
INTERNATIONAL STANDARD



727

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

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

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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.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, International Standard ISO 727 replaces ISO Recommendation R 727-1968 drawn up by Technical Committee ISO/TC 5, *Pipes and fittings*. Technical Committee ISO/TC 138, *Plastics pipes and fittings for the transport of fluids*, set up in 1970, took over responsibility for this document.

The Member Bodies of the following countries approved the Recommendation :

Argentina	Greece	Poland
Australia	Hungary	Portugal
Belgium	India	Spain
Canada	Ireland	Sweden
Chile	Israel	Switzerland
Czechoslovakia	Italy	Thailand
Egypt, Arab Rep of	Japan	Turkey
France	Netherlands	U.S.S.R.
Germany	Norway	Yugoslavia

The Member Body of the following country expressed disapproval of the Recommendation on technical grounds:

United Kingdom

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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. This plain socket is a joint without mechanical anchorage.

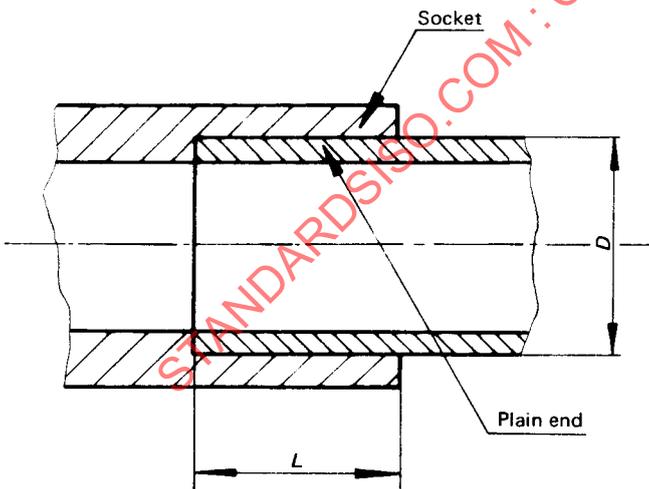
The basic dimensions of these fittings are given in ISO/R 264.

2 REFERENCES

ISO/R 161, *Pipes of plastics materials for the transport of fluids (Outside diameters and nominal pressures) – Part I : Metric series.*

ISO/R 264, *Pipes and fittings of plastics materials – Socket fittings for pipes under pressure – Basic dimensions – Metric series.*

3 SOCKET LENGTH



The socket length, L , is given by the expression

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

where D is the outside diameter of the pipe, in accordance with ISO/R 161.

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

4 TOLERANCES OF MEAN INSIDE DIAMETER OF SOCKET

Outside diameter of pipe Inside diameter of fitting D	Tolerances on mean inside diameter of socket	
	Type A for joint with interference	Type B for joint with clearance
mm	mm	mm
12		
16		
20	0	+ 0,30
25	- 0,15	+ 0,15
32		
40		
50		
63	0	+ 0,40
75	- 0,25	+ 0,15
90	0	+ 0,50
	- 0,30	+ 0,20

The mean inside diameter of the socketed portion of the fitting is defined as being the arithmetical mean of two diameters measured at 90° to each other at the midpoint of the socket depth. The maximum included angle of the socketed portion of the fittings shall not exceed $0^\circ 40'$.

5 OUT-OF-ROUNDNESS TOLERANCE OF SOCKET INSIDE DIAMETER

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

- less than or equal to $0,007 D$, or
- equal to 0,2 mm if $0,007 D < 0,2$ mm.