### INTERNATIONAL STANDARD

ISO 10889-6

Second edition 2004-11-15

# Tool holders with cylindrical shank — Part 6: Type E with cylindrical seat

Porte-outil à queue cylindrique —

iTeh STANDARD PRE pour outils à queue cylindrique (standards.iteh.ai)

ISO 10889-6:2004 https://standards.iteh.ai/catalog/standards/sist/ba8bbf94-efc6-4483-8612-0589a5e8174b/iso-10889-6-2004



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#### **Foreword**

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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 10889-6 was prepared by Technical Committee ISO/TC 29, Small tools.

This second edition cancels and replaces the first edition (ISO 10889-6:1997), Table 3 of which has been technically revised.

(standards.iteh.ai)
ISO 10889 consists of the following parts, under the general title *Tool holders with cylindrical shank*:

- Part 1: Cylindrical shank, location bore Technical delivery conditions
- Part 2: Type A, shanks for tool holders of special designs 004
- Part 3: Type B with rectangular radial seat
- Part 4: Type C with rectangular axial seat
- Part 5: Type D with more than one rectangular seat
- Part 6: Type E with cylindrical seat
- Part 7: Type F with taper seat
- Part 8: Type Z, accessories

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#### Tool holders with cylindrical shank —

#### Part 6:

#### Type E with cylindrical seat

#### 1 Scope

ISO 10889 is applicable to tool holders with cylindrical shank for machine tools with non-rotating tools, preferably for turning machines.

This part of ISO 10889 specifies dimensions, designations and complementary technical delivery conditions for tool holders with cylindrical seat of types E1 to E4 with a mounting system cylindrical shank in accordance with ISO 10889-1. For non-standardized tool holders such as tool holders with a cylindrical seat as shown in the figures, it is advisable to apply the corresponding specifications of this part of ISO 10889.

### 2 Normative references STANDARD PREVIEW

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. 10889-6:2004 https://standards.itch.ai/catalog/standards/sist/ba8bbf94-efc6-4483-8612-

ISO 2768-1, General tolerances — Part 1. Tolerances for linear and angular dimensions without individual tolerance indications

ISO 2768-2, General tolerances — Part 2: Geometrical tolerances for features without individual tolerance indications

ISO 10889-1, Tool holders with cylindrical shank — Part 1: Cylindrical shank, location bore — Technical delivery conditions

ISO 10897, Collets for tool holders with taper ratio 1:10 — Collets, holders, nuts

ISO 15488, Collets with 8° setting angle for tool shanks — Collets, nuts and fitting dimensions

#### 3 Dimensions

#### 3.1 General

Unspecified details shall be chosen appropriately.

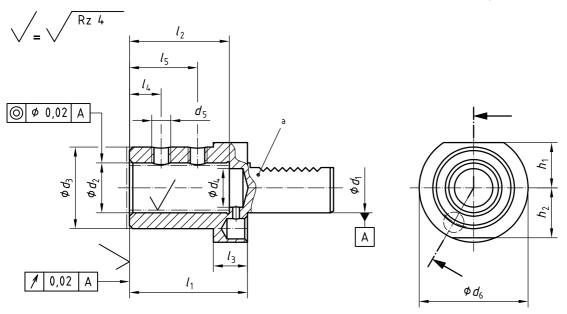
General tolerances: ISO 2768-mH.

#### 3.2 Tool holder of type E1

See Figure 1 and Table 1.

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Dimensions in millimetres, surface roughness in micrometres



<sup>a</sup> Cylindrical shank in accordance with ISO 10889-1.

Figure 1 — Type E1 tool holder for drilling tools with internal coolant supply (standards.iteh.ai)

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Table 1 — Type E1 tool holder dimensions

