



# Micromite® 1600 Series

Forged Metering Valves



## Typical Applications

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

## Technical Data

<b>BODY*</b>	316 stainless steel, brass
<b>MAXIMUM OPERATING PRESSURE @ 70° F (21° C)**</b>	<i>Brass</i> <ul style="list-style-type: none"> <li>• 3500 psig (242 bar)</li> </ul> <i>316 stainless steel</i> <ul style="list-style-type: none"> <li>• 5000 psig (345 bar)</li> </ul>
<b>OPERATING TEMPERATURE RANGE</b>	-20° to +250° F (-29° to +121° C)
<b>ORIFICE</b>	0.031" (0.79 mm)
<b>CV FACTOR</b>	0.0008

## 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- Unique thread design allows tapered needle portion of the stem to be withdrawn into the outer stem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.
- Special High Tolerance NPT Thread

metering valves

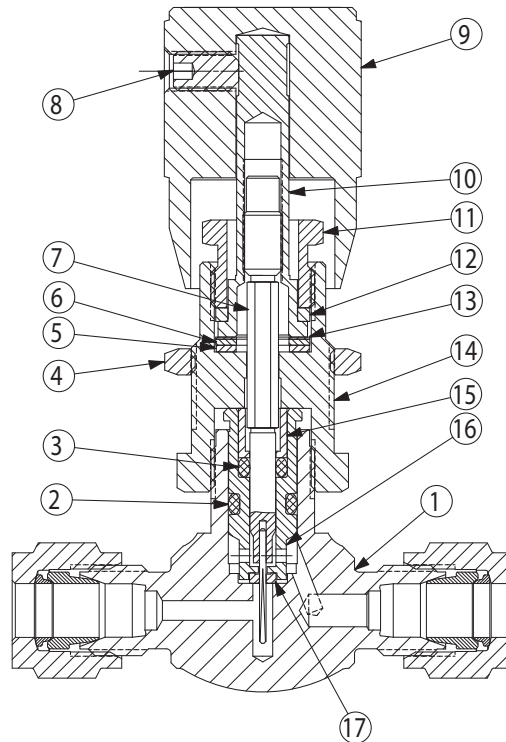
\* Consult factory for other materials

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

# 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

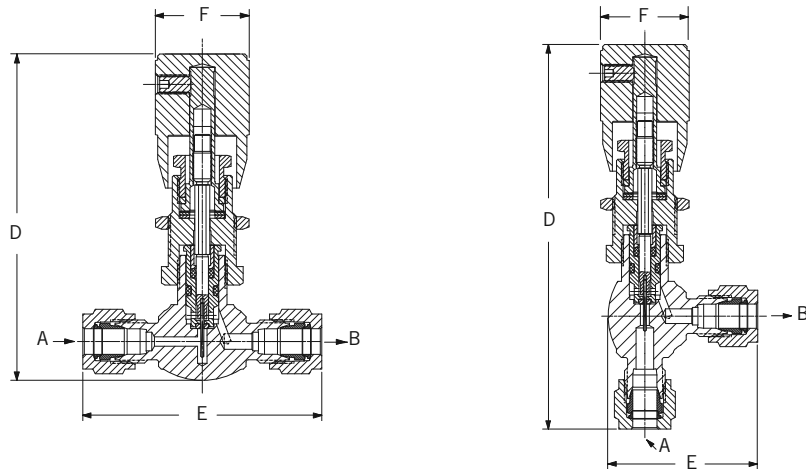


# Micromite® 1600 Series

## Dimensions

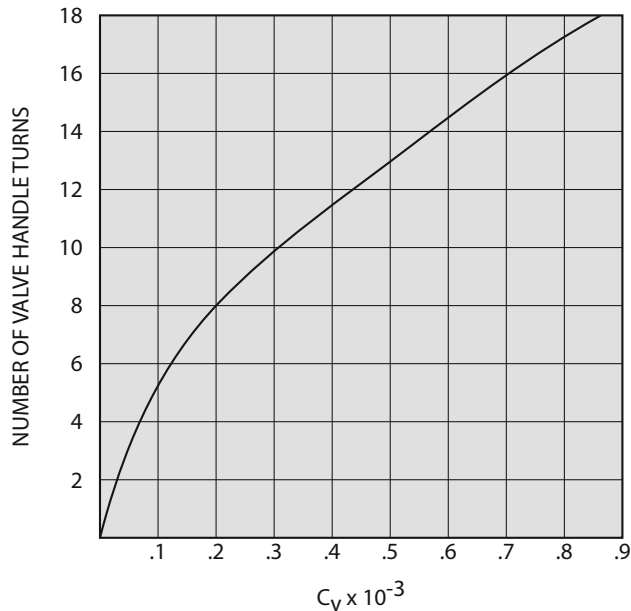
FLOW PATTERN	CONNECTIONS		PART NUMBER	BODY MATERIAL	O RING	DIMENSIONS			PANEL MOUNTING		
	A INLET	B OUTLET				D	E	F	MAXIMUM THICKNESS	HOLE SIZE	
GLOBE	1/8" FNPT	1/8" FNPT	1654F2BA	BRASS	Buna-N	mm	83	45	25	6	18
						inch	3 1/4	1 3/4	1	1/4	45/64
	1/8" MNPT	1/8" MNPT	1654M2BA	BRASS	Buna-N	mm	83	45	25	6	18
						inch	3 1/4	1 3/4	1	1/4	45/64
	1/4" MNPT	1/4" MNPT	1654M4BA	BRASS	Buna-N	mm	83	45	25	6	18
						inch	3 1/4	1 3/4	1	1/4	45/64
	1/16" GYROLOK®	1/16" GYROLOK®	1654G1BA	BRASS	Buna-N	mm	83	60	73	6	18
						inch	2 1/4	1 3/8	49	1/3	45/63
	1/8" GYROLOK®	1/8" GYROLOK®	1654G2BA	BRASS	Buna-N	mm	83	60	73	6	18
						inch	2 1/4	1 3/8	49	1/3	45/63
	1/4" GYROLOK®	1/4" GYROLOK®	1654G4BA	BRASS	Buna-N	mm	83	60	73	6	18
						inch	2 1/4	1 3/8	49	1/3	45/63
	1/8" FNPT	1/8" FNPT	1654F2YA	316 SS	Buna-N	mm	83	45	25	6	18
						inch	3 1/4	1 3/4	1	1/4	45/64
