



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 <ul style="list-style-type: none">• 3500 psig (242 bar) 316 stainless steel <ul style="list-style-type: none">• 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- Unique thread design allows tapered needle portion of the stem to be withdrawn into the outer stem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.
- Special High Tolerance NPT Thread

metering valves

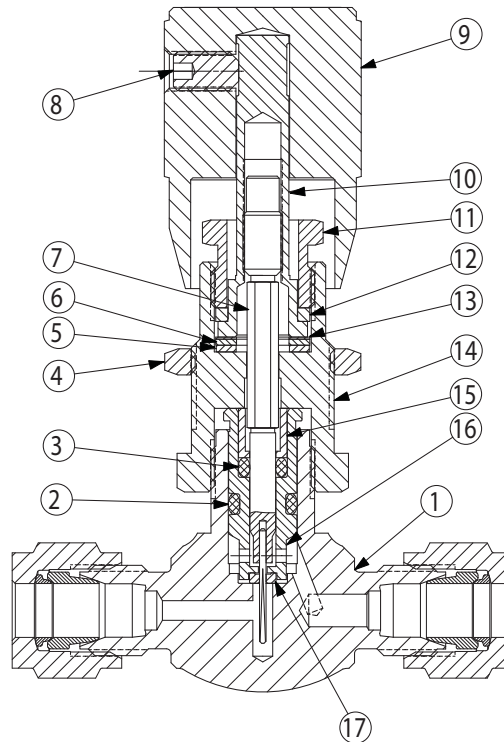
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Micromite® 1600 Series

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

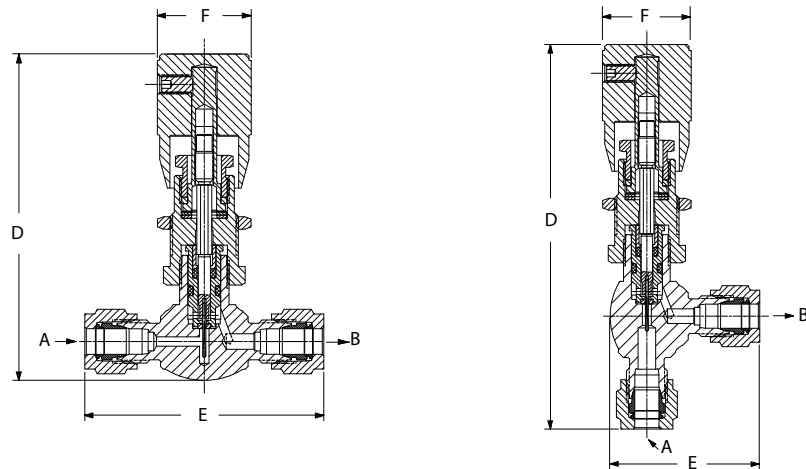


Micromite® 1600 Series

Dimensions

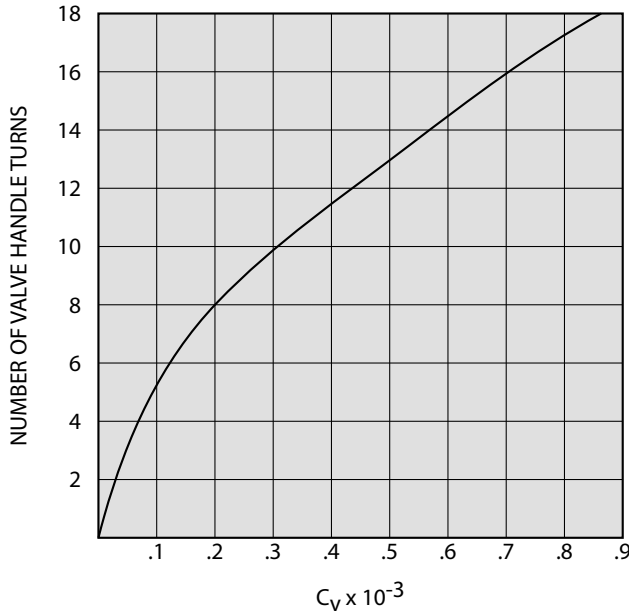
FLOW PATTERN	CONNECTIONS		PART NUMBER	BODY MATERIAL	O RING	DIMENSIONS			PANEL MOUNTING		
	A INLET	B OUTLET				D	E	F	MAXIMUM THICKNESS	HOLE SIZE	
GLOBE	1/8" FNPT	1/8" FNPT	1654F2BA	BRASS	Buna-N	mm	83	45	25	6	18
						inch	3 1/4	1 3/4	1	1/4	45/64
	1/8" MNPT	1/8" MNPT	1654M2BA	BRASS	Buna-N	mm	83	45	25	6	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	1654M4BA	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

FOR YOUR SAFETY

IT IS SOLELY THE RESPONSIBILITY OF THE SYSTEM DESIGNER AND USER TO SELECT PRODUCTS SUITABLE FOR THEIR SPECIFIC APPLICATION REQUIREMENTS AND TO ENSURE PROPER INSTALLATION, OPERATION AND MAINTENANCE OF THESE PRODUCTS. MATERIAL COMPATIBILITY, PRODUCT RATINGS AND APPLICATION DETAILS SHOULD BE CONSIDERED IN THE SELECTION. IMPROPER SELECTION OR USE OF PRODUCTS DESCRIBED HEREIN CAN CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.

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.