

INTERNATIONAL STANDARD

ISO
9448-8

First edition
1991-11-01

Tools for pressing — Guide bushes —

Part 8:

Form G, gliding bushes, stepped, type 1

iTeh STANDARD PREVIEW

(standards.iteh.ai)

Outillage de presse — Bagues de guidage —

Partie 8: Forme G, bagues lisses à gorge pour guidage lisse, type 1

[ISO 9448-8:1991](https://standards.iteh.ai/catalog/standards/sist/ab473276-6afc-4ac9-9dad-aea0fbb043e9/iso-9448-8-1991)

<https://standards.iteh.ai/catalog/standards/sist/ab473276-6afc-4ac9-9dad-aea0fbb043e9/iso-9448-8-1991>



Reference number
ISO 9448-8:1991(E)

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.

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.

International Standard ISO 9448-8 was prepared by Technical Committee ISO/TC 29, *Small tools*, Sub-Committee SC 8, *Tools for pressing and moulding*.

ISO 9448 consists of the following parts, under the general title *Tools for pressing — Guide bushes*:

- Part 1: *Forms*
- Part 2: *Form A, gliding bushes, plain, type 1*
- Part 3: *Form B, ball cage bushes, plain, type 1*
- Part 4: *Form C, gliding bushes, headed, type 1*
- Part 5: *Form D, ball cage bushes, headed, type 1*
- Part 6: *Form E, gliding bushes, flanged, type 1*
- Part 7: *Form F, ball cage bushes, flanged, type 1*
- Part 8: *Form G, gliding bushes, stepped, type 1*
- Part 9: *Form B, ball cage bushes, plain, type 2*
- Part 10: *Form E, gliding bushes, flanged, type 2*

© ISO 1991

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

— *Part 11: Form F, ball cage bushes, flanged, type 2*
Annex A of this part of ISO 9448 is for information only.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 9448-8:1991

<https://standards.iteh.ai/catalog/standards/sist/ab473276-6afc-4ac9-9dad-aea0fbb043e9/iso-9448-8-1991>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This page intentionally left blank

[ISO 9448-8:1991](#)

<https://standards.iteh.ai/catalog/standards/sist/ab473276-6afc-4ac9-9dad-aea0fbb043e9/iso-9448-8-1991>

Tools for pressing — Guide bushes —

Part 8:

Form G, gliding bushes, stepped, type 1

1 Scope

This part of ISO 9448 specifies the main dimensions and tolerances, in millimetres, of guide bushes of form G, stepped gliding bushes, type 1, intended for use in press tools and to be mounted in the clamp plate with interference fit over a certain length. The remaining portion of the length ensures the guiding. These bushes are provided with a clearance for lubrication.

It gives guidance on the materials, and specifies the hardness and the designation of bushes in accordance with this part of ISO 9448.

2 Dimensions

See figure 1 and table 1.

Details not stated such as chamfers, radii, lubrication grooves, etc., are left to the manufacturer's discretion.

3 Material and corresponding hardness

The material is left to the manufacturer's discretion and the hardness shall be 60^{+2}_0 HRC.

4 Designation

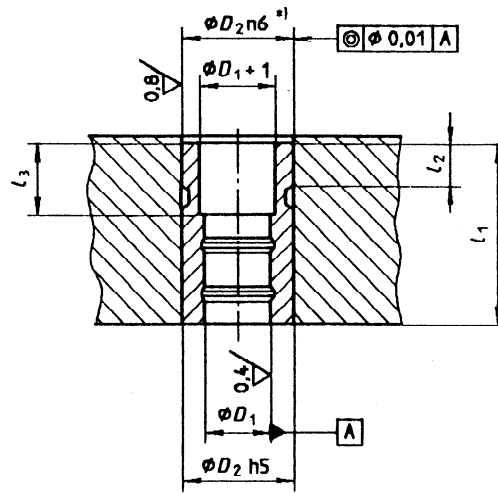
A guide bush in accordance with this part of ISO 9448 shall be designated by

- a) "Guide bush";
- b) a reference to this part of ISO 9448;
- c) its form;
- d) its guiding diameter, D_1 , in millimetres;
- e) its length, l_1 , in millimetres.

EXAMPLE

A guide bush of form G, stepped gliding bush, type 1, of guiding diameter $D_1 = 12$ mm and of length $l_1 = 20$ mm is designated as follows:

Guide bush ISO 9448-8 G - 12 × 20



$\star 1$) Intended to fit in a hole having a tolerance H7. When the bushes are glued, the tolerance J6 is permitted.

Figure 1

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 9448-8:1991

<https://standards.iteh.ai/catalog/standards/sist/ab473276-6afc-4ac9-9dad-aea0fbb043e9/iso-9448-8-1991>

Table 1

D_1	nom.		12		16		20		25		32		40		50		63		80		100	
	tol.		G6						G5													
D_2	22		28		32		40		48		58		70		85		105		125			
l_1 0 -0.5	l_2	l_3	l_2	l_3	l_2	l_3	l_2	l_3	l_2	l_3	l_2	l_3	l_2	l_3	l_2	l_3	l_2	l_3	l_2	l_3		
20	6	8																				
25	6	8																				
32	6	8																				
36			9	13																		
45					10	16																
50			9	13			13	20														
56									13	20												
63					10	16					14	21	14	21								
71							13	20							16	24						
80									13	20							18	26				
100											14	21	14	21						20	28	
110															16	24						
125																	18	26				
140																				20	28	

NOTE — To prevent an incorrect assembly of the upper and lower plates of the die set in relation to each other, the following values of D_1 are recommended: 11, 15, 19, 24, 30, 38, 48, 60, 76 and 95.

Annex A
(informative)

Bibliography

- [1] ISO 6508:1986, *Metallic materials — Hardness test — Rockwell test (scales A - B - C - D - E - F - G - H - K)*.
- [2] ISO 9448-1:1991, *Tools for pressing — Guide bushes — Part 1: Forms*.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 9448-8:1991](https://standards.iteh.ai/catalog/standards/sist/ab473276-6afc-4ac9-9dad-aea0fbb043e9/iso-9448-8-1991)

<https://standards.iteh.ai/catalog/standards/sist/ab473276-6afc-4ac9-9dad-aea0fbb043e9/iso-9448-8-1991>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This page intentionally left blank

[ISO 9448-8:1991](#)

<https://standards.iteh.ai/catalog/standards/sist/ab473276-6afc-4ac9-9dad-aea0fbb043e9/iso-9448-8-1991>