	1/8" MNPT	1/8" MNPT	1654M2YA	316 SS	Buna-N	mm	83	45	25	6	18
						inch	3 1/4	1 3/4	1	1/4	45/64
	1/4" MNPT	1/4" MNPT	1654M4YA	316 SS	Buna-N	mm	83	45	25	6	18
						inch	3 1/4	1 3/4	1	1/4	45/64
	1/16" GYROLOK®	1/16" GYROLOK®	1654G1YA	316 SS	Buna-N	mm	83	60	25	6	18
						inch	3 1/4	2 3/8	1	1/4	45/64
1/8" GYROLOK®	1/8" GYROLOK®	1654G2YA	316 SS	Buna-N	mm	83	60	25	6	18	
					inch	3 1/4	2 3/8	1	1/4	45/64	
1/4" GYROLOK®	1/4" GYROLOK®	1654G4YA	316 SS	Buna-N	mm	83	60	25	6	18	
					inch	3 1/4	2 3/8	1	1/4	45/64	
1/16" GYROLOK®	1/16" GYROLOK®	1656G1YA	316 SS	Fluorelastomer	mm	83	60	25	6	18	
					inch	3 1/4	2 3/8	1	1/4	45/64	
1/8" GYROLOK®	1/8" GYROLOK®	1656G2YA	316 SS	Fluorelastomer	mm	83	60	25	6	18	
					inch	3 1/4	2 3/8	1	1/4	45/64	
1/4" GYROLOK®	1/4" GYROLOK®	1656G4YA	316 SS	Fluorelastomer	mm	83	60	25	6	18	
					inch	3 1/4	2 3/8	1	1/4	45/64	
1/16" GYROLOK®	1/16" GYROLOK®	1666G1YA	316 SS	Fluorelastomer	mm	83	60	25	6	18	
					inch	3 1/4	2 3/8	1	1/4	45/64	
1/8" GYROLOK®	1/8" GYROLOK®	1666G2YA	316 SS	Fluorelastomer	mm	102	41	25	6	18	
					inch	4	1 5/8	1	1/4	45/64	
1/4" GYROLOK®	1/4" GYROLOK®	1666G4YA	316 SS	Fluorelastomer	mm	102	41	25	6	18	
					inch	4	1 5/8	1	1/4	45/64	

Dimensions for reference only, subject to change.



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## Reference Flow Curve



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

## How to Order

FLOW PATTERN	CONNECTIONS		BRASS WITH BUNA-N	316 STAINLESS STEEL WITH BUNA-N	316 STAINLESS WITH FLUORELASTOMER
	A Inlet	B Outlet			
GLOBE	1/8" FNPT	1/8" FNPT	1654F2BA	1654F2YA	—
	1/8" MNPT	1/8" MNPT	1654M2BA	1654M2YA	—
	1/4" MNPT	1/4" MNPT	—	1654M4YA	—
	1/16" GYROLOK®	1/16" GYROLOK®	1654G1BA	1654G1YA	1656G1YA
	1/8" GYROLOK®	1/8" GYROLOK®	1654G2BA	1654G2YA	1656G2YA
	1/4" GYROLOK®	1/4" GYROLOK®	1654G4BA	1654G4YA	1656G4YA
ANGLE	1/16" GYROLOK®	1/16" GYROLOK®	—	—	1666G1YA
	1/8" GYROLOK®	1/8" GYROLOK®	—	—	1666G2YA
	1/4" GYROLOK®	1/4" GYROLOK®	—	—	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. Please consult your local HOKE® distributor.