# Blind Pop Rivet

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Blind Pop Rivet to GB/T 12618 / ISO 15977 are catalogued in dia 2.4-6 mm, with dia 5-12 mm, long 7-18 mm. 7 sizes are held in the table below, and the technical drawing redraws to whichever row you select.

**Standard**

**GB/T 12618 / ISO 15977**

**Dia**

**2.4-6 mm**

**Dia**

**5-12 mm**

**Long**

**7-18 mm**

**Catalogued sizes**

**7**

Dimensions are nominal values from the governing standard. Confirm the tolerance class for your application before ordering.

## Materials & Grades

Select a material class to see the grades we supply it in. Each designation is listed with its ISO/EN, AISI/SAE, JIS and GB equivalents.

### Stainless Steel

**Carbon Steel** 66

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## Stainless Steel

### Austenitic Stainless Steel

**A1**
AISI 303 · SAE 303 · SUS303 · EN 1.4305 · X8CrNiS18-9

**A2**
AISI 304 · SAE 304 · SUS304 · EN 1.4301 · X5CrNi18-10 · 06Cr19Ni10

**304L**
AISI 304L · SUS304L · EN 1.4307 · X2CrNi18-9 · 022Cr19Ni10

**302**
AISI 302 · SUS302 · EN 1.4310

**305**
AISI 305 · SUS305 · EN 1.4303

**A4**
AISI 316 · SAE 316 · SUS316 · EN 1.4401 · X5CrNiMo17-12-2 · 06Cr17Ni12Mo2

**316L**
AISI 316L · SUS316L · EN 1.4404 · X2CrNiMo17-12-2 · 022Cr17Ni12Mo2

**321**
AISI 321 · SUS321 · EN 1.4541 · X6CrNiTi18-10

**310 / 310S**
AISI 310 · AISI 310S · SUS310S · EN 1.4845

**302HQ**
AISI 302HQ

**A3**

**A5**

**347**
AISI 347 · SUS347 · EN 1.4550 · X6CrNiNb18-10

**309 / 309S**
AISI 309 · AISI 309S · SUS309S

### Martensitic Stainless Steel

**AISI 410**
SUS410 · EN 1.4006 · X12Cr13 · 12Cr13

**AISI 420**
SUS420J1 · SUS420J2 · EN 1.4021 · EN 1.4028 · 20Cr13 · 30Cr13

**AISI 431**
SUS431 · EN 1.4057 · X17CrNi16-2

**C1**

**C3**

**C4**

**AISI 440A**

**AISI 440B**

**AISI 440C**
SUS440C · EN 1.4125

### Ferritic Stainless Steel

**AISI 430**
SUS430 · EN 1.4016 · X6Cr17 · 10Cr17

**F1**

**AISI 434**

**AISI 444**

### Precipitation-Hardening Stainless Steel

**17-4 PH**
AISI 630 · UNS S17400 · SUS630 · EN 1.4542 · X5CrNiCuNb16-4

**15-5 PH**
UNS S15500

**17-7 PH**
UNS S17700

### Duplex and Super Duplex Stainless Steel

**Duplex 2205**
UNS S31803 · UNS S32205 · EN 1.4462

**Super Duplex 2507**
UNS S32750 · EN 1.4410

**D2**

**D4**

**D6**

**D8**

**Lean Duplex 2101**
UNS S32101

**Super Duplex S32760**
UNS S32760 · EN 1.4501

## Carbon Steel

### Low-Carbon Steel

- SAE 1006
- SAE 1008
- SAE 1010
- SAE 1018
- SAE 1020
- Q195
- Q235
- SAE 1012
- SAE 1015
- Q215
- ML08
- ML08Al
- ML10
- ML15
- ML20
- SWRCH6A
- SWRCH8A
- SWRCH10A
- SWRCH12A
- SWRCH15A
- SWRCH18A

### Medium-Carbon Steel

- SAE 1035

| |
|---|
| SAE 1045 |
| S45C |
| C45 |
| SAE 1030 |
| SAE 1040 |
| SAE 1050 |
| 30 |
| 35 |
| 40 |
| 45 |
| 50 |
| S35C |
| S40C |
| S50C |
| C35 |
| C40 |

