



## Specifications

Model		LVP5□	LVP6□
Fluid pressure		0 to 0.3 MPa	0 to 0.4 MPa
Withstand pressure		1 MPa	
Pilot pressure		0.3 to 0.5 MPa	
Back pressure	Valve type: N.C. type	0.2 MPa or less	
	Valve type: N.O. type	0.2 MPa or less	
	Valve type: Double acting type	0.3 MPa or less	
Valve leakage		0 cm <sup>3</sup> /min (with water pressure 0.3 MPa)	0 cm <sup>3</sup> /min (with water pressure 0.4 MPa)
Fluid		Deionized water, chemicals (Fluid wetted part materials, fluid that does not corrode rigid vinyl chloride tube)	
Orifice diameter		ø16 mm	ø22 mm
Flow characteristics $Av \times 10^{-6} \text{m}^2 \text{ (Cv)}$		120 (5)	228 (9.5)
Fluid temperature		0 to 60°C (No freezing)	
Ambient temperature		0 to 60°C	
Fluid wetted part material	Diaphragm	PTFE	
	Body	CPVC	
Port size		PVC unfixed union (Nominal dia.: 16A)	PVC unfixed union (Nominal dia.: 20A or 25A)
Applicable tube		Rigid vinyl chloride tube <sup>Note 1)</sup> O.D. ø22 mm (Nominal dia.: 16A)	Rigid vinyl chloride tube <sup>Note 1)</sup> O.D. ø26 mm (Nominal dia.: 20A) O.D. ø32 mm (Nominal dia.: 25A)
Pilot port size		ø6 mm One-touch fitting <sup>Note 2)</sup> Rc1/8, M5 x 0.8, NPT1/8	

Note 1) Rigid vinyl chloride tube complies with JIS K6742

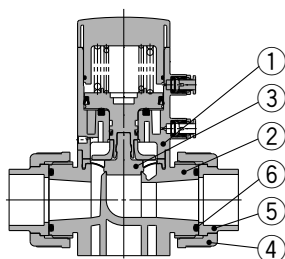
Note 2) SMC polyolefin tubing (Series TRH) and soft polyolefin tubing (Series TPH) are recommended for piping since the same mechanism and construction as SMC Series KP are used for ø6 mm One-touch fittings.

Complement: Polyurethane tubing (Series TU), nylon tubing (Series T), and soft nylon tubing (Series TS) can be used, but the degree of clean performance will be reduced.

