UDC 621.886.1 : 621.884 July 1977

Rivet Pins

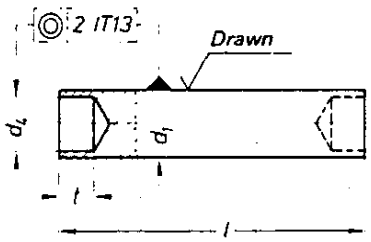
DIN 7341

Nietstifte

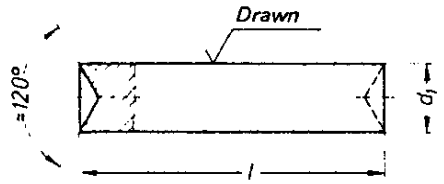
Dimensions in mm

1 Dimensions and designation

Type A



Type B



Designation of a rivet pin Type A of nominal diameter d_1 = 5 mm with tolerance zone h11 [1] and length l = 10 mm of 9 SMnPb 28K (St):

Rivet pin DIN 7341 – A5 h11 x 10 – St

Table 1.

d_1		2,5 [2]	3	4	5	6	8	10	12	16	20
d_4	H13	–	2	2,5	3,5	4,5	6,5	8	10	13	17
t	$^{+0,5}_{0}$	–	1,5	2	2,5	3	4	5	6	8	10
l	+ IT 14	Weight (7,85 kg/dm³) kg/1000 pieces ≈ for Type A									
4		0,154									
5		0,193									
6		0,231	0,259								
8		0,308	0,370	0,635							
10		0,385	0,481	0,832	1,163						
12		0,462	0,592	1,029	1,472	2,289					
14			0,703	1,226	1,780	2,734	3,970				
16			0,814	1,424	2,088	3,178	4,760				
20			1,035	1,818	2,705	4,066	6,340	9,18			
25				2,311	3,475	5,176	8,315	12,27	14,80		
30				2,804	4,246	6,286	10,29	15,35	19,24	30,67	
35					5,016	7,396	12,26	19,35	23,68	38,56	
40					5,787	8,506	14,24	22,92	28,12	46,45	63,00
45						9,616	16,22	26,18	32,56	54,34	75,33
50						10,73	18,19	29,44	36,99	62,23	87,66
55							20,17	32,70	41,43	70,12	99,9
60							22,14	35,96	45,88	78,01	112,3
65								39,22	50,32	85,90	124,7
70								42,48	54,76	93,79	136,9
75								45,74	59,20	101,7	149,3
80								49,00	63,64	109,6	161,6

Intermediate lengths should be avoided as far as possible.

These rivet pins are normally made in the sizes for which weight data are indicated.

The weights apply only for guidance and cannot be used for a binding determination of quantities.

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[1] See Section 3

[2] This size is supplied only with plain ends. The indication of a type letter symbol in the designation is dispensed with.

Continued on pages 2 and 3
Explanations on page 4

2 Material

St = 9 SMnPb 28K according to DIN 1651 or St 50 K + G according to DIN 1652 at manufacturer's choice; if a specific material is required, this is to be agreed.

Other materials by agreement.

3 Finish

For diameter d_1, tolerance zone h9 or h11 to be stated in the designation.

4 Requirements

4.1 General requirements

For general requirements DIN 267 Part 1 applies

4.2 External condition of the rivet pins

The surface of the rivet pins must be free from scale and burr.

5 Testing

5.1 Testing for measuring accuracy and finish

For the testing of measuring accuracy and finish the provisions of DIN 267 Part 5 apply as appropriate. For main and secondary features Table 2 applies; for the acceptable quality level Table 3 applies.

5.2 Testing of mechanical properties and materials

For testing the mechanical properties and materials the provisions of DIN 267 Part 5 apply. In doubtful cases the Brinell hardness test shall decide.