### High-Carbon Steel

| |
|---|
| SAE 1060 |
| SAE 1070 |
| 65Mn |
| SAE 1065 |
| SAE 1075 |
| SAE 1080 |
| SAE 1085 |
| SAE 1090 |
| SAE 1095 |
| 60 |

| |
|---|
| 65 |
| 70 |
| 75 |
| 80 |
| 85 |

### Cold-Heading Steel

| |
|---|
| SWRCH22A |
| 10B21 |
| SWRCH22K |
| SWRCH25K |
| SWRCH30K |
| SWRCH35K |
| SWRCH40K |
| ML20Mn |
| ML25 |
| ML30 |
| ML35 |
| ML40 |
| 15B25 |

## Alloy Steel

### Chromium Steel

| |
|---|
| 40Cr |
| 45Cr |
| AISI 5140 |

| |
|---|
| SAE 5140 |
| AISI 5120 |
| SAE 5120 |
| SCr420 |
| SCr440 |

**Chromium-Molybdenum Steel**

| |
|---|
| 35CrMo |
| 42CrMo |
| AISI 4140 |
| SCM435 |
| SCM440 |
| 42CrMo4 |
| 30CrMo |
| AISI 4130 |
| SAE 4130 |
| SAE 4140 |
| AISI 4142 |
| AISI 4145 |
| SCM415 |
| SCM420 |
| SCM445 |
| EN 1.7220 |
| EN 1.7225 |
| 25CrMo4 |
| 34CrMo4 |

### Nickel-Chromium-Molybdenum Steel

- AISI 4340
- SAE 4340
- 40CrNiMo
- SNCM439
- EN 1.6511
- 36CrNiMo4

### Boron Alloy Steel

- 10B22
- 10B21
- 15B21
- 15B25
- 20MnTiB
- 20Mn2B
- 35VB
- 40MnB

## Bearing Steel

### Bearing Steel

- GCr15
- AISI 52100
  SAE 52100 · UNS G52986
- SUJ2
- 100Cr6
  EN 1.3505
- GCr15SiMn

## Spring Steel

### Carbon Spring Steel

| |
|---|
| SAE 1065 |
| SAE 1070 |
| SAE 1075 |
| SAE 1080 |
| SAE 1095 |
| 65 |
| 70 |
| 75 |
| 80 |
| 65Mn |

### Silicon-Manganese Spring Steel

| |
|---|
| 60Si2Mn |
| 60Si2MnA |
| SUP6 |
| SUP7 |

### Chromium-Vanadium Spring Steel

| |
|---|
| 50CrVA |
| SAE 6150 |
| AISI 6150 |
| SUP10 |

### Stainless Spring Steel

| |
|---|
| AISI 301 |
| SUS301 |

| |
|---|
| EN 1.4310 |
| AISI 302 |
| AISI 304 |
| AISI 316 |
| 17-7 PH |

## Aluminum and Aluminum Alloys

### Commercially Pure Aluminum

| |
|---|
| 1050 |
| 1060 |
| 1070 |
| 1100 |

### 2xxx Series Aluminum

| |
|---|
| 2024 |
| 2011 |
| 2014 |
| 2017 |

### 5xxx Series Aluminum

| |
|---|
| 5052 |
| 5083 |
| 5754 |

### 6xxx Series Aluminum

| |
|---|
| 6061 |
| 6061-T6 |

6063

6082

6082-T6

### 7xxx Series Aluminum

7075

7075-T6

7005

7050

7075-T73

## Brass

### Free-Cutting Brass

C36000

H62

HPb59-1

C3601

C3602

C3604

CuZn36Pb3

CuZn39Pb3

EN CW614N

EN CW617N

H65

### Lead-Free Brass

C69300

C27450

CW510L

CW511L

### Naval Brass

C46400

CuZn39Sn1

## Bronze

### Silicon Bronze

C65500

C65100

C65600

### Phosphor Bronze

C51000

C52100

CuSn6

CuSn8

### Aluminum Bronze

C95400

C95500

C63000

CuAl10Ni5Fe4

## Copper

### Copper

- C11000
- T2
- C10100
- C10200
- C12200
- T1
- TU1
- TU2

## Titanium and Titanium Alloys

### Commercially Pure Titanium

- Grade 2
- Grade 1
- Grade 3
- Grade 4
- TA1
- TA2
- TA3

### Alpha-Beta Titanium Alloys

- Grade 5
- Ti-6Al-4V
- TC4
- UNS R56400

### Low-Interstitial Grade

- Grade 23
- Ti-6Al-4V ELI
- UNS R56407

### Other Titanium Fastener Alloys

- Ti-6Al-6V-2Sn
- Ti-6Al-2Sn-4Zr-2Mo
- Beta-C titanium
- Ti-10V-2Fe-3Al

## Nickel and Nickel Alloys

### Commercially Pure Nickel

- Nickel 200
- UNS N02200
- Nickel 201
- UNS N02201

### Inconel Alloys

- Inconel 625
  UNS N06625
- Inconel 718
  UNS N07718
- Inconel 600
  UNS N06600
- Inconel 601
  UNS N06601
- Inconel 686