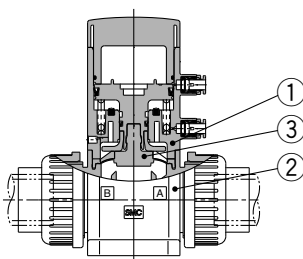
## Construction

### Standard type

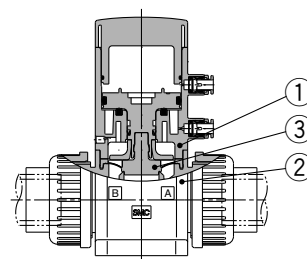
N.C. type



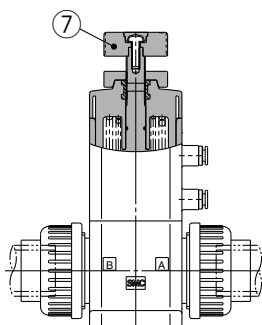
N.O. type



Double acting type



With flow rate adjustment

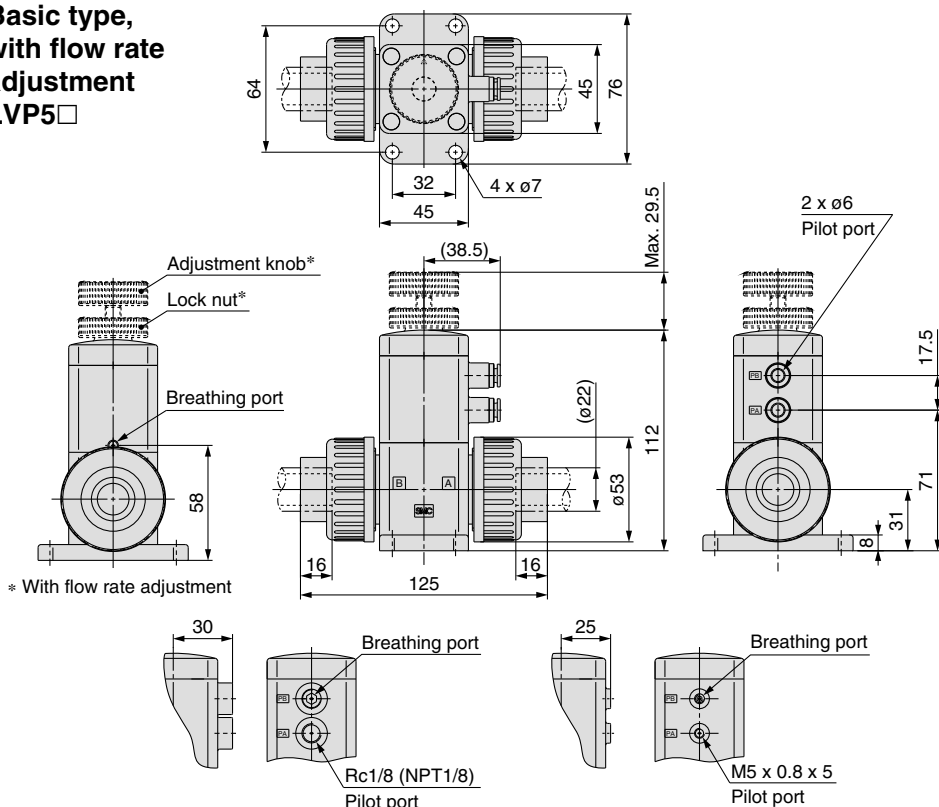


### Component Parts

No.	Description	Material	Option
1	Actuator section	PPS	—
2	Body	CPVC	—
3	Diaphragm	PTFE	—
4	Union nut	U-PVC	—
5	Union end	U-PVC	—
6	O-ring	FKM	EPDM
7	Flow rate adjuster section	PPS	—

