



# Simplified Panel-mount Miniature Needle Valve

## MODEL 2400 SERIES

This is a miniature needle valve at an affordable price with simplified construction that allows easy control of operation for fine regulation of gases and liquids. Its simplified structure is comprised of the components that are the minimum requirement, avoiding overspecification.

### Features

- **Panel-mount miniature type**  
Compact, space-saving, and ideal for mounting on the instrumentation board
- **Compatible with both gases and liquids**
- **All precision-machined components are perfectly cleaned before assembly to ensure cleanliness of the product for the customer's use with peace of mind.**

### Applications

- For flowmeters and pressure gauges
- For pollution-related instruments and analyzers
- For gas/liquid flow controls at laboratory
- For integration into instrumentation boards
- For sampling systems

### Standard Specifications

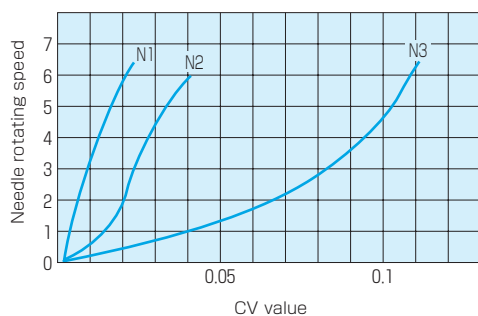
Number of turns of regulating screw	Approx. 12 turns (Effective number of turns: 5-12)
Needle	3 types
Maximum operating pressure	0.6 MPa
Fluids	Gas and liquid
Materials of parts in contact with fluids	(B) Brass, NBR, SUS303, POM (S) SUS304, FKM, SUS303, fluorocarbon resin
Connection end	Rc 1/4
Rated flow ranges	See the table below.

### Table of Rated Flow Ranges (Reference)

Due to operating conditions and instrumental errors, there may be differences between the values indicated in this table and those that are actually used by the customer. Please use these values for reference only.

Needle #	Max. CV value	Supply pressure (MPa)(Air at 20°)						Supply pressure (MPa)(Water at 20°)		
		0.01	0.05	0.1	0.2	0.3	0.05	0.1	0.15	
N1	0.018	1.6	5.0	7.5	12.0	15.0	0.16	0.24	0.31	
N2	0.03	3.8	9.0	13.0	21.0	27.0	0.26	0.42	0.86	
N3	0.13	12.0	31.0	55.0	90	120	1.2	1.8	2.5	

### CV Values

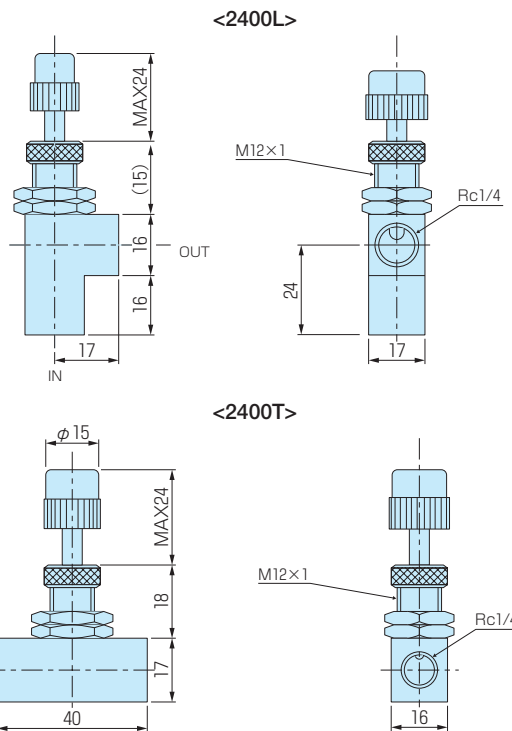


### Notes:

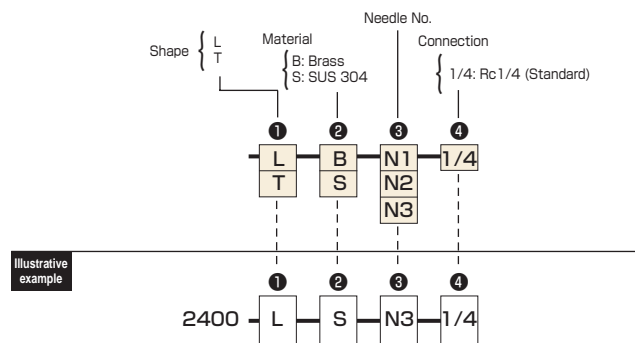
- Refer to Model 2400D on page 93 for large capacity valve.
- If you are not sure which needle you should use for your equipment, please indicate the fluid, pressure and flow rate of your equipment on the Order Form. We can suggest you the needle number most suitable for your equipment.
- Connection openings not included in the standard specifications.



### Dimensions



### Ordering



\* Refer to "Ordering" and "Illustrative example" when placing an order or requesting a quotation. Fill in the blanks in the "Order/Quotation Request Card" at the end of the catalog, and send the card by fax.