

# Datasheet

**RS Stock No: 9087624**

## **Clear Passivated, Bright Zinc Plated Steel Pan Head Machine Screws: Metric Thread**



Pan Head Machine Screws are similar to Oval Head Machine Screws in that they have rounded sides, the difference being that Pan Head Machine Screws have a flat top rather than rounded. The cross recess drive, also known as Posidriv, is becoming a popular driving method with this type of fastener due to the ease of assembly with reduced driver slippage (Cam Out) which reduces the effect of surface damage. Machine screws can be used in pre-tapped holes or used with conforming nuts and washers in through-holes.

- Clear Passivated, Bright Zinc Plated Steel
- Threaded in accordance with DIN 84 standard
- Suitable for light fastening applications in facilities maintenance and electronic & domestic applications
- Typical applications include; PCB prototyping, circuit board mounting and general repair and maintenance
- Requires a slotted screwdriver

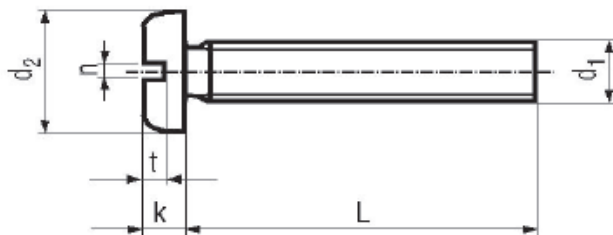


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Please view our range listing below for more Clear Passivated, Zinc Plated Steel, Pan Head Machine Screws:

| Head Shape | Drive Type | Material          | Thread Size | Length | RS Part No. |
|------------|------------|-------------------|-------------|--------|-------------|
| Pan Head   | Slot       | Zinc Plated Steel | M2.5        | 10 mm  | 9087582     |
| Pan Head   | Slot       | Zinc Plated Steel | M3          | 8 mm   | 9087586     |
| Pan Head   | Slot       | Zinc Plated Steel | M3.5        | 16 mm  | 9087595     |
| Pan Head   | Slot       | Zinc Plated Steel | M4          | 8 mm   | 9087598     |
| Pan Head   | Slot       | Zinc Plated Steel | M5          | 6 mm   | 9087592     |
| Pan Head   | Slot       | Zinc Plated Steel | M5          | 8 mm   | 9087602     |
| Pan Head   | Slot       | Zinc Plated Steel | M5          | 30 mm  | 9087605     |
| Pan Head   | Slot       | Zinc Plated Steel | M5          | 35 mm  | 9087609     |
| Pan Head   | Slot       | Zinc Plated Steel | M6          | 30 mm  | 9087618     |
| Pan Head   | Slot       | Zinc Plated Steel | M6          | 35 mm  | 9087611     |
| Pan Head   | Slot       | Zinc Plated Steel | M8          | 16 mm  | 9087615     |
| Pan Head   | Slot       | Zinc Plated Steel | M8          | 20 mm  | 9087624     |
| Pan Head   | Slot       | Zinc Plated Steel | M8          | 25 mm  | 9087627     |
| Pan Head   | Slot       | Zinc Plated Steel | M8          | 30 mm  | 9087621     |
| Pan Head   | Slot       | Zinc Plated Steel | M8          | 40 mm  | 9087630     |
| Pan Head   | Slot       | Zinc Plated Steel | M8          | 50 mm  | 9087633     |

## PAN HEAD SLOTTED MACHINE SCREWS DIN 85 / ISO 1580 / JIS B 1101 / ANSI B.18.16.7M



| Head Diameter (d2)      | Size d1 | M1.6 |     | M2  |     | M2.5 |     | M3  |     | (M3.6) |     | M4   |     | M6   |     | M8    |      | M10   |     |
|-------------------------|---------|------|-----|-----|-----|------|-----|-----|-----|--------|-----|------|-----|------|-----|-------|------|-------|-----|
| Standard                |         | min  | max | min | max | min  | max | min | max | min    | max | min  | max | min  | max | min   | max  | min   | max |
| DIN 85 (1990)           |         |      |     |     |     |      |     | 5.7 | 6   | 6.64   | 7   | 7.64 | 8   | 9.64 | 10  | 11.57 | 12   | 15.57 | 16  |
| ISO 1580 (1984)         |         | 2.9  | 3.2 | 3.7 | 4   | 4.7  | 5   | 5.3 | 5.6 | 6.64   | 7   | 7.64 | 8   | 9.14 | 9.5 | 11.57 | 12   | 15.57 | 16  |
| JIS B 1101 (1977)       |         | 2.6  | 3   | 3.1 | 3.5 | 4.1  | 4.5 | 5   | 5.5 | 5.5    | 6   | 6.5  | 7   | 8.4  | 9   | 9.8   | 10.5 | 13.2  | 14  |
| ANSI B 18.16.7 M (1986) |         |      |     | 3.7 | 4   | 4.7  | 5   | 5.3 | 5.6 | 6.6    | 7   | 7.6  | 8   | 9.1  | 9.5 | 11.5  | 12   | 15.5  | 16  |

