

What Are Blind Pop Rivet Used For?

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[Fasteners/Rivets Blind Pop Rivet — GB/T 12618 / ISO 15983 \(Series 098\)](#) Applications
Rivets · GB/T 12618 / ISO 15983 · Application guide
Typical applications, the industries that use the blind pop rivet, and how to choose the right size, material and finish for the joint.

Blind Pop Rivets are used for permanent, vibration-proof joints in sheet and plate. They are manufactured to GB/T 12618 / ISO 15983, and selection is driven by the nominal diameter, the fit and tolerance the assembly requires, and the service environment.

Primary duty

Permanent, vibration-proof joints in sheet and plate

Governing standard

GB/T 12618 / ISO 15983

Nominal diameter range

2.4 mm to 6 mm

Category

Rivets

Application notes are general engineering guidance. Verify the property class and any approval requirement against your own design calculation.



Blind Pop Rivets are selected when an assembly calls for permanent, vibration-proof joints in sheet and plate. This application guide to the GB/T 12618 / ISO 15983 type covers concrete end-uses, the specification checklist, correct installation, and where an alternative fastener performs better. Stocked across roughly 2.4 mm to 6 mm, they cover light-duty and instrument-scale work.

Typical Applications for Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098)

The most common settings where these are specified:

- **Fabrication & metalwork:** bench and on-site assembly of steel frames, enclosures and weldments.
- **Sheet-metal assembly:** permanent joints in ductwork, panels and enclosures.
- **Bodywork & trailers:** blind joints where only one side is accessible.
- **Signage & cladding:** fast, vibration-resistant fixing of thin panels.
- **General machine building:** fastening covers, brackets, motors and sub-assemblies on production equipment.

How to Specify Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098) for Your Application

- **Size:** Select on nominal diameter, then on the hole tolerance and fit class — the fit, not the diameter alone, determines whether the part locates or slips. This product spans 2.4 mm–6 mm; check the full table below for the exact dimensions of each size.

- **Material:** Choose the material and finish for the service environment — plated steel for general use, stainless for corrosion resistance.
- **Environment:** For damp, coastal or chemical exposure prefer A4/316 stainless or a suitable coating; indoors, plated steel or A2 is usually sufficient.
- **Standard:** This product is supplied to GB/T 12618 / ISO 15983. Quoting the standard on your order guarantees interchangeable dimensions between suppliers.

Installation & Assembly Practice

- Drill the hole 0.1 mm over the nominal rivet diameter and deburr both sides before setting.
- Grip range must match the total joint thickness — a rivet set outside its grip range clamps poorly and works loose.

Common Selection Mistakes with Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098)

- Setting a rivet outside its grip range, which leaves the joint loose from day one.
- Using aluminum rivets on steel sheet outdoors — galvanic corrosion eats the rivet.

Where Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098) Are Not the Right Choice

Not where the joint must later be disassembled, and not for high-tension structural connections.

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.

Sends the selected values to the quote form below.

Request a Quote

The form below follows the current technical drawing configuration. Change the drawing values above and the request details update automatically.

Dimensions & Specifications (GB/T 12618 / ISO 15983)

Nominal diameter (mm)	Grip range (mm)	Cap diameter dk (mm)	Free length L (mm)	Body / mandrel material	Reference standard
2.4	0.5~3.0	5.0	7.0	Aluminum / steel	ISO 15977 / DIN 7337
3.0	0.5~4.0	6.0	8.0	Aluminum / steel	ISO 15977 / DIN 7337
3.2	0.5~6.0	6.4	10.0	Aluminum / steel	ISO 15977 / DIN 7337
4.0	0.5~6.0	8.0	12.0	Aluminum / steel	ISO 15977 / DIN 7337
4.8	0.5~8.0	9.5	14.0	Aluminum / steel	ISO 15977 / DIN 7337
5.0	1.0~10.0	10.0	16.0	Stainless / stainless	ISO 15977 / DIN 7337
6.0	1.5~12.0	12.0	18.0	Stainless / stainless	ISO 15977 / DIN 7337

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.

1.



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.



2.

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.

3.



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.

4.



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.

Frequently Asked Questions

How do I choose the right size of Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098)?

Select on nominal diameter and on the fit the assembly requires. This product is available from 2.4 mm to 6 mm; the full dimension table on this page lists each size.

Can Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098) joints be taken apart?

No — rivets form a permanent joint and must be drilled out to remove. Use a bolt or screw where you need to disassemble the joint later.

What material should Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098) be for outdoor use?

For damp, coastal or chemical environments specify A4 (316) stainless or a suitably coated steel. For indoor or dry use, A2 (304) stainless or zinc-plated steel is normally adequate.

Are Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098) made to a recognized standard?

Yes — they are manufactured to GB/T 12618 / ISO 15983, so dimensions are interchangeable between suppliers when you quote the standard on your order.

Can I get a quote for Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098) in the size and material I need?

Yes. Use the technical drawing and quote form on this page to set the size and options, then send the exact configuration to our team for pricing and lead time.

Related Pages

Product page: [Blind Pop Rivet — GB/T 12618 / ISO 15983 \(Series 098\) — specifications & sizes](#)

Blind Pop Rivet — GB/T 12618 / ISO 15983 (Series 098) Specification Guides

- [A4 stainless Blind Pop Rivet — GB/T 12618 / ISO 15983 \(Series 098\)](#)

Related Fastener Applications

- [Blind \(Pop\) Rivets applications](#)
- [Round Head Solid Rivet — GB/T 867 / DIN 660 \(Series 097\) applications](#)
- [Solid Rivets applications](#)