

Precise Flow Control with Fine Adjustment of Corrosive and Ultra Pure Fluids

Throttle Master™ NEEDLE VALVES

Features & Benefits:

- **Needle Finish, SPI/SPE # 1**
Bubble tight, low torque shut-off
- **Proven three prong, star handle.**
Tri-Oval geometry
Fast open/close operation
Fine metering control
- **24 pitch metering thread**
20% finer control adjustment
- **Integrally designed panel mounting**
No fasteners required
Mounts to panel thicknesses from .031 to .500
- **PTFE, Teflon® sealed**
Chemical resistance
High Purity
- **No Elastomers (O-rings), metals or lubricants**
No corrosion
No contamination
- **Materials of Construction**
PVC: NSF Std 14 & 61 Compliant
CPVC: NSF Std 14 & 61 Compliant
PP: Natural (Unpigmented), Reinforced
PVDF: NSF Std 14 & 61 Compliant

Cap acts as a gland nut. Any seal wear is compensated for by simple hand tightening.

Panel Nut Ring for easy mounting to bracket or panel.



Teflon® PTFE Seal isolates stem threads from fluid.



Custom Handles & Colored Ring Inserts are Available.
Please Contact our Sales Department

Teflon® is a Registered Trademark of E. I. DuPont.

Materials: PVC, CPVC, PP, & PVDF
Connection Sizes: 1/4", 3/8", 1/2" FNPT

Flare & Compression Tubing Connections Available!



Why Marquest Scientific Throttle Master Needle Valves?

The Throttle Master line represents the latest in computer generated solid modeling and flow analysis. The developed metering chamber provides for the most reliable stabilization and linearity of flow. Ultimate cross sectional geometry allows the manufacturing process to attain full material property potentials for the most demanding applications.

Fields of Application:

Wet Processing, Waste Water Treatment, Chemical Feed Systems, Commercial Industrial RO Systems, Wet Benches & Fume Hoods, Plating Equipment, Water Purification, Photographic Processing, Car Wash, Farming, Dialysis Systems, Pharma Processing, Semi Fab Wafer Manufacturing.



MARQUEST SCIENTIFIC
Fluid Handling Products

- Body**
- **PVC:** Polyvinyl Chloride
 - **CPVC:** Chlorinated Polyvinyl Chloride
 - **PP:** Polypropylene, unpigmented homopolymer, glass & mineral reinforced
 - **PVDF:** 100% Virgin Polyvinylidene Flouride

- Seal**
- Virgin PTFE, Teflon

- Choice of three sizes**
- 1/4" x 1/4" FNPT
 - 3/8" x 3/8" FNPT
 - 1/2" x 1/2" FNPT

 Tubing Connections are available. Please visit www.marquestscientific.com for more info.

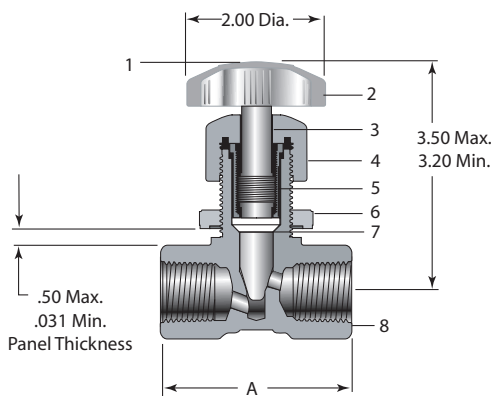
DIMENSIONAL DATA - inches

Dimensions

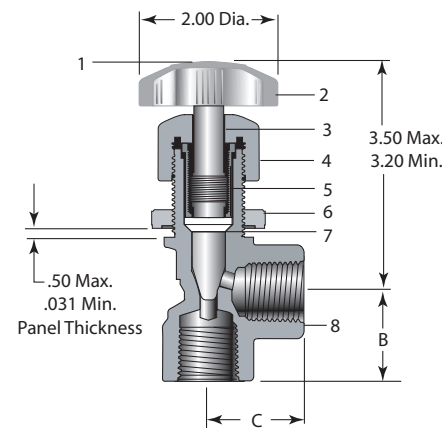
Size	A	B	C
1/4" FNPT	2.31	1.16	1.17
3/8" FNPT	2.39	1.19	1.21
1/2" FNPT	2.65	1.31	1.32

Parts List

- | | |
|-------------------------|---------------------|
| 1. Colored Ring Inserts | 5. Threaded Insert |
| 2. Handle | 6. Panel Nut |
| 3. Needle | 7. PTFE Teflon Seal |
| 4. Cap | 8. Body |



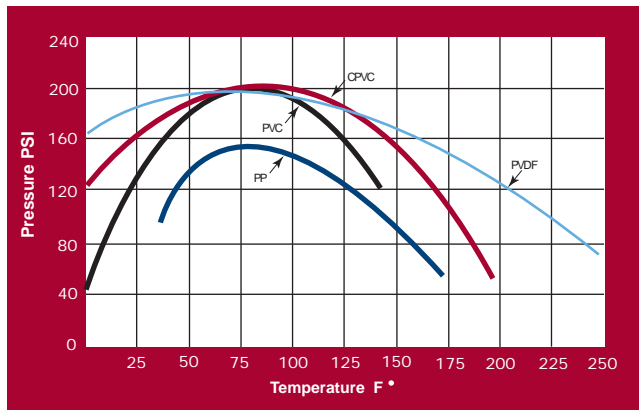
Globe Pattern



Angle Pattern

PRESSURE/TEMPERATURE RANGE

Non-Shock



Flow Data

	1/4" & 3/8"		1/2"	
	Globe Pattern	Angle Pattern	Globe Pattern	Angle Pattern
Orifices Inlet	0.187"	0.250"	0.218"	0.250"
Orifices Outlet	0.187"	0.187"	0.218"	0.218"
Cv	0.310	0.426	0.620	0.780

*A flow calculator is available at our website.

HOW TO ORDER

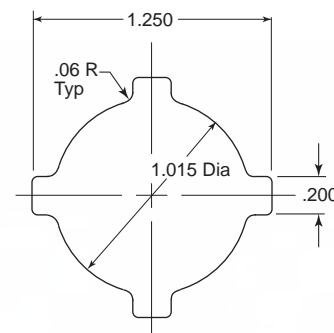
NG - 500 - PVC

Model Number	Connections	Body Material
NG = Globe Pattern NA = Angle Pattern	250 = 1/4" FNPT 375 = 3/8" FNPT 500 = 1/2" FNPT	PVC = Polyvinyl Chloride CPV = Chlorinated Polyvinyl Chloride PPR = Polypropylene, unpigmented homopolymer, glass & mineral reinforced PVD = PVDF, Polyvinylidene Flouride

Example Part Number: **NG-500-PVC**
Globe pattern with 1/2" FNPT connections and a Polyvinyl Chloride Body

Mounting Template

When required, the template provides the outline of the hole and orientation slots for a panel or bracket mounting. The orientation slots may be cut in multiple positions to allow versatility in mounting the valve to accommodate the piping alignment requirements.



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WWW.NEEDLEVALVES.US

Bulletin No. TMNV0804



MARQUEST SCIENTIFIC

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