| Head Height (k)         | Size d1 | M1.6 |     | M2   |     | M2.5 |     | M3   |      | (M3.6) |      | M4   |      | M6   |      | M8  |     | M10 |     |
|-------------------------|---------|------|-----|------|-----|------|-----|------|------|--------|------|------|------|------|------|-----|-----|-----|-----|
| Standard                |         | min  | max | min  | max | min  | max | min  | max  | min    | max  | min  | max  | min  | max  | min | max | min | max |
| DIN 85 (1990)           |         |      |     |      |     |      |     | 1.66 | 1.8  | 1.96   | 2.1  | 2.26 | 2.4  | 2.86 | 3    | 3.3 | 3.6 | 4.5 | 4.8 |
| ISO 1580 (1984)         |         | 0.86 | 1.0 | 1.16 | 1.3 | 1.36 | 1.5 | 1.66 | 1.8  | 1.96   | 2.1  | 2.26 | 2.4  | 2.86 | 3    | 3.3 | 3.6 | 4.5 | 4.8 |
| JIS B 1101 (1977)       |         | 0.9  | 1.1 | 1.2  | 1.4 | 1.6  | 1.8 | 1.85 | 2.15 | 2.15   | 2.45 | 2.45 | 2.75 | 3.15 | 3.45 | 3.7 | 4.1 | 5   | 5.4 |
| ANSI B 18.16.7 M (1986) |         |      |     | 1.1  | 1.3 | 1.3  | 1.5 | 1.6  | 1.8  | 1.9    | 2.1  | 2.2  | 2.4  | 2.7  | 3    | 3.3 | 3.6 | 4.5 | 4.8 |

| Slot Width (n)          | Size d1 | M1.6 |      | M2   |      | M2.5 |      | M3   |      | (M3.6) |      | M4   |      | M6   |      | M8   |      | M10  |      |
|-------------------------|---------|------|------|------|------|------|------|------|------|--------|------|------|------|------|------|------|------|------|------|
| Standard                |         | min  | max  | min  | max  | min  | max  | min  | max  | min    | max  | min  | max  | min  | max  | min  | max  | min  | max  |
| DIN 85 (1990)           |         |      |      |      |      |      |      | 0.86 | 1    | 1.06   | 1.2  | 1.26 | 1.51 | 1.26 | 1.51 | 1.66 | 1.91 | 2.06 | 2.31 |
| ISO 1580 (1984)         |         | 0.46 | 0.6  | 0.56 | 0.7  | 0.66 | 0.8  | 0.86 | 1    | 1.06   | 1.2  | 1.26 | 1.51 | 1.26 | 1.51 | 1.66 | 1.91 | 2.06 | 2.31 |
| JIS B 1101 (1977)       |         | 0.4  | 0.55 | 0.5  | 0.75 | 0.6  | 0.95 | 0.8  | 0.95 | 1      | 1.15 | 1    | 1.15 | 1.2  | 1.4  | 1.2  | 1.4  | 1.6  | 1.8  |
| ANSI B 18.16.7 M (1986) |         |      |      | 0.5  | 0.7  | 0.6  | 0.8  | 0.8  | 1    | 1      | 1.2  | 1.2  | 1.5  | 1.2  | 1.5  | 1.6  | 1.9  | 2    | 2.3  |

| Slot Depth (t)          | Size d1 | M1.6 |      | M2  |     | M2.5 |      | M3   |      | (M3.6) |      | M4  |     | M6  |     | M8  |     | M10 |     |
|-------------------------|---------|------|------|-----|-----|------|------|------|------|--------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| Standard                |         | min  | max  | min | max | min  | max  | min  | max  | min    | max  | min | max | min | max | min | max | min | max |
| DIN 85 (1990)           |         |      |      |     |     |      |      | 0.7  |      | 0.8    |      | 1   |     | 1.2 |     | 1.4 |     | 1.9 |     |
| ISO 1580 (1984)         |         | 0.35 |      | 0.5 |     | 0.60 |      | 0.7  |      | 0.8    |      | 1   |     | 1.2 |     | 1.4 |     | 1.9 |     |
| JIS B 1101 (1977)       |         | 0.45 | 0.65 | 0.6 | 0.8 | 0.75 | 1.05 | 0.95 | 1.25 | 1.05   | 1.45 | 1.2 | 1.6 | 1.5 | 2.1 | 1.8 | 2.4 | 2.3 | 3.3 |
| ANSI B 18.16.7 M (1986) |         |      |      | 0.5 |     | 0.60 |      | 0.7  |      | 0.8    |      | 1   |     | 1.2 |     | 1.4 |     | 1.9 |     |

