Micromite 1600 Series

Forged Metering Valves

Typical Applications

- Chromatography
- Mass Spectroscopy
- Sampling and fine metering
- Pollution analyzing instrumentation

Technical Data

BODY*	316 stainless steel, brass
MAXIMUM OPERATING PRESSURE @ 70° F (21° C)**	Brass • 3500 psig (242 bar) 316 stainless steel • 5000 psig (345 bar)
OPERATING TEMPERATURE RANGE	-20° to +250° F (-29° to +121° C)
ORIFICE	0.031" (0.79 mm)
CV FACTOR	0.0008

** Consult factory for other materials*

*** Valve is not designed for shut-off. Pressure ranges for metering only*

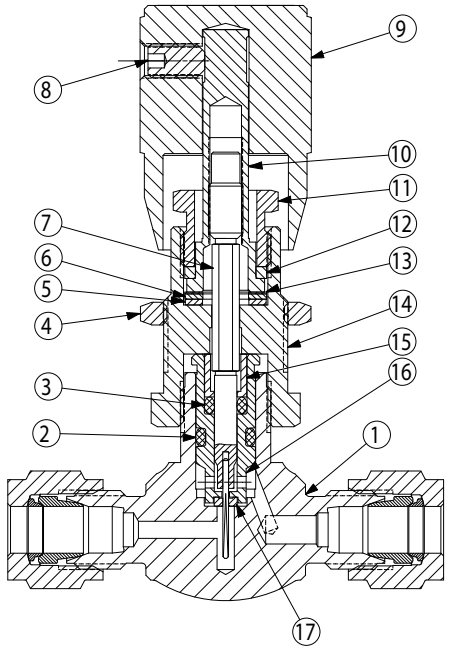
Features & Benefits

- 18 turn non-rotating stem
- Low internal volume provides low flow control
- Non-rotating stem minimizes unwanted variability of flow rate
- Unique thread design allows tapered needle portion of the stem to be withdrawn into the outer stem
- O-ring seals below the stem threads provide smooth operation and eliminate backlash
- Panel mounting is standard for all models
- Dial indicator provides repeatable positioning of stem in full turns and tenths of a turn from closed to fully open.
  - Position by finger tip rotating the knurled aluminum dial.
  - A position lock prevents accidental movement of the handle and resulting errors in flow data.
  - The size and design of the handle assembly provide an attractive appearance for equipment panels.

Micromite® 1600 Series

Materials of Construction

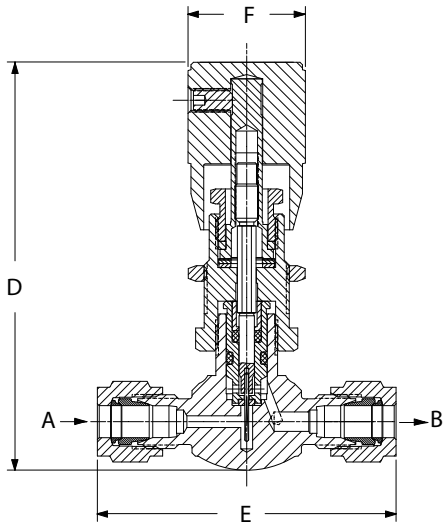
	DESCRIPTION	MATERIAL
1	BODY	316 stainless or brass
2	O-RING	Fluorelastomer or Buna-N
3	O-RING	Fluorelastomer or Buna-N
4	PANEL NUT	Brass
5	WASHER	Fluorelastomer
6	WASHER	304 stainless
7	STEM AND PIN	316 stainless
8	SET SCREW	Alloy steel
9	HANDLE	Aluminum
10	SPINDLE	316 stainless
11	SCREW	316 stainless
12	FRICTION WASHER	Delrin® AF
13	FRICTION WASHER	Glass cloth
14	BONNET	316 stainless
15	RETAINER	PCTFE
16	GLAND	316 stainless
17	SEAT	316 stainless