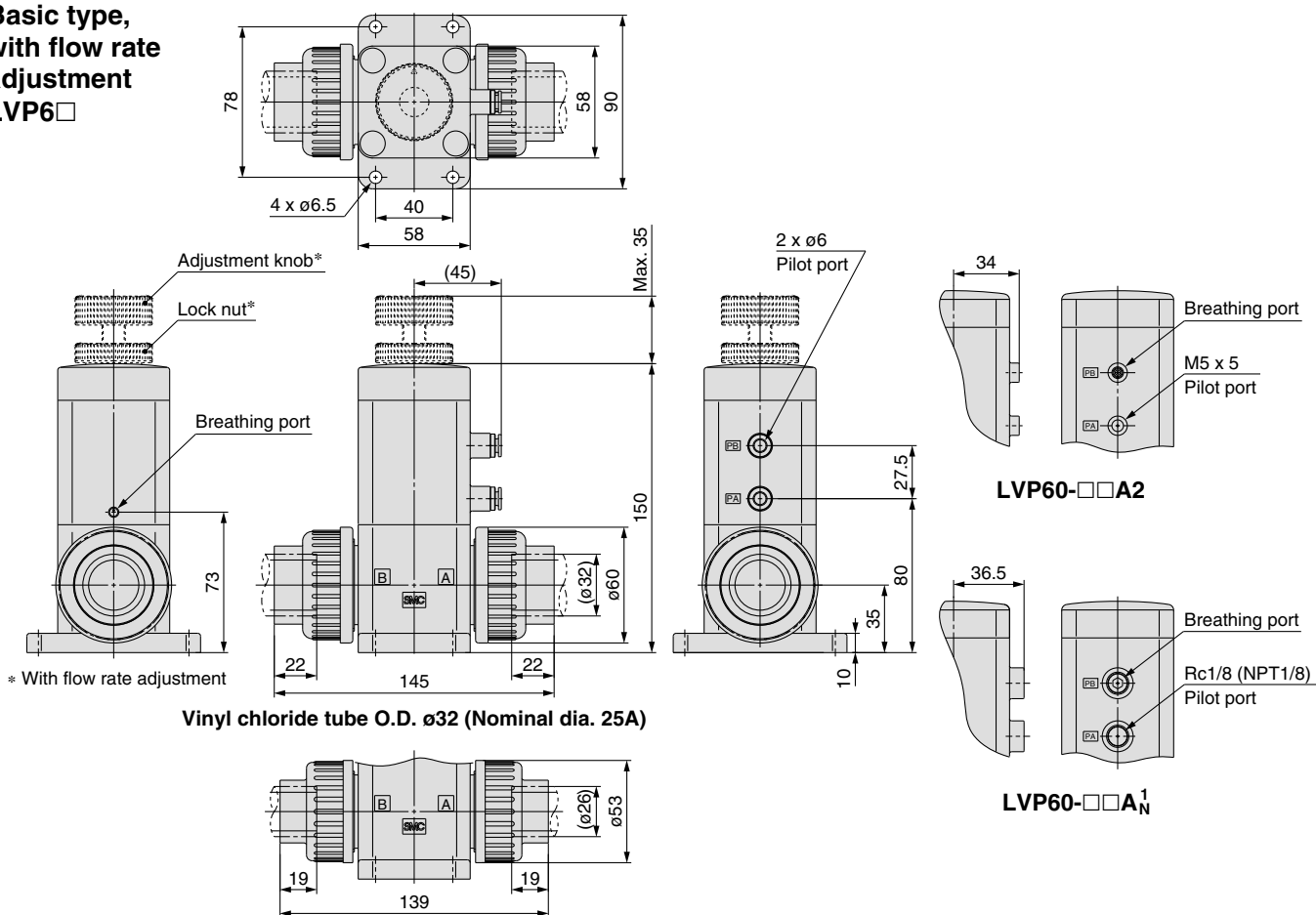
## Dimensions

**Basic type,  
with flow rate  
adjustment  
LVP5□**



**LVP50-16A2**

**Basic type,  
with flow rate  
adjustment  
LVP6□**



**LVP60-□□A2**

**Vinyl chloride tube O.D. ø26 (Nominal dia. 20A)**



# Applicable Fluids

## Material and Fluid Compatibility Check List for Vinyl Chloride Air Operated Valves

Chemical		Compatibility
Ammonium hydroxide	Temperature 40°C or less	○ Material option "N" Note 2)
Isobutyl alcohol	Temperature 40°C or less	○ Note 1) Note 2)
Isopropyl alcohol	Temperature 40°C or less	○ Note 1) Note 2)
Hydrochloric acid	Concentration 30% or less	○ Note 2)
Hydrogen peroxide	Concentration 5% or less, Temperature 50°C or less	○
Nitric acid (except fuming nitric acid)	Concentration 10% or less, Temperature 40°C or less	○ Note 2)
Deionized water		○
Sodium hydroxide (Caustic soda)	Concentration 50% or less	○
Nitrogen gas		○
Super pure water		○
Sulfuric acid (except fuming sulfuric acid)	Concentration 30% or less	○ Note 2)
Phosphoric acid	Concentration 50% or less	○



The material and fluid compatibility check list provides reference values as a guide only.  
Note 1) Since static electricity may be generated, implement suitable countermeasures.  
Note 2) Use caution as permeation may occur. The permeated fluid may effect the parts of other materials.

### Table symbols

- : Can be used
- : Can be used in certain conditions

- Compatibility is indicated for fluid temperatures of 60°C or less.
- The material and fluid compatibility check list provides reference values as a guide only, therefore we do not guarantee the application to our product.
- The data above is based on the information presented by the material manufacturers.
- SMC is not responsible for its accuracy and any damage happened because of this data.