Dimensions in millimetres

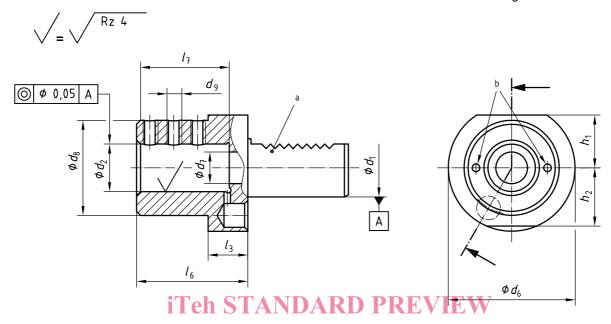
											510113 111 11	
$d_1$	$d_2$	$d_3$	$d_4^{a}$	$d_5$	$d_6$	h <sub>1</sub>	$h_2$	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$
	H6							0 - 0,2				
20	20	40	12	M10 × 1	50		23	67	54	18	15	35
	25	45	17	M12 × 1	50	_		71	59		17	40
25	20	40	12	M10 × 1	58	25	25	67	54	18	15	35
	25	45	17	M12 × 1	36			71	59		17	40
	20	40	12	M10 × 1	68	28	30	67	54	22	15	35
30	25	45	17	M12 × 1				71	59		17	40
	32	52	24					75	63		17	44
40	20	40	12	M10 × 1		32,5	_	67	54	22	15	35
	25	45	17	M12 × 1	83			75	59		17	40
	32	52	24					75	63		17	44
	40	65	32	M16 × 1				90	73		22	50
	20	40	12	M10 × 1				67	54		15	35
	25	45	17	M12 × 1	98	35	_	80	59	30	17	40
50	32	52	24					80	63		17	44
	40	65	T 32	SM16×1	DAI	RD P	REV	/ 90	73		22	50
	50	75	42	OVITO X				100	83		24	60
60	20	40	12	M10×1	SO 10889 log/standar :8174b/isc	42,5	11.211) 8bb <del>19</del> 4-efi 1-2004	80	54	30	15	35
	25	45	17	M12 × 1 ]				80	59		17	40
	32	52 https	24 //standard					80	63		17	44
	40	65	32	M16×9150				90	73		22	50
	50	75	42					100	83		24	60
	20	40	12	M10 × 1	158	55	_	80	54	30	15	35
80	25	45	17	M12 × 1				80	59		17	40
	32	52	24					80	63		17	44
	40	65	32	M16 . 4				90	73		22	50
	50	75	42	M16 × 1				100	83		24	60
a d. sh	all be nilot	-drilled for	manufacti	uring reasons								

 $<sup>^{\</sup>mathrm{a}}$   $d_{\mathrm{4}}$  shall be pilot-drilled for manufacturing reasons.

#### 3.3 Tool holder of type E2

See Figure 2 and Table 2.

Dimensions in millimetres, surface roughness in micrometres



- a Cylindrical shank in accordance with ISO 1088911ndards.iteh.ai)
- b External coolant supply (closable).

ISO 10889-6:2004

Figure 2 — Type E2 tool holder for turning tools with cylindrical shank 0589a5e8174b/iso-10889-6-2004

Table 2 — Type E2 tool holder dimensions

Dimensions in millimetres

									nensions in	millimetre
$d_1$	<i>d</i> <sub>2</sub>	$d_6$	<i>d</i> <sub>7</sub>	d <sub>8</sub>	$d_9^{a}$	h <sub>1</sub>	$h_2$	$l_3$	l <sub>6</sub>	$l_7$
	H7		min.							
16	6	40	6,7	32	M6 M8	18	18	13		
	8								4.4	0.4
	10								44	34
	12			40						
	16									
20	8 10	50	9	40	M6	_	23	18		
	12				- M8				50	41
	16								00	71
	20									
	25			50					60	51
	8									<u> </u>
25	10	58	10,5	40	M6		25	18	50	
	12				- M8	25				41
	16									ı
	20			58						
	25			36					60	51
	8	<b>iTe</b> 68	L CT	NDA 155 1ndar	M6 RD F ds <sub>M8</sub> te	DEX/	<b>IEW</b> 30	22		
	10									
	12					KL V			60	51
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	20									
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40	20									61
	25									
	32									
	40			83					90	76
50	16	98	25,5	68	M10			30	90	
	20				M12	35	_			
	25									76
	32									
	40			98						
	50			30					100	86
	16	123	40,5	68	M10		_	30		
	20					42,5			90	
60	25				M12					76
	32									
	40			98					400	00
	50								100	86
80	20	158	40,5	68	M12	55	_	30		
	25 32								100	86
	40									
	50			98						
	50			l		1			l .	<u> </u>