to its secretary.

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EUROPEAN STANDARD

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English Version

**Industrial valves - Socket welding ends for steel valves**

Robinetterie industrielle - Extrémités à emboîter et à souder pour appareils de robinetterie en acier

Industriearmaturen - Schweißmuffenenden für Armaturen aus Stahl

This European Standard was approved by CEN on 3 March 2016.

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## European foreword

This document (EN 12760:2016) has been prepared by Technical Committee CEN/TC 69 “Industrial valves”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by October 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.

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

This document supersedes EN 12760:1999.

The main change is the update of the standard to be in compliance with the present rules for the structure and drafting of CEN-CENELEC publications.

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## 1 Scope

This European Standard specifies the dimensions of socket welding ends of steel valves designed to be socket welded to standardised pipes in the size range DN 6 to DN 65.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 736-1, *Valves — Terminology — Part 1: Definition of types of valves*

EN 736-2, *Valves — Terminology — Part 2: Definition of components of valves*

EN 736-3, *Valves — Terminology — Part 3: Definition of terms*

ISO 4200, *Plain end steel tubes, welded and seamless — General tables of dimensions and masses per unit length*

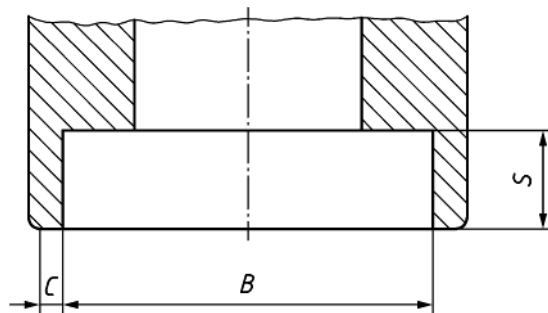
## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 736-1, EN 736-2 and EN 736-3 apply.

## 4 Requirements

**4.1** Socket welding ends of steel valve bodies shall have the form shown in Figure 1 and dimensions as stated in Table 1.

**4.2** The width of the flat welding surface,  $C$ , shall not be less than  $0,81 \times$  Pipe wall thickness as specified in ISO 4200 or 3 mm, whichever is the greater.



**Figure 1 — Socket welding end detail**

**Table 1 — Dimensions of socket welding ends**

Valve DN (Nominal Size)	DN 6	DN 8	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65
Inside diameter of socket max.	11,15	14,60	18,05	22,20	27,55	34,30	43,05	49,15	61,60	77,40
ØB in mm. min.	10,65	14,10	17,55	21,70	27,05	33,80	42,55	48,65	61,10	76,80
Depth of socket S in mm. min.	10,0	10,0	10,0	10,0	13,0	13,0	13,0	13,0	16,0	16,0

## 5 Designation

A socket welding end shall be designated by the following:

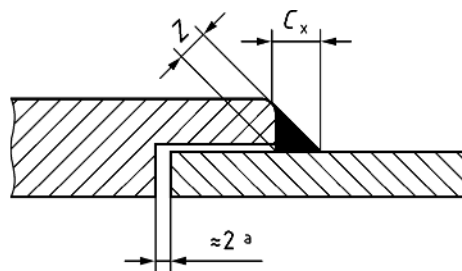
- the wording “socket welding end (SW)”;
- the number of this European Standard, i.e. EN 12760;
- the nominal size DN of the valve, e.g. DN 50.

EXAMPLE Socket welding end (SW) EN 12760 DN 50.

## Annex A (informative)

### Recommended welding detail

It is recommended that the width of fillet weld  $C_x$  as shown in Figure A.1 should not be less than  $1,09 \times$  pipe wall thickness or 3 mm, whichever is the greater. A gap of approximately 2 mm should be left between the bottom of the socket and the end of the pipe.



#### Key

Z  $0,707 \times C_x$

<sup>a</sup> Approximately 2,0 mm before welding

**Figure A.1 — Recommended welding detail**





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