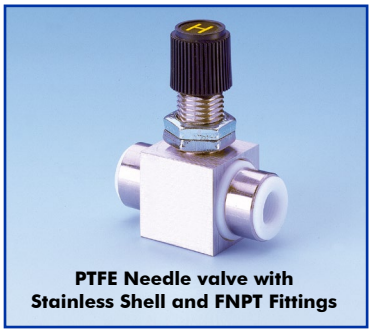
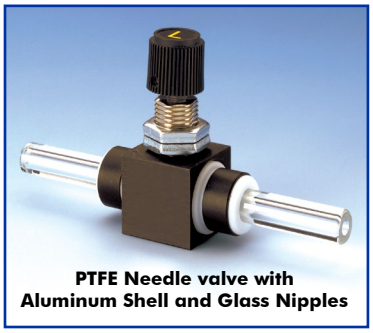


PTFE Needle valve with Stainless Shell and FNPT Fittings



PTFE Needle valve with Aluminum Shell and Glass Nipples

TABLE 69, CVT PTFE NEEDLE VALVES

MODEL NUMBER	MAXIMUM FLOW [mL/min]		CV	NON WETTED MATERIALS		CONNECTIONS
	AIR	WATER		SHELL	BUSHING	
6ATV0101	2400	130	0.011	Aluminum	Brass	1/8" Female
6ATV0102	55000	2800	0.250	Aluminum	Brass	1/8" Female
6ATV0103	2400	130	0.011	Aluminum	Brass	1/4" Compression Fittings
6ATV0104	55000	2800	0.250	Aluminum	Brass	1/4" Compression Fittings
6ATV0105	2400	130	0.011	Aluminum	Brass	Glass Nipples
6ATV0106	55000	2800	0.250	Aluminum	Brass	Glass Nipples
6ATV2101	2400	130	0.011	Stainless	Stainless	1/8" Female
6ATV2102	55000	2800	0.250	Stainless	Stainless	1/8" Female
6ATV2103	2400	130	0.011	Stainless	Stainless	1/4" Compression Fittings
6ATV2104	55000	2800	0.250	Stainless	Stainless	1/4" Compression Fittings
6ATV2105	2400	130	0.011	Stainless	Stainless	Glass Nipples
6ATV2106	55000	2800	0.250	Stainless	Stainless	Glass Nipples

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

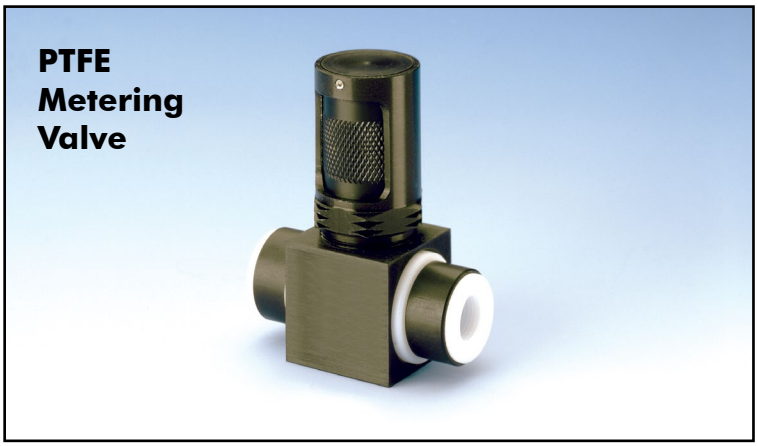


TABLE 69-1, MVT PTFE NEEDLE VALVES

MODEL NUMBER	MAXIMUM FLOW [mL/min]		CV	NON WETTED MATERIALS		CONNECTIONS
	AIR	WATER [mL/min]		SHELL	HANDLE	
6ATV3101	600	36	0.003	Aluminum	Aluminum	1/8" FNPT
6ATV3102	3000	180	0.015	Aluminum	Aluminum	1/8" FNPT
6ATV3103	30000	1800	0.150	Aluminum	Aluminum	1/8" FNPT
6ATV3104	600	36	0.003	Aluminum	Aluminum	1/4" Compression Fittings
6ATV3105	3000	180	0.015	Aluminum	Aluminum	1/4" Compression Fittings
6ATV3106	30000	1800	0.150	Aluminum	Aluminum	1/4" Compression Fittings
6ATV3107	600	36	0.003	Aluminum	Aluminum	Glass Nipples
6ATV3108	3000	180	0.015	Aluminum	Aluminum	Glass Nipples
6ATV3109	30000	1800	0.150	Aluminum	Aluminum	Glass Nipples

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

CVT PTFE NEEDLE VALVES

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 CTFE 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 CTFE 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.

SPECIFICATIONS FOR CVT VALVE:

MAXIMUM PRESSURE:	75 psig (517 kPa).
MAXIMUM TEMPERATURE:	150 °F (65 °C).
ORIFICE SIZE:	0.125" diameter (3.175 mm).
FLUID CONTACTING:	Body and O-Ring-PTFE. Valve Spindle-PCTFE.
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.*

DESIGN FEATURES

- ✓ Fluids contact PTFE only.
- ✓ Structurally Rigid Metal Shell.
- ✓ One PTFE O-Ring.
- ✓ Brass or 316 stainless steel high resolution.
- ✓ Simplicity - Only Seven Components.

MVT™ METERING VALVES

Are constructed of PTFE and PCTFE 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.

SPECIFICATIONS FOR MVT VALVES:

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-PCTFE.
NON-FLUID CONTACTING COMPONENTS:	Shell + Handle - Aluminum (anodized).

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