

BS ISO 9448-4:2013



BSI Standards Publication

Tools for pressing — Guide bushes

Part 4: Form C, gliding bushes, headed, type 1

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National foreword

This British Standard is the UK implementation of ISO 9448-4:2013. It supersedes BS 7568-20:1992 (ISO 9448-4:1991) which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MTE/12, Tools for pressing and moulding.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Tools for pressing — Guide bushes —

Part 4:

Form C, gliding bushes, headed, type 1

Outillage de presse — Bagues de guidage —

Partie 4: Forme C, bagues à collerette pour guidage lisse, type 1





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Contents

	Page
Foreword	iv
1 Scope	1
2 Dimensions	1
3 Material	3
4 Designation	3
Bibliography	4

Foreword

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The committee responsible for this document is ISO/TC 29, *Small tools*, Subcommittee SC 8, *Tools for pressing and moulding*.

This second edition results from the reinstatement of ISO 9448-4:1991, which was withdrawn in 2006 and with which it is technically identical.

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*
- Part 11: *Form F, ball cage bushes, flanged, type 2*

Tools for pressing — Guide bushes —

Part 4:

Form C, gliding bushes, headed, type 1

1 Scope

This part of ISO 9448 specifies the main dimensions and tolerances, in millimetres, of guide bushes of form C, headed gliding bushes, type 1, intended for use in press tools and to be mounted in the clamp plate with transition fit and fixed to the plate by means of screws.

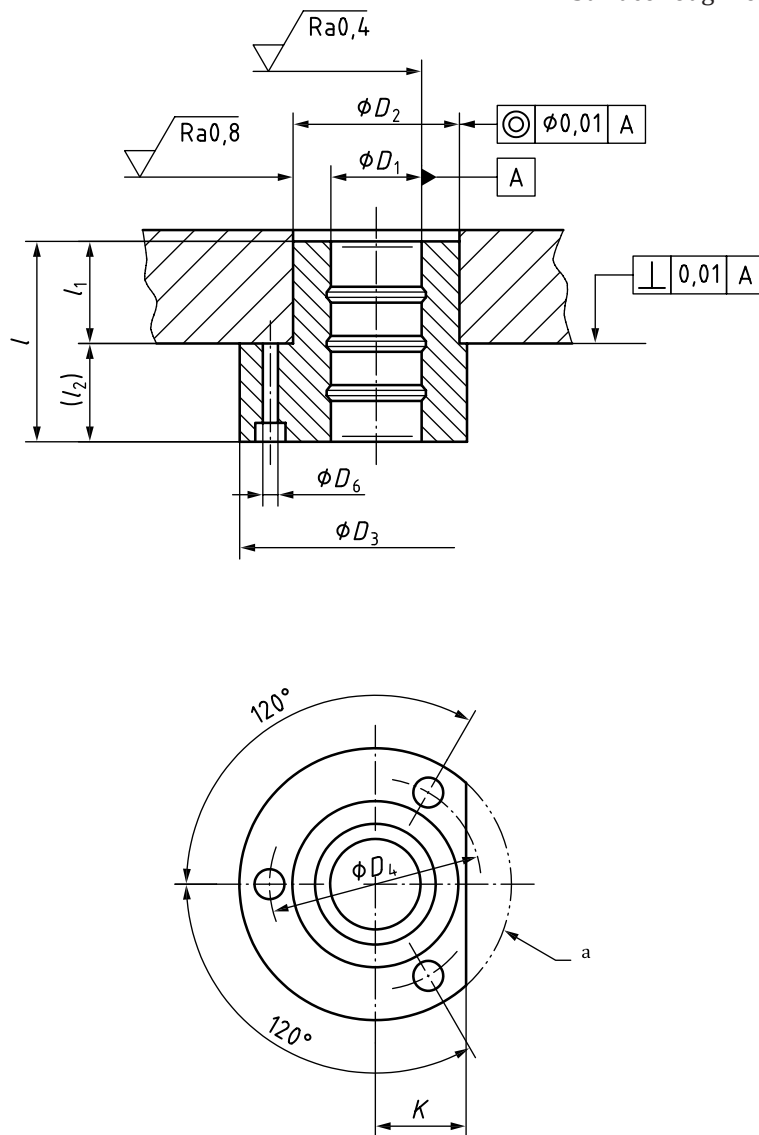
It gives guidance on the materials, and specifies the hardness and the designation of bushes in accordance with this part of ISO 9448.

2 Dimensions

The dimensions of type 1 headed gliding bushes (form C) shall conform to the indications of [Figure 1](#) and Table 1.

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

Surface roughness values in micrometres



a Left to the manufacturer's discretion.

Figure 1 — Form C, headed gliding bushes, type 1

Table 1

D_1	nom.	16	20	25	32	40	50						
	tol.	G6				G5							
D_2 k5 ^a		28	32	40	48	58	70						
D_3		45	50	63	72	85	104						
D_4		35	40	50	58	70	86						
Clearance hole D_6		4,5	4,5	5,5	5,5	6,6	9						
For screw		M4	M4	M5	M5	M6	M8						
K		15	18	23	28	33	38						
	l_1												
nom.	tol.	l	(l_2)	l	(l_2)	l	(l_2)	l	(l_2)	l	(l_2)	l	(l_2)
25	-2,0 -2,5	31	6	40	15								
32		38	6	47	15	57	25						
40	-3 -4			55	15	65	25	65	25	70	30		
50								75	25	80	30	92	42
63												105	42
To prevent 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: 15, 19, 24, 30, 38 and 48.													
^a Intended to fit into a hole having a tolerance of H7.													

3 Material

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:

- "Guide bush";
- a reference to this part of ISO 9448, i.e ISO 9448-4;
- its form;
- its guiding diameter, D_1 , in millimetres;
- its length, l_1 , in millimetres.

EXAMPLE A guide bush of form C, headed gliding bush, type 1 of guiding diameter $D_1 = 16$ mm and of length $l_1 = 25$ mm is designated as follows:

Guide bush ISO 9448-4 C - 16 × 25

Bibliography

- [1] ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method*

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