These compact and reliable PTFE needle valves are designed for laboratory and industrial applications for regulating corrosive gases and liquids or for high purity service. They may also be used as shut off valves.

Pliant PTFE bodies of the valves are reinforced by structurally rigid metallic shells. Fluids contact only PTFE and PEEK materials. Shells are made of anodized aluminum or type 316 stainless steel and bushings are made of plated brass or 316 stainless steel. Where externally corrosive conditions exist stainless steel is recommended.

Valve spindles are made of rigid PEEK to minimize the undesirable material "creeping" normally associated with PTFE. PTFE valves are designed for relatively high flow ranges while still performing well in low flow rates. Valves may be used in pressure or non-critical vacuum service.

The simplicity of design - there are only seven components (including a single PTFE o-ring) - assures reliability and minimizes sources of leakage. It takes seconds to disassemble the valve for cleaning and maintenance. The PTFE o-ring is radially compressed and due to this unique design feature the degree of compression may be adjusted without disassembly by tightening the hexagonal bushing.

PTFE Needle valve with Stainless Shell and FNPT Fittings

design features

- ✓ Fluids contact PTFE and PEEK only.
- ✓ Structurally Rigid Metal Shell.
- ✓ One PTFE o-ring.
- ✓ Simplicity only seven components.

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

SPECIFICATIONS	
MAXIMUM PRESSURE	75 psig (517 kPa)
MAXIMUM TEMPERATURE	150 °F (65 °C)
ORIFICE SIZE	0.125" diameter (3.175 mm)
****MATERIALS OF CONSTRUCTION FLUID CONTACTING**	Body and o-ring-PTFE. Valve spindle-PEEK.
NON FLUID CONTACTING	Shell - Aluminum (anodized) or 316 stainless steel. Bushing plated brass, or 316 stainless steel. Adjusting Knob-phenolic.

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

Configure and Order Online: PTFE Needle Valves

ORDERING INFORMATION PTFE NEEDLE VALVES

MODEL NUMBER	MAXIMUM FLOW [ml/min]		CV	NON WETTED MATERIALS		CONNECTIONS
	AIR	WATER		SHELL	BUSHING	
VCL-TT-0A	2400	130	0.011	Aluminum	Brass	1/8" FNPT
VCH-TT-0A	55000	2800	0.250	Aluminum	Brass	1/8" FNPT
VCL-TT-0F	2400	130	0.011	Aluminum	Brass	1/4" Comp.
VCH-TT-0F	55000	2800	0.250	Aluminum	Brass	1/4" Comp.
VCL-TT-0G	2400	130	0.011	Aluminum	Brass	0.390 O.D. Glass Nipples
VCH-TT-0G	55000	2800	0.250	Aluminum	Brass	0.390 O.D. Glass Nipples
VCL-TT-2A	2400	130	0.011	Stainless	Stainless	1/8" FNPT
VCH-TT-2A	55000	2800	0.250	Stainless	Stainless	1/8" FNPT
VCL-TT-2F	2400	130	0.011	Stainless	Stainless	1/4" Comp.
VCH-TT-2F	55000	2800	0.250	Stainless	Stainless	1/4" Comp.
VCL-TT-2G	2400	130	0.011	Stainless	Stainless	0.390 O.D. Glass Nipples
VCH-TT-2G	55000	2800	0.250	Stainless	Stainless	0.390 O.D. Glass Nipples

PTFE NEEDLE VALVES

PTFE Needle valve with Aluminum Shell and Glass Nipples

MVT™ Metering valves are constructed of PTFE and PEEK materials.

Non-fluid contacting external parts are made of anodized aluminum. Valves are offered in three conveniently overlapping flow ranges. Safety handle prevents over tightening and facilitates fine metered regulation. MVT™ valves are useful in regulating the flow of corrosive gases and liquids.

They may be used in pressure or non-critical vacuum service and serve as bubble tight shutoff valves.

PTFE Metering Valve

SPECIFICATIONS	
MAXIMUM PRESSURE	75 psig (517 kPa)
MAXIMUM TEMPERATURE	150 °F (65 °C)
ORIFICE SIZE	0.125" diameter (3.175 mm)
NUMBER OF TURNS TO FULLY OPEN	Eight.
STEM	Non-rising type.
FLUID CONTACTING COMPONENTS	Body /o-ring-PTFE. Valve spindle-PEEK.
NON-FLUID CONTACTING COMPONENTS	Shell + Handle - Aluminum (anodized).

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

Configure and Order Online: VT PTFE Metering Valves

ORDERING INFORMATION PTFE METERING VALVE				
MODEL NUMBER	**MAXIMUM FLOW [ml/min]**		**Cv**	**CONNECTIONS**
	Air	**Water**		
VM1-TT-0A	600	36	0.003	1/8" FNPT
VM3-TT-0A	3000	180	0.015	1/8" FNPT
VM6-TT-0A	30000	1800	0.150	1/8" FNPT
VM1-TT-0F	600	36	0.003	1/4" Comp.
VM3-TT-0F	3000	180	0.015	1/4" Comp.
VM6-TT-0F	30000	1800	0.150	1/4" Comp.
VM1-TT-0G	600	36	0.003	0.390 O.D. Glass Nipples
VM3-TT-0G	3000	180	0.015	0.390 O.D. Glass Nipples
VM6-TT-0G	30000	1800	0.150	0.390 O.D. Glass Nipples

design features

- ✓ Fluids contact PTFE and PCTFE only.
- ✓ One PTFE o-ring.
- ✓ Simplicity, only six components.

PTFE needle valves are designed for laboratory and industrial applications for regulating corrosive gases and liquids or for high purity service. They may also be used as shut off valves.

Fluids contact only PTFE and PCTFE materials.

Valve spindles are made of rigid PCTFE to minimize the undesirable material "creeping" normally associated with PTFE.

PTFE valves are designed for relatively high flow ranges while still performing well in low flow rates.

Valves may be used in pressure or non-critical vacuum service.

The simplicity of design - there are only six components (including a single PTFE o-ring) - assures reliability and minimizes sources of leakage. It takes seconds to disassemble the valve for cleaning and maintenance.

The PTFE o-ring is radially compressed and due to this unique design feature the degree of compression may be adjusted without disassembly by tightening the bushing.

6mm PTFE Needle Valves

SPECIFICATIONS	
MAXIMUM PRESSURE	75 psig (517 kPa)
MAXIMUM TEMPERATURE	150 °F (65 °C)
ORIFICE SIZE	6.0 mm (0.250") diameter.
****MATERIALS OF CONSTRUCTION FLUID CONTACTING**	Body and o-ring-PTFE. Valve spindle-PCTFE.
NON FLUID CONTACTING	Set screws 18-8 stainless steel.

Configure and Order Online: VT6 PTFE Needle Valve 6mm Orifice

ORDERING INFORMATION FOR 6mm PTFE NEEDLE VALVES				
MODEL NUMBER	MAXIMUM FLOW LPM		Cv	CONNECTIONS
	Air	Water		
VT6-TT-0	300	9	0.765	3/8" FNPT

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