UNS N06686

**Inconel X-750**
UNS N07750

### Monel Alloys

**Monel 400**
UNS N04400

**Monel K-500**
UNS N05500

### Hastelloy Alloys

**Hastelloy C-276**
UNS N10276

**Hastelloy C-22**
UNS N06022

**Hastelloy B-2**
UNS N10665

**Hastelloy B-3**
UNS N10675

**Hastelloy X**
UNS N06002

### Other Nickel Alloys

**Alloy 20**
UNS N08020

**Alloy 625**

**Alloy 718**

**Alloy 825**
UNS N08825

**Alloy 925**
UNS N09925

## Iron-Nickel and High-Temperature Alloys

### A286

- A-286
- UNS S66286
- EN 1.4980

### Invar

- Invar 36
- Alloy 36
- UNS K93600
- FeNi36

### Alloy 42

- Alloy 42
- UNS K94100
- FeNi42

## Tool Steel and Specialty Hardened Steel

### Tool Steel and Specialty Hardened Steel

- AISI D2
- AISI H13
- SKD11
- Cr12MoV
- AISI O1
- AISI A2
- AISI S7

| |
|---|
| **SKD61** |
| **9CrSi** |

## Structural and Construction Steel

### Structural and Construction Steel

| |
|---|
| **ASTM A36** |
| **Q235B** |
| **Q355B** |
| **S355JR** |
| **Q235C** |
| **Q355C** |
| **S235JR** |
| **S275JR** |
| **S355J2** |

## Applications & Industries

Where Blind Pop Rivet are used, and what decides the specification in each case. Stocked from 2.4 to 6.0 (nominal diameter).

### Industries that specify Blind Pop Rivet

Sheet-metal fabrication Permanent joints in enclosures, ducting and panels.

Transport & bodywork Trailer, bus and van panels joined blind from one side.

Signage & cladding Fast, vibration-resistant fixing of thin material.

Consumer goods & toys Riveted pivots and permanent light assemblies.

### Typical applications

- riveted pivots that must stay tight but still turn
- permanent joints in thin sheet where a threaded fastener would loosen
- blind fixing where only one side can be reached

### Service conditions to specify against

Marine and coastal
Available in A4 (316) stainless for chloride exposure — coastal structures, pool halls, water treatment and deck hardware, where A2 will eventually pit.

### Where to use something else

- Not for a joint that has to come apart in service — removal means drilling the rivet out.

**Full application guide: where Blind Pop Rivet are used, how to specify them, and the cases they are wrong for (https://engineeringhardware.com/applications/cad-svg-098-blindrivet/)**

## Technical Drawing

Customize the parameters below — every spec field is editable, and the drawing redraws to match the values you choose. Changing the size will snap the other fields to that size's standard values; you can then override any individual value.

Dimensioned line drawing of 2.4 Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098) to GB/T 12618 / ISO 15977. Side view and top view, drawn to the dimensions in the table below and redrawn for any size selected.

Opens a short step to confirm the exact specification before you enter contact details.

### Request a Quotation for Blind Pop Rivet

Click “Request this configuration” under the drawing to confirm the exact specification, then add your contact details. You can also send the request without a specification — but only an accurate selection gets an accurate quote.

## Dimensions & Specifications (GB/T 12618 / ISO 15977)

Every row below is a starting point for the customizer above — pick any size and the drawing will redraw to that row.

| Nominal diameter (mm) | Grip range (mm) | Cap diameter dk (mm) | Free length L (mm) |
|---|---|---|---|
| 2.4 | 0.5~3.0 | 5.0 | 7.0 |
| 3.0 | 0.5~4.0 | 6.0 | 8.0 |
| 3.2 | 0.5~6.0 | 6.4 | 10.0 |
| 4.0 | 0.5~6.0 | 8.0 | 12.0 |
| 4.8 | 0.5~8.0 | 9.5 | 14.0 |
| 5.0 | 1.0~10.0 | 10.0 | 16.0 |
| 6.0 | 1.5~12.0 | 12.0 | 18.0 |

Manufactured to GB/T 12618 / ISO 15977, Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098) are rivets supplied by Engineering Hardware. The dimensional data, materials and selection notes are summarized here.

