INTERNATIONAL STANDARD

ISO 10907-1

> Second edition 2008-11-01

Tools for moulding — Locating rings —

Part 1:

Locating rings for mounting without thermal insulating sheets in small or medium moulds (types A and B)

Outillage de moulage — Bagues de centrage —

Partie 1: Bagues de centrage pour montage sans feuille d'isolation thermique dans les petits et les moyens moules (types A et B)



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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 10907-1 was prepared by Technical Committee ISO/TC 29, Small tools, Subcommittee SC 8, Tools for pressing and moulding.

This second edition cancels and replaces the first edition (ISO 10907-1:1996), of which it constitutes a minor revision. In particular, the indication of surface texture has been updated in accordance with ISO 1302:2002.

ISO 10907 consists of the following parts, under the general title *Tools for moulding — Locating rings*:

- Part 1: Locating rings for mounting without thermal insulating sheets in small or medium mouldes (types A and B)
- Part 2: Locating rings for mounting with thermal insulating sheets in small or medium moulds (types C and D)



Tools for moulding — Locating rings —

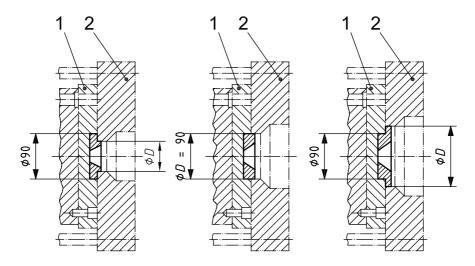
Part 1:

Locating rings for mounting without thermal insulating sheets in small or medium moulds (types A and B)

1 Scope

This part of ISO 10907 specifies the basic dimensions and tolerances, in millimetres, of locating rings for mounting of moulds (see Figure 1) without thermal insulating sheets, suitable for injection moulding machines up to size E12, (according to EUROMAP 2), type A (with bore) and type B (without bore).

It also gives material guidelines and hardness requirements, and specifies the designation of locating rings that are in accordance with its specifications.



Key

- 1 mould, fixed half
- 2 machine plate

Figure 1 — Example of mounting of locating rings (type A)

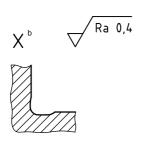
2 Dimensions

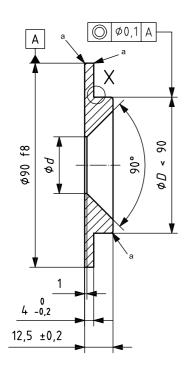
2.1 Locating rings with bore - Type A

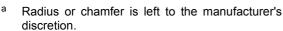
The dimensions of type A locating ring shall conform to the indications in Figures 2 to 4 and Table 1.

NOTE A type A locating ring is preferably used for fixed mould halves.

Surface roughness values in micrometres

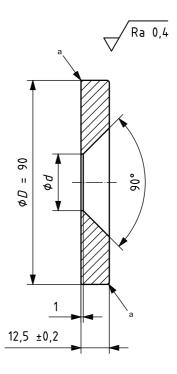






b Undercut is left to the manufacturer's discretion.

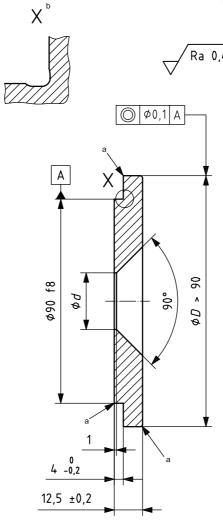
Figure 2 — D < 90 mm



Radius or chamfer is left to the manufacturer's discretion.

Figure 3 — D = 90 mm

Surface roughness values in micrometres



- Radius or chamfer is left to the manufacturer's discretion.
- b Undercut is left to the manufacturer's discretion.

