

INTERNATIONAL STANDARD

ISO
8752

First edition
1987-11-01



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

Spring-type straight pins, slotted

Goupilles cylindriques creuses, dites goupilles élastiques

STANDARDSISO.COM : Click to view the full PDF of ISO 8752:1987

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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8752 was prepared by Technical Committee ISO/TC 2, *Fasteners*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Spring-type straight pins, slotted

1 Scope and field of application

This International Standard specifies the characteristics of slotted spring-type straight pins with metric dimensions and nominal diameters, d_1 , from 1 to 50 mm inclusive.

NOTE — The nominal diameters have been chosen in such a way that pins may be fitted one into the other.

2 References

ISO 3269, *Fasteners — Acceptance inspection*.

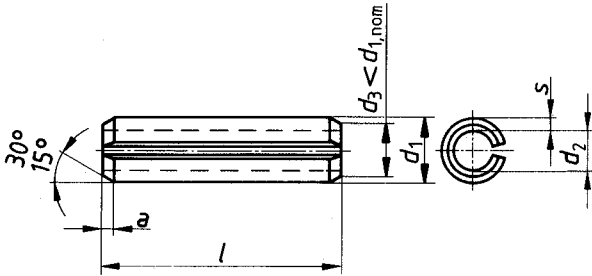
ISO 8749, *Pins and grooved pins — Shear test*.

3 Dimensions

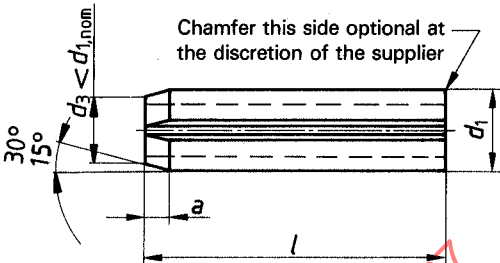
Type A : Standard spring pin

Type B : Non-interlocking spring pin¹⁾

Spring pin with nominal diameter $d_1 < 12$ mm



Spring pin with nominal diameter $d_1 > 12$ mm



		nom.	1	1,5	2	2,5	3	3,5	4	4,5	5	6	8	10	
d_1	before mounting	min.	1,2	1,7	2,3	2,8	3,3	3,8	4,4	4,9	5,4	6,4	8,5	10,5	
		max.	1,3	1,8	2,4	2,9	3,5	4	4,6	5,1	5,6	6,7	8,8	10,8	
d_2	before mounting	$\approx$	0,8	1,1	1,5	1,8	2,1	2,3	2,8	2,9	3,4	4	5,5	6,5	
a		min.	0,15	0,25	0,35	0,4	0,5	0,6	0,65	0,8	0,9	1,2	2	2	
		max.	0,35	0,45	0,55	0,6	0,7	0,8	0,85	1	1,1	1,4	2,4	2,4	
s			0,2	0,3	0,4	0,5	0,6	0,75	0,8	1	1	1,2	1,5	2	
Mimimum shear strength, double kN			0,7	1,58	2,82	4,38	6,32	9,06	11,24	15,36	17,54	26,04	42,76	70,16	
$l^{2)}$															
nom.		min.	max.												
4		3,75	4,25												
5		4,75	5,25												
6		5,75	6,25												
8		7,75	8,25												
10		9,75	10,25												
12		11,5	12,5												
14		13,5	14,5												
16		15,5	16,5												
18		17,5	18,5												
20		19,5	20,5												
22		21,5	22,5												
24		23,5	24,5												
26		25,5	26,5												
28		27,5	28,5												
30		29,5	30,5												
32		31,5	32,5												
35		34,5	35,5												
40		39,5	40,5												
45		44,5	45,5												
50		49,5	50,5												
55		54,25	55,75												
60		59,25	60,75												
65		64,25	65,75												
70		69,25	70,75												
75		74,25	75,75												
80		79,25	80,75												
85		84,25	85,75												
90		89,25	90,75												
95		94,25	95,75												
100		99,25	100,75												
120		119,25	120,75												
140		139,25	140,75												
160		159,25	160,75												
180		179,25	180,75												
200		199,25	200,75												

1) See clause 5, slot type B.
2) For nominal lengths above 200 mm, steps of 20 mm.

commercial

lengths

4 Application

The bore dimension of the spring pin hole shall be equal to the nominal diameter, d_1 , of the mating pin, and to tolerance H12.

When mounted in the smallest permitted hole the slot for type A and type B shall not fully close.

5 Specifications and reference International Standards

Slot	Type A	Form and width of slot at the discretion of the supplier.
	Type B	Non-interlocking pins with a form and/or width of slot which guarantees no interlocking may be supplied by special agreement between customer and supplier.
Material	Steel (= St) at the supplier's option : Either plain carbon steel [% (m/m)] C > 0,65 Mn > 0,5 or Silicon manganese steel [% (m/m)] C > 0,5 Si > 1,5 Mn > 0,7 Hardened and tempered to a Vickers hardness 420 to 520 HV or austempered to a Vickers hardness 500 to 560 HV. Other materials as agreed between customer and supplier.	
Surface finish	Plain, i.e. pins to be supplied in natural finish, treated with a protective lubricant, unless otherwise specified by agreement between customer and supplier.	
	Appropriate plating or coating processes should be employed to avoid hydrogen embrittlement. When pins are electroplated or phosphate-coated, they shall be suitably treated immediately after plating or coating to obviate detrimental hydrogen embrittlement. All tolerances shall apply prior to the application of a plating or coating.	
Workmanship	Parts shall be uniform in quality and free of irregularities or detrimental defects. No burrs shall appear on any part of the pin.	
Shear strength test	The test shall be in accordance with ISO 8749.	
Acceptability	The acceptance procedure is covered in ISO 3269.	

6 Designation

Example for the designation of a steel, slotted spring-type straight pin, type A, with nominal diameter $d_1 = 6$ mm and nominal length $l = 30$ mm :

Spring pin ISO 8752 - 6 × 30 -A- St