Table 2. **Main and secondary features**

Main feature	Secondary feature e.g.
Nominal diameter d_1	Length Diameter d_4 Depth of sinking t Centricity deviations

Table 3. AQL **values**

Type of feature	Acceptable quality level (AQL)	
	for testing features	for testing defective parts
Main feature	1	1,5
Secondary feature	1,5	6,5

6 Examples of application

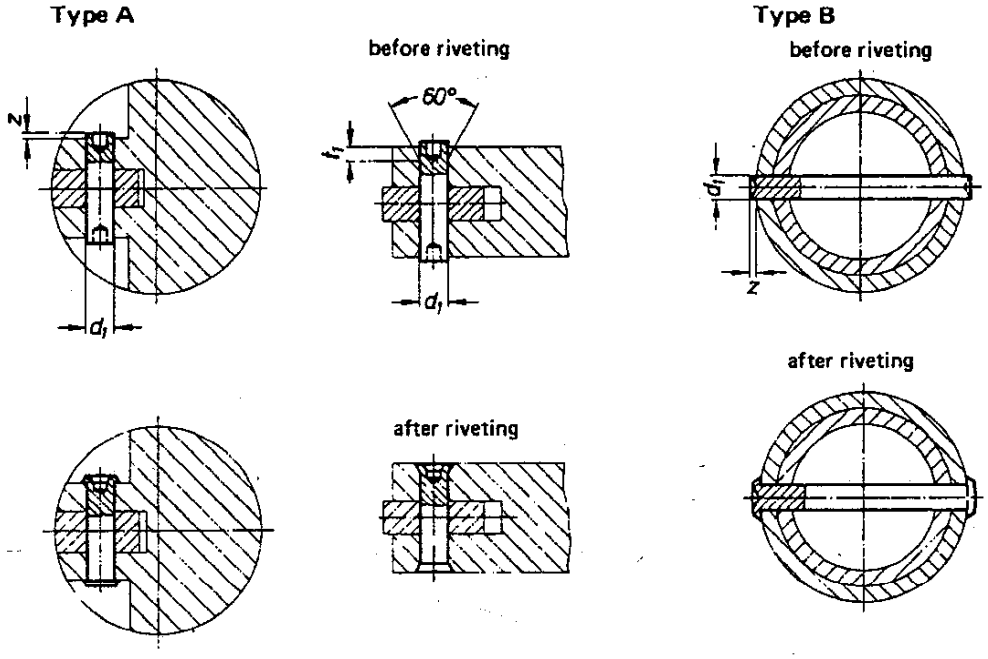

Table 4.

d_1	2,5	3	4	5	6	8	10	12	16	20
Projection z min.	0,5	0,5	1	1	1,5	1,5	2	2	3	3
Depth of sinking t_1	–	1	1	1,5	1,5	2	2,5	3	4	5

Explanations

The last issue of DIN 7341 appeared in 1963. The new knowledge acquired since then has made a new issue of the Standard necessary. The following alterations and additions have been made in the present new issue:

a) The nominal diameters 2, 13, 14, 18 and 22 mm have been deleted, since the demand for these nominal diameters is only very small.

b) Commercial lengths and weights of the rivet pins have been included.

c) Permissible dimension deviations for nominal lengths and holes have been stated. For the nominal diameters the usual h9 and h11 tolerance zones to be stated when ordering have been retained.

d) The data on materials have been modified. Under the symbol St the material 9 SMnPb 28 K predominantly used for rivet pins is mentioned, but under St the material St 50 K + G previously used has also been allowed at manufacturer's choice, unless a specific material is stated when ordering. Materials other than these are possible subject to arrangement.

e) The data on requirements and testing are to be regarded as an important addition compared with the March 1963 edition. These particulars have been adopted as appropriate from the new DIN Standards on pins and studs which have appeared in the meantime. In this connection it was considered initially whether the term "rivet pins" should be dropped, since pins according to DIN 7341 primarily fulfil the function of a pin on the lines of DIN 7, which is rendered captive simply by riveting over of the ends. For reasons which also included respect for existing documents, however, it was decided not to revise the nomenclature.

f) The content of the Standard has been re-arranged and also brought into line with the previously mentioned new Standards on pins, studs and rivets.