

Designed for controlling very low flow rates of liquids and gases, MFV™ Barstock valves are available in seven conveniently overlapping orifice-needle sizes.



MFV™
Valve-Straight Flow

MFV™
Valve-90 deg Flow

design features

- ✓ Virtually free of hysteresis (see-sawing).
- ✓ Bubble tight shutoff.
- ✓ Straight or 90 degree flow patterns.
- ✓ Brass or 316 stainless steel high resolution.
- ✓ Sixteen turns to full open.

BARSTOCK METERING VALVES MFV™

Offered in straight (T) and 90 degree (L) flow patterns, the MFV™ Barstock Valve includes a “non-rising stem” design, it’s unique non-rotating needle is cylindrical with a precision ground tapered metering surface. The needle moves in a rectilinear fashion which accounts for its desirable sixteen- turn high resolution attribute. Hysteresis is virtually eliminated due to the needle design and the closely fitting fine thread on its adjustment plunger. The valve body is precision machined chrome plated brass or type 316 stainless steel.

SPECIFICATIONS

| | |
|----------------------------|--|
| MAXIMUM PRESSURE | 500 psig (3792 kPa). |
| MAXIMUM TEMPERATURE | 180 °F (82 °C) -brass. 250 °F (121 °C). |
| VALVE STEM | Sixteen turns, non-rising type. |

**MATERIALS OF CONSTRUCTION

| | |
|---------------------|---|
| BODY | Chrome plated brass or 316 stainless steel. |
| VALVE NEEDLE | 316 stainless steel. |
| ORIFICE | 316 stainless steel with PTFE liner for valve sizes 1, 2 and 3; PEEK for valve sizes 4,5,6 and 7. |
| O-RINGS | Buna® (brass valves). FKM (stainless valves). |

***The selection of materials of construction, is the responsibility of the customer. The company accepts no liability.*



Configure and Order Online: [Barstock Metering Valves MFV™](#)

| ORDERING INFORMATION BARSTOCK METERING VALVES MFV™ | | | | | | |
|--|--------------|-----------|-----------------------|-------|--------------|--------|
| MODEL NUMBER | FLOW PATTERN | MATERIAL | MAXIMUM FLOW [mL/min] | | ORIFICE [in] | CV |
| | | | Air | Water | | |
| VM1-BB-1A | Straight | Brass | 200 | 6 | 0.042 | 0.0005 |
| VM2-BB-1A | Straight | Brass | 400 | 12 | 0.042 | 0.001 |
| VM3-BB-1A | Straight | Brass | 1000 | 30 | 0.042 | 0.0025 |
| VM4-BB-1A | Straight | Brass | 2500 | 70 | 0.093 | 0.0061 |
| VM5-BB-1A | Straight | Brass | 6200 | 200 | 0.093 | 0.016 |
| VM6-BB-1A | Straight | Brass | 21500 | 650 | 0.093 | 0.054 |
| VM7-BB-1A | Straight | Brass | 46090 | 1410 | 0.093 | 0.118 |
| VM1-SV-2A | Straight | Stainless | 200 | 6 | 0.042 | 0.0005 |
| VM2-SV-2A | Straight | Stainless | 400 | 12 | 0.042 | 0.001 |
| VM3-SV-2A | Straight | Stainless | 1000 | 30 | 0.042 | 0.0025 |
| VM4-SV-2A | Straight | Stainless | 2500 | 70 | 0.093 | 0.0061 |
| VM5-SV-2A | Straight | Stainless | 6200 | 200 | 0.093 | 0.016 |
| VM6-SV-2A | Straight | Stainless | 21500 | 650 | 0.093 | 0.054 |
| VM7-SV-2A | Straight | Stainless | 46090 | 1410 | 0.093 | 0.118 |
| VM1-BB-6A | 90 degree | Brass | 200 | 6 | 0.042 | 0.0005 |
| VM2-BB-6A | 90 degree | Brass | 400 | 12 | 0.042 | 0.001 |
| VM3-BB-6A | 90 degree | Brass | 1000 | 30 | 0.042 | 0.0025 |
| VM4-BB-6A | 90 degree | Brass | 2500 | 70 | 0.093 | 0.0061 |
| VM5-BB-6A | 90 degree | Brass | 6200 | 200 | 0.093 | 0.016 |
| VM6-BB-6A | 90 degree | Brass | 21500 | 650 | 0.093 | 0.054 |
| VM7-BB-6A | 90 degree | Brass | 46090 | 1410 | 0.093 | 0.118 |
| VM1-SV-7A | 90 degree | Stainless | 200 | 6 | 0.042 | 0.0005 |
| VM2-SV-7A | 90 degree | Stainless | 400 | 12 | 0.042 | 0.001 |
| VM3-SV-7A | 90 degree | Stainless | 1000 | 30 | 0.042 | 0.0025 |
| VM4-SV-7A | 90 degree | Stainless | 2500 | 70 | 0.093 | 0.0061 |
| VM5-SV-7A | 90 degree | Stainless | 6200 | 200 | 0.093 | 0.016 |
| VM6-SV-7A | 90 degree | Stainless | 21500 | 650 | 0.093 | 0.054 |
| VM7-SV-7A | 90 degree | Stainless | 46090 | 1410 | 0.093 | 0.118 |