## What Are Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098)?

Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098) are rivets defined by GB/T 12618 / ISO 15977. They are selected by nominal diameter and the dimensional characteristics shown below, and are available in a range of materials and finishes to suit the application and environment.

## CAD Source Reference

This page is generated from an original native CAD part model (SolidWorks .SLDPRT) of the blind pop rivet — gb/t 12618 / iso 15977 (series 098) family maintained by our engineering team. The technical drawing shown above is rebuilt parametrically from the dimensional table, so it always reflects the exact size and configuration you select. Native CAD files (STEP / SLDPRT) can be supplied with your quotation on request.

## Materials & Finishes

Common materials include carbon steel (typically zinc plated or hot-dip galvanized), hardened or case-hardened steel where wear matters, and stainless steel A2 (304) or A4 (316) for corrosion resistance. Specify the material, hardness where relevant, and the surface finish appropriate to your application and environment.

## Specification Guides

Each size, material and standard of Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098) has its own reference page with the figures for that one configuration.

## Goes With

Hardware commonly specified alongside Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098).

# Pricing

Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098) are supplied to order. Pricing starts from approximately US$0.020 per piece for standard sizes in carbon steel; final pricing depends on size, material, finish and order quantity (MOQ applies). Submit your exact configuration with the quote form above.

Custom manufacturing · Made to drawing

## Need a blind pop rivet outside the standard range?

Body diameter, grip range, head form and body/mandrel material combination can all be specified against the joint rather than chosen from a table. Made by cold heading or drawing.

Minimum order from 2,000 pieces; samples within 7 days of drawing approval.

**Custom rivet manufacturing (https://engineeringhardware.com/custom/rivets/)**

**Send a drawing (https://engineeringhardware.com/custom/rivets/#rfq)**

Inside the plant

# Manufactured in our own plant

This part is cold-formed, threaded, heat-treated and finished in-house. The stages below are where its class and finish are actually decided.

01

### Cold heading

Wire rod is drawn to size and cold-formed into blanks. Forming rather than cutting keeps the grain flow continuous around the head, which is where a bolt is most likely to fail.

**Head dimensions and under-head radius checked at set-up and per shift.**

02

## Thread rolling

Threads are rolled between hardened dies rather than cut. Rolled threads are stronger in fatigue than cut threads and hold pitch and flank angle far more consistently across a batch.

**Go / no-go ring gauges to ISO 965 tolerance class 6g.**

03

## Heat treatment

Quench-and-temper brings carbon and alloy steel to the property class ordered — 8.8, 10.9 or 12.9 — with the furnace charge tracked so a finished lot can be traced back to it.

**Core hardness and tensile tested per lot to ISO 898-1.**

04

## Surface treatment

Zinc, zinc-nickel, hot-dip galvanizing, black oxide, phosphate and Dacromet, selected against the service environment rather than against the price list.

**Coating thickness and neutral salt spray hours to ISO 9227.**

## Video: Blind Pop Rivet

(https://www.youtube.com/watch?v=rD5SUEhbpWw)https://www.youtube.com/watch?v=rD5SUEhbpWw)

► Watch video: https://www.youtube.com/watch?v=rD5SUEhbpWw(https://www.youtube.com/watch?v=rD5SUEhbpWw)

Third-party video, selected automatically for this topic. It is not produced by Engineering Hardware and is not a specification source — use the tables on this page for dimensional data.

## Frequently Asked Questions

**Which standard governs Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098)?**

Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098) are manufactured to GB/T 12618 / ISO 15977. The dimensional values on this page follow that standard.

**What sizes are available for Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098)?**

The table on this page lists 7 sizes for Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098), ranging from 2.4 to 6.0. Sizes outside the table can be quoted on request.

**In which materials are Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098) supplied?**

Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098) are supplied in aluminum, steel and stainless, with finishes including zinc plating, hot-dip galvanizing and black oxide. Choose material and finish to suit the load and the service environment for Blind Pop Rivet — GB/T 12618 / ISO 15977 (Series 098).

**How do I request a quotation?**

Use the parametric drawing on this page to set the exact configuration (size, material, finish) and click "Request this configuration" — a specialist from Engineering Hardware will respond within one business day.