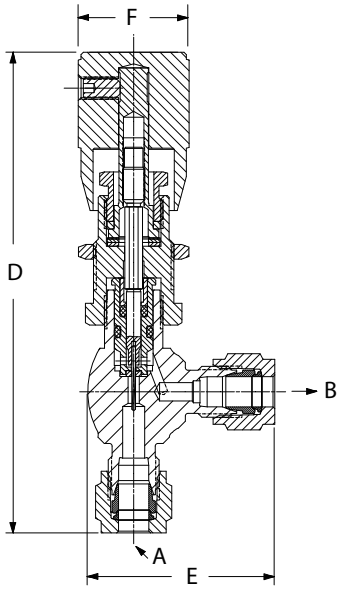


Dimensions

FLOW PATTERN	CONNECTIONS		PART NUMBER		DIMENSIONS				PANEL MOUNTING	
	A INLET	B OUTLET		BODY MATERIAL		D	E	F	MAXIMUM THICKNESS	HOLE SIZE
GLOBE	8/1" LOK®	8/1" LOK®	1656G2YA	316 stainless steel	mm	83	60	25	6	18
					inch	3 1/4	2 3/8	1	1/4	45/64
	1/4" LOK®	1/4" LOK®	1656G4YA	316 stainless steel	mm	83	60	25	6	18
					inch	3 1/4	2 3/8	1	1/4	45/64
	1/4" LOK®	1/4" LOK®	1654G4BA	Brass	mm	83	60	25	6	18
					inch	3 1/4	2 3/8	1	1/4	45/64
	1/4" NPT MALE	1/4" NPT MALE	1654M4BA	Brass	mm	83	45	25	6	18
					inch	3 1/4	1 3/4	1	1/4	45/64
ANGLE	8/1" LOK®	8/1" LOK®	1666G2YA	316 stainless steel	mm	102	41	25	6	18
					inch	4	1 5/8	1	1/4	45/64
	1/4" LOK®	1/4" LOK®	1666G4YA	316 stainless steel	mm	102	41	25	6	18
					inch	4	1 5/8	1	1/4	45/64

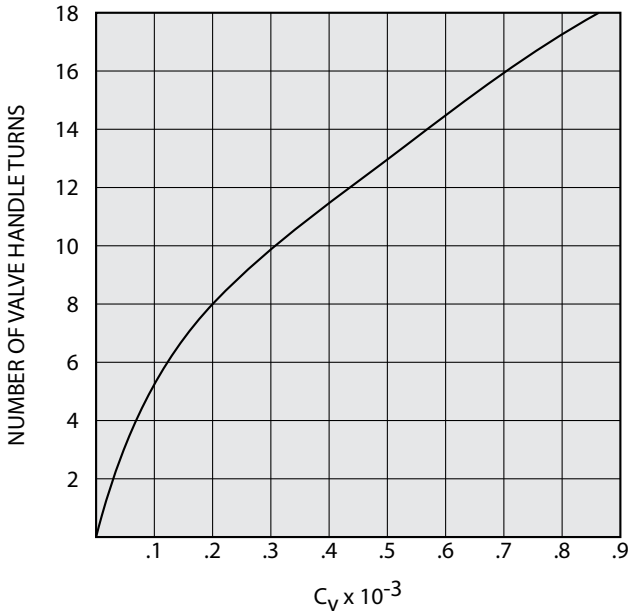
Dimensions for reference only, subject to change.





Micromite® 1600 Series

Reference Flow Curve



Metering range is approximately 18 handle turns. Opening the valve beyond the metering range will increase the flow to full Cv.

How to Order

FLOW PATTERN	CONNECTIONS		ORDER BY NUMBER	
	A INLET	B INLET	BRASS VALVES	316 STAINLESS STEEL VALVES
Globe	1/8" lok®	1/8" lok®	—	1656G2YA
	¼" lok®	¼" lok®	1654G4BA	1656G4YA
	¼" NPT Male	¼" NPT Male	—	1656M4YA
Angle	1/8" lok®	1/8" lok®	—	1666G2YA
	¼" lok®	¼" lok®	—	1666G4YA

To Order the Dial Indicator, order Kit 1600K4. If valve and kit are to be factory assembled, please note "Factory Assembled" on order

Ordering Options

Spare Parts

Spare parts and repair kits are available for all needle valves. Please contact your distributor for specific information.

Cleaning and Testing

When ordering, please specify if oxygen cleaning or helium leak testing is required.

Additional Sizes

Additional sizes and options are available on special request.