Note: Based on 10psig(69 kPa) inlet pressure and atmospheric exhaust.

design features

- ✓ Bubble tight shutoff.
- ✓ Straight or 90 degree flow patterns.
- ✓ Brass or 316 stainless steel.

Designed for controlling a broad range of flow rates of liquids and gases, CV™ Utility valves are available in three conveniently overlapping orifice-needle sizes.

BARSTOCK \ UTILITY VALVES CV™

These versatile, rugged and reliable valves are suitable for laboratory instrumentation, bench top or OEM flow control purposes.

Valves are offered in straight (T) and 90 degree (L) flow patterns. All valves are supplied with 1/8" FNPT inlet and outlet ports.

Valve cartridges are also interchangeable with built-in valves of Aalborg's series of P, T, S, and G flow meter product line.

The valve body is precision machined chrome plated brass or type 316 stainless steel.



**MATERIALS OF CONSTRUCTION

| | |
|---------------------|---|
| BODY | Chrome plated brass or 316 stainless steel. |
| VALVE NEEDLE | 316 stainless steel. |
| ORIFICE | KEL-F. |
| O-RINGS | Buna® (brass valves). FKM (stainless valves). |

**The selection of materials of construction, is the responsibility of the customer. The company accepts no liability.

SPECIFICATIONS

| | |
|----------------------------|---|
| MAXIMUM PRESSURE | 500 psig (3792 kPa). |
| MAXIMUM TEMPERATURE | 180 °F (82 °C) - (brass valves). 250 °F (121 °C) - (stainless valves). |

Configure and Order Online: [Barstock Utility Valves CV™](#)

ORDERING INFORMATION BARSTOCK UTILITY VALVES CV™

| MODEL NUMBER | FLOW PATTERN | MATERIAL | MAXIMUM FLOW [mL/min] | | ORIFICE [in] | Cv |
|--------------|--------------|-----------|-----------------------|-------|--------------|------|
| | | | Air | Water | | |
| VCL-BB-1A | Straight | Brass | 5000 | 350 | 0.052 | 0.03 |
| VCL-SV-2A | Straight | Stainless | 5000 | 350 | 0.052 | 0.03 |
| VCL-BB-6A | 90 degree | Brass | 5000 | 350 | 0.052 | 0.03 |
| VCL-SV-7A | 90 degree | Stainless | 5000 | 350 | 0.052 | 0.03 |
| VCM-BB-1A | Straight | Brass | 20000 | 1200 | 0.082 | 0.10 |
| VCM-SV-2A | Straight | Stainless | 20000 | 1200 | 0.082 | 0.10 |
| VCM-BB-6A | 90 degree | Brass | 20000 | 1200 | 0.082 | 0.10 |
| VCM-SV-7A | 90 degree | Stainless | 20000 | 1200 | 0.082 | 0.10 |
| VCH-BB-1A | Straight | Brass | 60000 | 3500 | 0.120 | 0.30 |
| VCH-SV-2A | Straight | Stainless | 60000 | 3500 | 0.120 | 0.30 |
| VCH-BB-6A | 90 degree | Brass | 60000 | 3500 | 0.120 | 0.30 |
| VCH-SV-7A | 90 degree | Stainless | 60000 | 3500 | 0.120 | 0.30 |

Note: Based on 10psig (69 kPa) inlet pressure and atmospheric exhaust.