

UDC 621.882.215.1.091.5.092.4

September 1986

Slotted raised countersunk head screws with full dog point

DIN
924

Linsensenkschrauben mit Schlitz und Zapfen

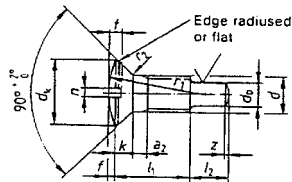
Supersedes August 1972 edition.

In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.

1 Dimensions

Dimensions in mm

$$r = \begin{cases} \sqrt{R_2 6,3} & \text{for sizes up to M3} \\ \sqrt{R_2 16} & \text{for sizes exceeding M3} \end{cases}$$



a_2 as specified in
DIN 76 Part 1
(2 P maximum).

| Thread size d | | M 1,4 | M 1,6 | M 2 | M 2,5 | M 3 |
|-----------------|--------------------------------|-----------|-------|-------|-------|-------|
| p_1) | | 0,3 | 0,35 | 0,4 | 0,45 | 0,5 |
| d_k | max = nominal size | 2,6 | 3 | 3,8 | 4,7 | 5,6 |
| | min | 2,35 | 2,75 | 3,5 | 4,4 | 5,3 |
| d_p | max = nominal size | 0,8 | 0,8 | 1,2 | 1,5 | 2 |
| | min | 0,775 | 0,775 | 1,175 | 1,475 | 1,975 |
| f | ≈ | 0,35 | 0,4 | 0,5 | 0,6 | 0,75 |
| k | max | 0,84 | 0,96 | 1,2 | 1,5 | 1,65 |
| | Nominal size | 0,3 | 0,4 | 0,5 | 0,6 | 0,8 |
| n | min | 0,36 | 0,46 | 0,56 | 0,66 | 0,86 |
| | max | 0,5 | 0,6 | 0,7 | 0,8 | 1 |
| r_1 | ≈ | 3 | 3 | 4 | 5 | 6 |
| r_2 | max | 0,14 | 0,16 | 0,2 | 0,25 | 0,3 |
| | min | 0,52 | 0,65 | 0,8 | 1 | 1,2 |
| t | max | 0,65 | 0,8 | 1 | 1,2 | 1,45 |
| | ≈ | 0,2 | 0,25 | 0,25 | 0,35 | 0,4 |
| Nominal size | | Tolerance | | | | |
| 1,6 | js 15 for l_1 and l_2 . | | | | | |
| 2 | | | | | | |
| 2,5 | | | | | | |
| (3) | | | | | | |
| 4 | | | | | | |
| (5) | | | | | | |
| 6 | | | | | | |
| Nominal size | | l_2 | | | | |
| | | min | max | | | |
| 0,8 | 0,6 | 0,85 | | | | |
| (0,8) | 0,8 | 1,05 | | | | |
| 1 | 1 | 1,25 | | | | |
| (1,2) | 1,2 | 1,45 | | | | |
| 1,6 | 1,6 | 1,85 | | | | |
| 2 | 2 | 2,25 | | | | |
| 2,5 | 2,5 | 2,75 | | | | |
| (3) | 3 | 3,25 | | | | |

Lengths l_1 and l_2 and intermediate lengths given in brackets should be avoided if possible.
Slotted raised countersunk head screws are normally manufactured in the range indicated by stepped lines.
1) P = pitch of thread (coarse pitch thread)

