



## Check Valves, Filters and Relief Valves

Catalog 4135-CV

December 2010

aerospace  
climate control  
electromechanical  
filtration  
**fluid & gas handling**  
hydraulics  
pneumatics  
**process control**  
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## Introduction

Parker BV Series Bleed Valves are designed for use on products such as multi-valve manifolds or gauge/root valves. Functionally, the valve vents line pressure either to atmosphere or to containment when used with the optional barbed vent tube. Generally, bleed valves are used whenever an instrument is removed from a system or to assist in the calibration of control devices. The BV Series is also recommended for use in bleeding hydraulic systems.

## Features

- ▶ Available in stainless steel, carbon steel and Alloy N24135
- ▶ Vent tube directs excess gas or liquid from system lines
- ▶ Chrome plated stem provides extended cycle life with improved sealability
- ▶ Positive stop/vent tube design prevents accidental removal of the stem
- ▶ Compact design
- ▶ Wrench actuation
- ▶ Available in a variety of end configurations including male pipe and SAE ports
- ▶ 100% factory tested
- ▶ Barbed vent tube option enables containment of vented media
- ▶ Optional T-bar handle for wrench-less actuation

## Specifications

### Pressure Rating:

..... 10,000 psig (689 bar) CWP

### Temperature Rating:

Stainless Steel..... -65°F to 850°F (-54°C to 454°C)

Carbon Steel..... -20°F to 450°F (-29°C to 232°C)

Alloy N24135 (400)..... -65°F to 500°F (-54°C to 260°C)

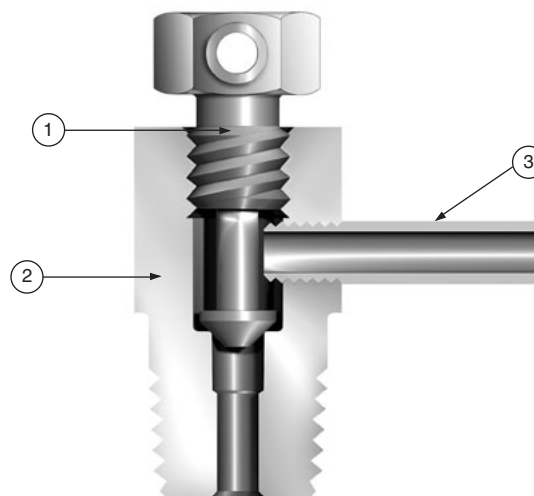
## Flow Data

$C_v = 0.13$ ;  $x_T = 0.53$ ; Orifice = 0.125" (3.2mm).

Tested in accordance with ISA S75.02.

Gas flow will be choked when  $P_1 - P_2 / P_1 = x_T$ .

## Materials of Construction



**Model Shown: 4M-BV4-SS**

Item #	Part	Stainless Steel	Carbon Steel	Alloy 400
1	Stem	ASTM A479, Type 316		ASTM B164
2	Valve Body	ASTM A479, Type 316	ASTM A108, Grade 12L14	ASTM B164
3	Vent Tube	316 Stainless Steel		ASTM B164

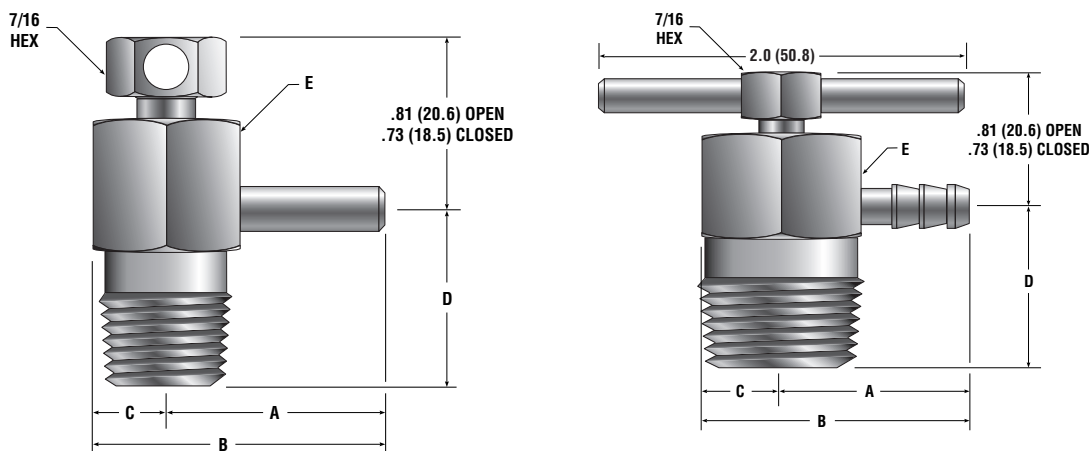
Lubrication: Molybdenum disulfide with soft metallic fillers

## Caution

These valves do not have a stem seal. It is imperative to open the valve slowly and direct the vent tube away from persons operating or near the valve. Because of the absence of a stem seal, small amounts of media will flow through the stem thread area when the valves are opened.

BV

## Dimensions



( ) Denotes dimensions in millimeters

**Model Shown: 4M-BV4-SS**

**Model Shown: 8M-BV8-SS-BVT-T**

Dimensions in inches (millimeters) are for reference only, subject to change.

Basic Part Number	End Connections		Dimensions									
	(Inlet) Port 1	(Outlet) Port 2	A		B		C		D		E (hex)	
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
2M-BV4	1/8" Male NPT	3/16" O.D.  Tube Stub	0.94	23.88	1.24	31.50	0.31	7.87	0.75	19.05	0.63	16.00
4M-BV4	1/4" Male NPT		0.94	23.88	1.24	31.50	0.31	7.87	0.75	19.05	0.63	16.00
4KM-BV4	1/4" Male BSP		0.94	23.88	1.24	31.50	0.31	7.87	0.75	19.05	0.63	16.00
4F5-BV4	1/4" Male SAE		0.94	23.88	1.24	31.50	0.31	7.87	0.69	17.53	0.63	16.00
6M-BV8	3/8" Male NPT		1.03	26.16	1.49	37.85	0.44	11.18	0.88	22.35	0.88	22.35
8M-BV8	1/2" Male NPT		1.03	26.16	1.49	37.85	0.44	11.18	0.88	22.35	0.88	22.35
8F5-BV8	1/2" Male SAE		1.03	26.16	1.49	37.85	0.44	11.18	0.88	22.35	0.88	22.35

## How to Order

Dimensions in inches (millimeters) are for reference only, subject to change.

The correct part number is easily derived from the following example and ordering chart. The six product characteristics required are coded as shown in the chart.

The example below describes a stainless steel BV4 Bleed Valve with a 1/4" male NPT inlet and a barbed vent tube outlet. It does not have a handle.

**Example: 4M-BV4-SS-BVT**

4M		-	BV4		-	SS		-	BVT		-		
End Connection			Valve Series			Material			Vent Selection			Handle Option	
End Connection			Valve Series			Material			Vent Selection			Handle Option	
2M	4KM		BV4			SS	Stainless Steel		Blank	Vent Tube		Blank	No Handle
4M	4F5**					S	Carbon Steel		BVT	Barbed Vent Tube		T	Tee Bar Handle
6M	8M		BV8			M	Alloy N24135						
8F5**													

\* If the inlet and outlet ports are the same, eliminate the outlet port designator.

\*\* Male SAE port will be supplied with a fluorocarbon rubber O-ring by adding O after F5; i.e., 4F5O.