INTERNATIONAL STANDARD 1179

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

Pipe connections for plain end steel and other metal tubes in industrial applications

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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 1179 was drawn up by Technical Committee ISO/TC 5, *Metal pipes and fittings*, and circulated to the Member Bodies in April 1972.

It has been approved by the Member Bodies of the following countries :

Australia	Hungary	Romania
Austria	India	South Africa, Rep. of
Belgium	Ireland	Spain
Canada	Israel	Sweden
Czechoslovakia	Italy	Switzerland
Denmark	Japan	Thailand
Egypt, Arab Rep. of	Netherlands	Turkey
Finland	New Zealand	United Kingdom
Germany	Norway	U.S.S.R.

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

France

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Pipe connections for plain end steel and other metal tubes in industrial applications

1 SCOPE AND FIELD OF APPLICATION

This International Standard lays down a limited range of threads for connection of tubes to machines or equipment and indicates the related outside diameters of the tubes.

This International Standard does not attempt to specify the method of connecting the tube to the fitting, or the type of pipe connector.

2 REFERENCES

ISO/R 7, *Pipe threads for gas list tubes and screwed fittings where pressure-tight joints are made on the threads (1/8 inch to 6 inches).*

ISO/R 228, *Pipe threads where pressure-tight joints are not made on the threads (1/8 inch to 6 inches).*

3 TYPE OF THREADS

The specified thread denotes the connection between the machine or equipment and the connector. It shall be in accordance with ISO/R 228 – Class A tolerances.

4 DIMENSIONS

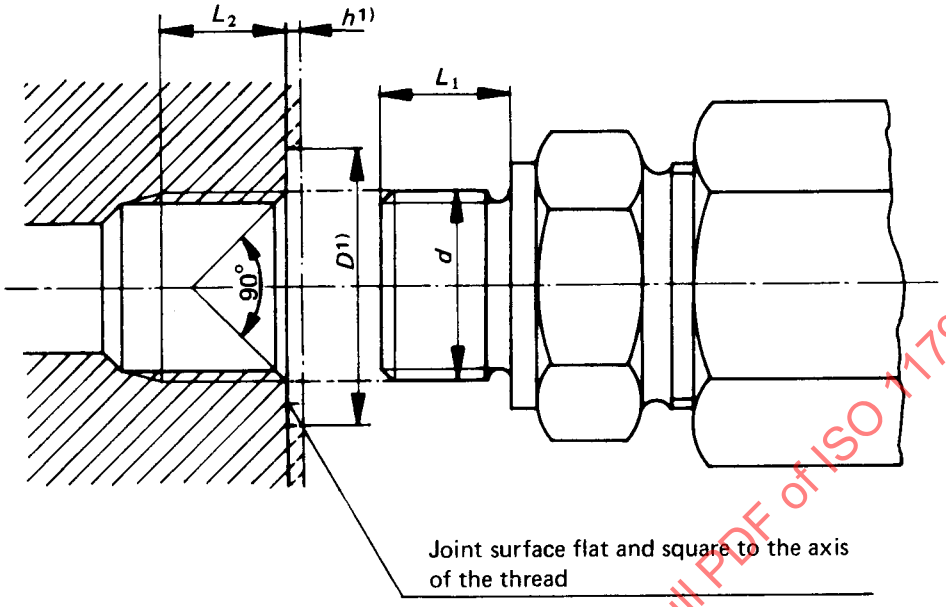

FIGURE 1

TABLE 1

Nominal size of thread d		Thread length L_1 male max. L_2 female min.		Dimensions of recess [1)]			
				D min.		h max.	
in		mm	in	mm	in	mm	in
G	1/16	7,4	0.290 2	13	0.512	1	0.039
G	1/8	7,4	0.290 2	15	0.591	1	0.039
G	1/4	11,0	0.434 0	19	0.748	1,5	0.059
G	3/8	11,4	0.447 3	23	0.906	2	0.079
G	1/2	15,0	0.589 2	27	1.063	2,5	0.098
G	3/4	16,3	0.642 8	33	1.299	2,5	0.098
G 1		19,1	0.750 0	40	1.575	2,5	0.098
G 1	1/4	21,4	0.840 9	50	1.969	2,5	0.098
G 1	1/2	21,4	0.840 9	56	2.205	2,5	0.098
G 2		25,7	1.011 3	69	2.717	3	0.118

1) Where a recess is necessary, the dimensions shall be as given in Table 1, unless otherwise specified, for example for O-rings.

The lengths L_2 of the female threads given in Table 1 are also suitable for assembly with male threads in accordance with ISO/R 7.

5 CHOICE OF TUBES

The outside diameter of tubes shall be chosen from Table 2, as appropriate to the nominal size of thread.

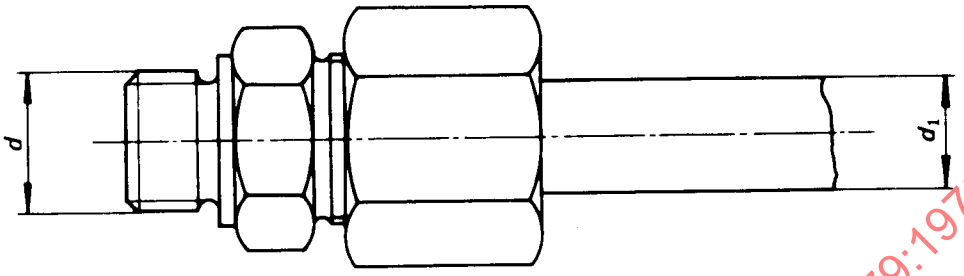

FIGURE 2

TABLE 2

Nominal size of thread *d*	Tubes Outside diameters d_1	
	Metric series	Inch series
in	mm	in
G 1/16	4	—
G 1/8	6	0.250
G 1/4	6	0.250
	8	0.312
	10	0.375
G 3/8	10	0.375
	12	
G 1/2	15	0.500
	16	0.625
	18	
G 3/4	20	0.750
	22	0.875
G 1	25	1.000
	28	
G 1 1/4	30	1.250
	35	
G 1 1/2	38	1.500
	42	
G 2	50	2.000