

Bleed Valve

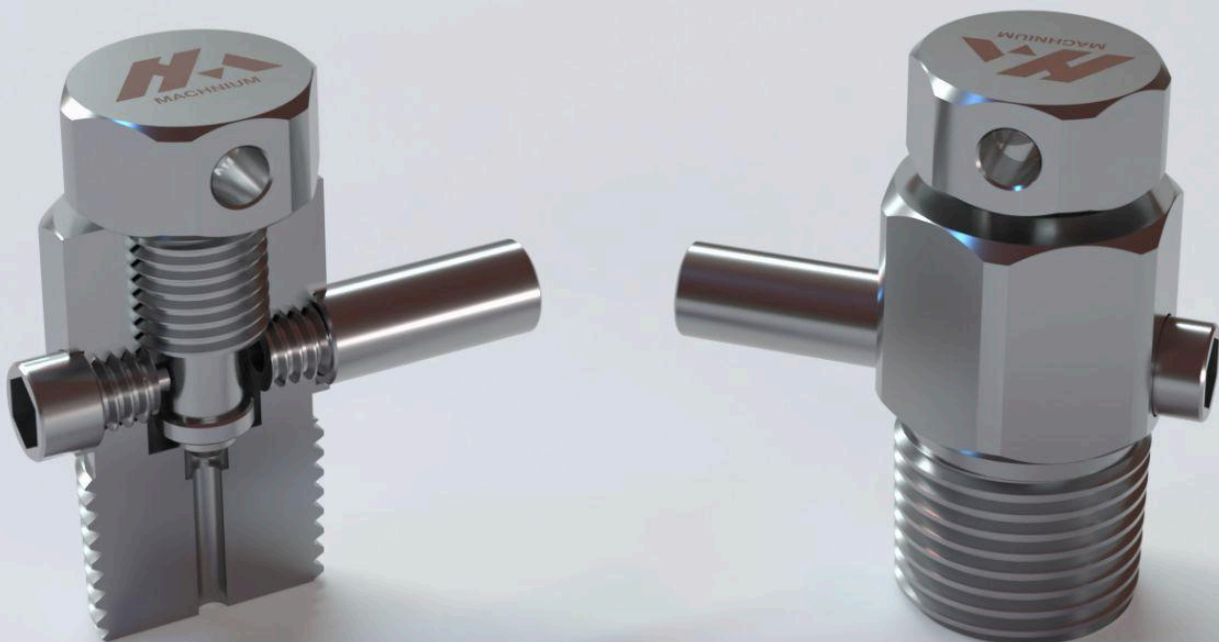
Technical Reference Manual



Why Choose Our Bleed Valve?

Machnium Bleed Valves are engineered for safe, reliable, and convenient pressure venting in instrumentation and control systems, allowing signal-line pressure to be released before instrument removal and supporting accurate calibration and maintenance. Their compact, space-saving design, reliable pressure control, and male NPT and SAE end connections make them easy to integrate into multivalve manifolds, gauge valves, and instrumentation assemblies. Machnium Bleed Valves provide controlled venting while delivering the precision, durability, and dependable performance expected from Machnium.

Recognizing that every system has unique operational demands, we offer fully customized solutions tailored to your specific application requirements. Whether you need specialized materials, custom thread configurations, or unique pressure ratings, our engineering team works directly with you to build the exact component you need.



Key Features

Durable Stainless-Steel Construction

High-quality materials provide excellent durability, corrosion resistance, and reliable performance in demanding industrial environments.

Precision-Machined Components

Carefully engineered components deliver smooth, consistent valve operation and dependable service life.

Controlled Pressure Venting

Allows trapped pressure to be safely released from signal lines before instrument removal, maintenance, or calibration.

Optimized Flow Performance

A 0.125 in. (3.2 mm) orifice and Cv of 0.25 provide controlled and predictable venting characteristics.

Safety-Focused Back-Stop Screw

The back-stop screw helps prevent accidental stem disassembly, enhancing operational safety during servicing.

Reliable Instrumentation Performance

Built for demanding applications requiring controlled venting, dependable pressure isolation, and long-term operational reliability.



Technical Specifications

Parameter	Specification
Connection	NPT, SEA
Size Range	1/8" to 3"
Pressure Range	0 to 10,000 psig (0 to 689 bar)
Max. Pressure Rating	Up to 10,000 psig (689 bar) @ 100°F (37°C)
Temperature Range	–65°F to 850°F (–53°C to 454°C) <i>(material/seat dependent)</i>
Operation	Manual Screw Down / Bar Handle
Body Material	Stainless Steel; Brass & Special Alloys Available
Flow Direction	Straight-Through / Angle (Inlet to Vent Port)
Seat Leakage	Rate A (Zero Leakage per BS EN 12266-1 / API 598)
Applications	Venting / Bleeding System Pressure, Instrument Calibration
Installation	Any Orientation
Options	Soft Seat, NACE MR0175, Special Materials

All components are available in Stainless Steel, Steel, Aluminum, Brass and exotic alloys. Rated to 10,000 psig (689 bar) at –65 to 100°F (–53 to 37°C), with maximum temperature limits ranging from 450°F/232°C (Steel) to 850°F/454°C per specified material.



Customization Options

We offer tailored solutions based on:

Specific pressure and flow requirements

Unique size preferences

Material selection for corrosive environments

At Machnium, we provide end-to-end, tailor-made solutions designed to meet the unique challenges of various industries. From initial concept to final manufacturing, we work closely with our clients to design, develop, and implement custom-engineered solutions that address their specific requirements. We handle everything from design, prototyping, and rigorous testing to full-scale production and ongoing support, ensuring that each solution meets the highest industry standards. Our expertise ensures seamless integration with existing systems while optimizing performance, durability, and serviceability.

Whether it's enhancing safety, improving efficiency, or meeting strict operational demands, our comprehensive approach delivers innovative, high-performance solutions built for the most demanding applications.

For detailed technical data and customization options, please contact us.

 machnium.com

 sales@machnium.com

 713-955-8838

 202-888-4474