| Length Tolerance | DIN 85/ISO 1580 |       |
|------------------|-----------------|-------|
| Nominal Length   | min             | max   |
| 2                |                 |       |
| (2.5)            |                 |       |
| 3                | 2.8             | 3.2   |
| 4                | 3.76            | 4.24  |
| 5                | 4.76            | 5.24  |
| 6                | 5.76            | 6.24  |
| 8                | 7.71            | 8.29  |
| 10               | 9.71            | 10.29 |
| 12               | 11.65           | 12.35 |
| (14)             | 13.65           | 14.35 |
| 16               | 15.65           | 16.35 |
| (18)             | 17.65           | 18.35 |
| 20               | 19.58           | 20.42 |
| (22)             | 21.58           | 22.42 |
| 25               | 24.58           | 25.42 |
| (28)             | 27.58           | 28.42 |
| 30               | 29.58           | 30.42 |
| 35               | 34.5            | 35.5  |
| 40               | 39.5            | 40.5  |
| 45               | 44.5            | 45.5  |
| 50               | 49.5            | 50.5  |
| (55)             | 54.05           | 55.95 |
| 60               | 59.05           | 60.95 |
| (65)             | 64.05           | 65.95 |
| 70               | 69.05           | 70.95 |
| (75)             | 74.05           | 75.95 |
| 80               | 79.05           | 80.95 |
| 90               | 88.9            | 91.1  |

| JIS B 1101        |     |                 |     |             |     |
|-------------------|-----|-----------------|-----|-------------|-----|
| Over M2.5 To M4.5 |     | Over M4.5 To M8 |     | M10 & Above |     |
| min               | max | min             | max | min         | max |
|                   |     |                 |     | 1.7         | 2   |
|                   |     |                 |     | 2.7         | 3   |
|                   |     |                 |     | 3.7         | 4   |
| 4.4               | 5   | 4.2             | 5   | 4.5         | 5   |
| 5.4               | 6   | 5.2             | 6   | 5.6         | 6   |
| 7.4               | 8   | 7.2             | 8   | 7.6         | 8   |
| 9.4               | 10  | 9.2             | 10  | 9.6         | 10  |
| 11.4              | 12  | 11              | 12  | 11.4        | 12  |
| 15.4              | 16  | 15              | 16  | 15.4        | 16  |
| 19.4              | 20  | 19              | 20  | 19.4        | 20  |
| 24.2              | 25  | 24              | 25  | 24.2        | 25  |
| 29.2              | 30  | 29              | 30  | 29.2        | 30  |
| 34.2              | 35  | 34              | 35  | 34.2        | 35  |
| 39.2              | 40  | 39              | 40  | 39.2        | 40  |
| 44                | 45  | 44              | 45  |             |     |
| 49                | 50  | 49              | 50  |             |     |
| 54                | 55  | 54              | 55  |             |     |
|                   |     | 59              | 60  |             |     |
|                   |     | 69              | 70  |             |     |
|                   |     | 79              | 80  |             |     |
|                   |     | 89              | 90  |             |     |

| ANSI B 18.16.7 M |      |
|------------------|------|
| min              | max  |
| 2.3              | 2.7  |
| 2.8              | 3.2  |
| 3.7              | 4.3  |
| 4.7              | 5.3  |
| 5.7              | 6.3  |
| 7.7              | 8.3  |
| 9.7              | 10.3 |
| 12.6             | 13.4 |
| 15.6             | 16.4 |
| 19.5             | 20.5 |
| 24.5             | 25.5 |
| 29.5             | 30.5 |
| 34.5             | 35.5 |
| 39.5             | 40.5 |
| 44.5             | 45.5 |
| 49.5             | 50.5 |
| 54               | 56   |
| 59               | 61   |
| 64               | 66   |
| 69               | 71   |
| 79               | 81   |
| 89               | 91   |

Diameters & Lengths With ( ) are not recommended for new design.

| Thread Pitch   | Thread Tolerance Plain Eg     |                                 |
|----------------|-------------------------------|---------------------------------|
| Dia. Pitch     | Thread Tolerance Plated 6h    |                                 |
| M1.6 0.35      | Thread Tolerance Stainless Eg |                                 |
| M2 0.4         |                               |                                 |
| M2.5 0.45      | Material                      | 4-8 A2-A4                       |
| (M2.6) 0.45    |                               |                                 |
| M3 0.5         | Tensile Strength              | 60900 72500-101500              |
| (M3.5) 0.6     |                               |                                 |
| M4 0.7         | Yield Strength                | 49300 30450-65250               |
| M5 0.8         |                               |                                 |
| M6 1           | Hardness                      | HRB 71-99.5 NA                  |
| (M8) 1.25      |                               |                                 |
| (M10) 1.5      |                               |                                 |
| Property Class |                               | Steel 4-8 Stainless Steel A2-A4 |
| Finish         |                               | Plain /Plated Plain             |

For Machine Screws, The Letter A After The DIN Number Indicates Full Thread. Unless Requested, All Machine Screws Are Supplied As Full Thread, Therefore We Omit The A.

Refer To ISO 1580 For M2, M2.5, and M10, As These Three Diameters Are Not Available In DIN 85 A

M2.6 Is Not Available In DIN 85 A Or ISO 1580. Use M2.5 ISO 1580 For Dimensional Information.

Neither DIN, ISO, Or ANSI Specify A Maximum Slot Depth.