Continued on pages 2 and 3

2 Technical delivery conditions

| Material | | Steel | Stainless steel | Non-ferrous metal |
|---|---------------------------|--|-----------------|--|
| General requirements | | As specified in DIN 267 Part 1 | | |
| Thread | Tolerance class | For size M 1,4 4h; from size M 1,6 6g | | |
| | Standard | DIN 13 Part 15 | | |
| Mechanical properties ¹⁾ | Property class (material) | 5.8 ¹⁾ | A1-50 C4-50 | CuZn = copper-zinc alloy ²⁾ |
| | Standard | ISO 898 Part 1 (test programme B) | DIN 267 Part 11 | DIN 267 Part 18 |
| Permissible dimensional deviations and deviations of form | Product grade | For size M 1,4 F; from size M 1,6: A | | |
| | Standard | DIN 267 Part 6; ISO 4759 Part 1 | | |
| Types and finishes with additional information to be stated on ordering | | As specified in DIN 962 | | |
| Surface finish | | As processed. | Bright. | Bright. |
| | | DIN 267 Part 2 shall apply with regard to surface roughness. DIN 267 Part 19 shall apply with regard to permissible surface discontinuities. DIN 267 Part 9 shall apply with regard to electroplating. | | |
| Acceptance inspection | | DIN 267 Part 5 shall apply with regard to acceptance inspection. | | |

¹⁾ Where cold drawn steels as specified in DIN 1651 are used, an elongation at break, A_5 , of 5% shall be permissible.
²⁾ CuZn = CU2 or CU3 (as specified in DIN 267 Part 18), at the manufacturer's discretion.
³⁾ Other property classes or materials shall be subject to agreement.

3 Designation

Designation of an M 2 slotted raised countersunk head screw with full dog point, of lengths $l_1 = 2,5 \text{ mm}$ and $l_2 = 1,6 \text{ mm}$, assigned to property class 5.8 ¹⁾:

Countersunk head screw DIN 924 – M 2 × 2,5 × 1,6 – 5.8

¹⁾ Where no property class or type of material is given in existing documentation, property class 5.8 shall apply.

Standards referred to

| | |
|-----------------|---|
| DIN 13 Part 15 | ISO metric screw threads; fundamental deviations and tolerances for screw threads of 1 mm and larger |
| DIN 76 Part 1 | Thread run-outs and thread undercuts for ISO metric threads as specified in DIN 13 |
| DIN 267 Part 1 | Fasteners; technical delivery conditions; general requirements |
| DIN 267 Part 2 | Fasteners; technical delivery conditions; types of finish and dimensional accuracy |
| DIN 267 Part 5 | Fasteners; technical delivery conditions; acceptance inspection (modified version of ISO 3269, 1984 edition) |
| DIN 267 Part 6 | Fasteners; technical delivery conditions; types of finish and dimensional accuracy for product grade F |
| DIN 267 Part 9 | Fasteners; technical delivery conditions; components with electroplated coatings |
| DIN 267 Part 11 | Fasteners; technical delivery conditions (with additions to ISO 3506); corrosion-resistant stainless steel fasteners |
| DIN 267 Part 18 | Fasteners; technical delivery conditions; components made of non-ferrous metals |
| DIN 267 Part 19 | Fasteners; technical delivery conditions; surface discontinuities on bolts and screws |
| DIN 962 | Screws, bolts, studs and nuts; designations, types and finishes |
| DIN 1651 | Free cutting steels; technical delivery conditions |
| ISO 898 Part 1 | Mechanical properties of fasteners; bolts, screws and studs |
| ISO 4759 Part 1 | Tolerances for fasteners; bolts, screws and nuts with thread diameters between 1,6 (inclusive) and 150 mm (inclusive) and product grades A, B and C |

Previous editions

01.43, 08.53, 08.72.

Amendments

The following amendments have been made in comparison with the August 1972 edition.

- a) Size M 1,8 has been deleted because there is no demand for it.
- b) The previous design m as specified in DIN 267 Part 2, April 1968 edition, has been replaced by product grade F as specified in DIN 267 Part 6 and product grade A as specified in ISO 4759 Part 1.
- c) Limiting dimensions calculated from the permissible tolerances have been included.
- d) The technical delivery conditions have been amended.
- e) The content of the standard has been editorially revised.
- f) The example of designation has been amended.

International Patent Classification

F 16 B 23/00

F 16 B 35/00