Figure 4 — D > 90 mm

Table 1 — Dimensions of locating rings with bore — Type A

<i>D</i> f8		d ± 0,	Figure reference		
	25	28	32	40	
60	x				Figure 2
63	х		х		Figure 2
80 ^a	х	х	х		Figure 2
90	х	Х	х		Figure 3
100 ^a	x	х	х	х	Figure 4
110 ^a	x	х	х	х	Figure 4
125ª	х	х	х	х	Figure 4
160ª		х	х	х	Figure 4
	ling to EUROMAP 2.				3

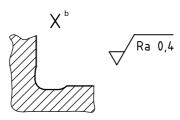
2.2 Locating rings without bore — Type B

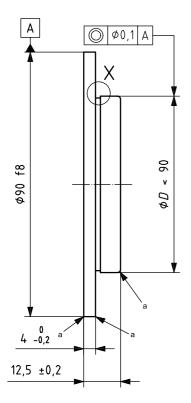
The dimensions of type B locating ring shall conform to the indications in Figures 5 to 7 and Table 2.

NOTE A type B locating ring is preferably used for moveable mould halves.

Surface roughness values in micrometres

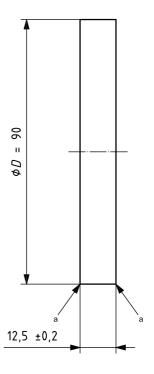






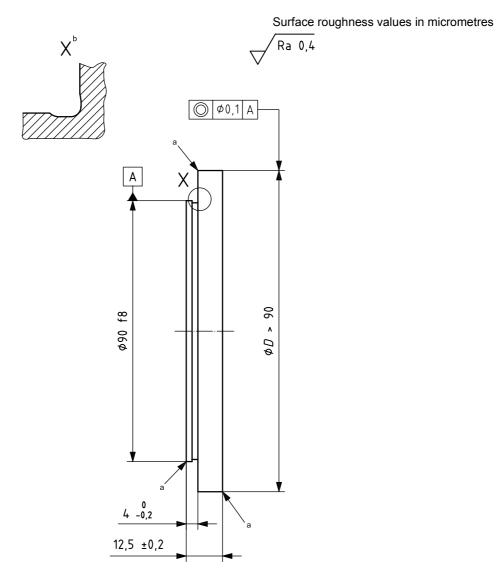
- Radius or chamfer is left to the manufacturer's discretion.
- b Undercut is left to the manufacturer's discretion.

Figure 5 — D < 90 mm



Radius or chamfer is left to the manufacturer's discretion.

Figure 6 — D = 90 mm



- ^a Radius or chamfer is left to the manufacturer's discretion.
- b Undercut is left to the manufacturer's discretion.

Figure 7 — D > 90 mm

Table 2 — Dimensions of locating rings without bore — Type B

<i>D</i> f8	Figure reference			
60	Figure 5			
63	Figure 5			
80 ^a	Figure 5			
90	Figure 6			
100 ^a	Figure 7			
110 ^a	Figure 7			
125 ^a	Figure 7			
160 ^a	Figure 7			
a Diameters according to EUROMAP 2.				

3 Material

The material shall be steel with a minimum yield strength 370 N/mm², the grade is left to the manufacturer's discretion.

4 Designation

Locating rings in accordance with this part of ISO 10907 shall be designated by:

- a) "Locating ring";
- b) reference to this part of ISO 10907, i.e. 10907-1;
- c) the type of locating ring (A or B);
- d) the diameter, D, in millimetres;
- e) the diameter *d* (only for type A), in millimetres.

EXAMPLE A locating ring type A, for mounting without insulating sheets in small or medium moulds, of diameter D = 100 mm and of diameter d = 32 mm is designated as follows:

Locating ring ISO 10907-1 A - 100 × 32

EXAMPLE A locating ring type B, for mounting without insulating sheets in small or medium moulds, of diameter D = 100 mm is designated as follows:

Locating ring ISO 10907-1 B - 100

Bibliography

[1]	EUROMAP 2:1996,	Dimensioning	of	the	clamping	unit	and	mould	mounting	and	connection
	dimensions of injecti	ion moulding ma	achi	nes ¹)						

[2]	ISO 1302:2002, Geometrical Product Specifications (GPS) — Indication of surface texture in technical
	product documentation

¹⁾ European Committee of Machinery Manufacturers for the Plastics and Rubber Industries.

ICS 25.120.30

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