INTERNATIONAL STANDARD 727

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Unplasticized polyvinyl chloride (PVC) fittings with plain sockets for pipes under pressure — Dimensions of sockets — Metric series

Raccords en polychlorure de vinyle (PVC) non plastifié à emboîtements lisses pour tubes sous pression — Dimensions des emboîtements — Série métrique

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 727 was developed by Technical Committee ISO/TC 138, *Plastics pipes, fittings and values for the transport of fluids*. The second edition (ISO 727-1975) had been approved by the member bodies of the following countries:

Austria	India	Romania
Belgium	Ireland	South Africa, Rep. of
Chile	Israel	Spain
Czechoslovakia	Italy	Sweden
Denmark	Netherlands	Switzerland
Finland	Norway	United Kingdom
France	Poland	USA
Germany, F.R.	Portugal	

No member body had expressed disapproval of the document.

This third edition, which supersedes ISO 727-1975, incorporates draft Amendment 1, which was submitted directly to the ISO Council, in accordance with clause 5.10.1 of the Directives for the technical work of ISO.

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Unplasticized polyvinyl chloride (PVC) fittings with plain sockets for pipes under pressure — Dimensions of sockets — Metric series

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the dimensions of plain sockets in unplasticized polyvinyl chloride (PVC) fittings intended for connecting by solvent welding to unplasticized PVC pipe for use under pressure. The resulting joint does not require mechanical anchorage.

The basic dimensions of these fittings are given in ISO 264.

2 REFERENCES

ISO 161/1, *Thermoplastics pipes for the transport of fluids — Nominal outside diameters and nominal pressures — Part 1 : Metric series.*

ISO 264, *Unplasticized polyvinyl chloride (PVC) fittings with plain sockets for pipes under pressure — Dimensions of laying lengths — Metric series.*

3 SOCKET LENGTH (MINIMUM)

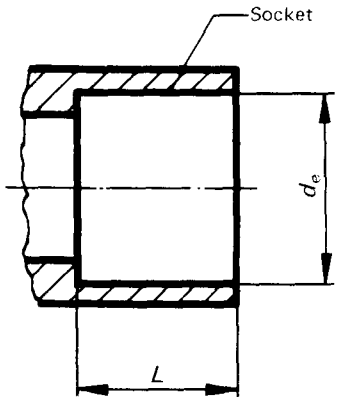

FIGURE — **Socket dimensions**

The socket length L (see the figure) is given by the expression

$$L = 0{,}5\, d_e + 6 \text{ mm, with a minimum of 12 mm,}$$

where d_e is the outside diameter of the pipe, in accordance with ISO 161/1.

This socket length is applicable for socket fittings for pipes of any diameter under pressure.

4 INSIDE DIAMETER OF SOCKET

The mean inside diameter of a socket shall comply with the requirements of the table.

TABLE — **Tolerances on mean inside diameter of socket**

Dimensions in millimetres

Outside diameter of pipe Inside diameter of fitting d_e	**Tolerances on mean inside diameter of socket**	
	Type A for joint with interference	**Type B** for joint with clearance
10 12 16 20 25	0 − 0,15	+ 0,3 + 0,1
32 40 50	0 − 0,2	
63 75	0 − 0,25	
90	0 − 0,3	
110 125		+ 0,4 + 0,1
140 160	0 − 0,4	+ 0,5 + 0,2
200 225	0 − 0,4	+ 0,6 + 0,3

The mean inside diameter of the socketed portion of the fitting is defined as being the arithmetical mean of two diameters measured perpendicular to each other at the midpoint of the socket depth. The maximum included angle of the socketed portion of the fittings shall not exceed 0° 30′.

5 OUT-OF-ROUNDNESS TOLERANCES OF SOCKET INSIDE DIAMETER

Maximum out-of-roundness tolerances (maximum diameter − minimum diameter) shall be

a) equal to 0,007 d_e, or

b) equal to 0,2 mm if 0,007 d_e < 0,2 mm.