

# Large Capacity Precision Needle Valve (for Stable Control)

## MODEL 2412D SERIES

This large capacity needle valve exhibits high performance in precision control of comparatively large flow. The needle valve is a larger version of our precision needle valve (Model 2412) that has time-tested reliability, and is suitable for stable control in a comparatively large flow range of 50–300 l/min (0.1 MPa).

### Features

- The rotational motion of the flow control screw is changed into a linear motion to ensure smooth flow control without causing a screw gap.
- The completely clean inside of the valve permits clean flow control.
- Special grease is used for the section not in contact with liquid to ensure outstanding durability.

### Standard Specifications

Number of turns of regulating screw	Approx. 8-12 turns
Needle	3 types
Maximum operating pressure	1 MPa
Materials of parts in contact with fluids	(A) Brass, Al, NBR, POM (SS) SUS316, FKM, fluorocarbon resin
Connection end	Rc 3/8, Rc 1/4
Fluid	Gas and liquid
Rated flow ranges	See the table below.

### Flow rating (Reference table)

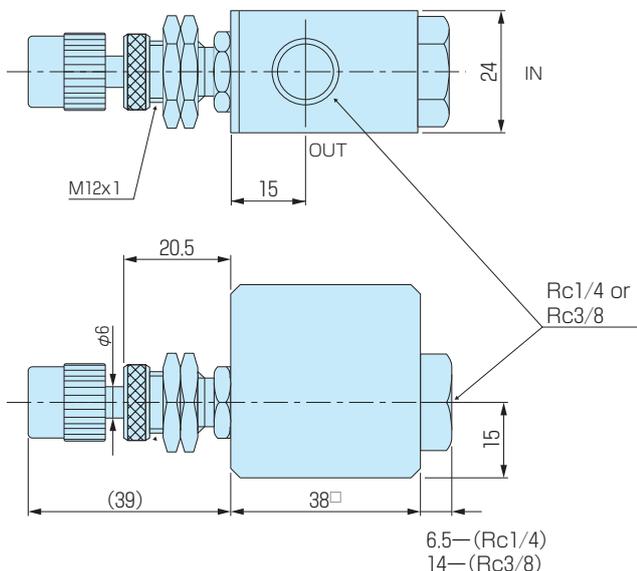
The actual flow may be different from the values shown in the table depending on the operating conditions and instrument errors. Please use these values for reference only.

Outlet side open to air at 20°C

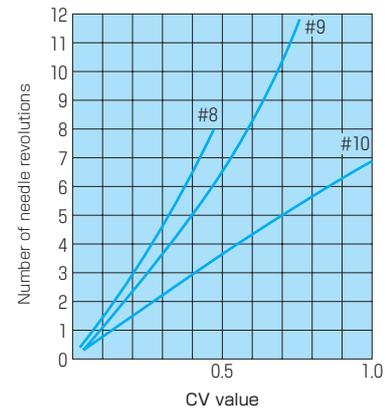
Needle No.	Max. CV value	Supply pressure (MPa)				
		0.01	0.05	0.1	0.2	0.3
#8	0.48	50	135	200	280	370
#9	0.83	65	235	320	480	—
#10	1.06	80	300	440	—	—

Unit: L/MIN

### Dimensions



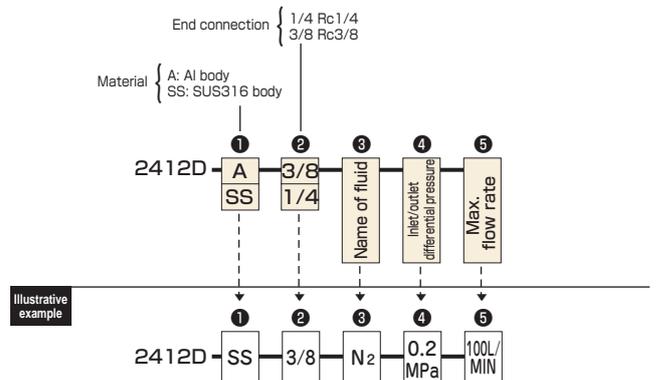
### CV value



### Purchasing

- Refer to Model 2412 on page 86 for control of very small flow.
- If you find it difficult to select a needle number, advise us of the name of the fluid, pressure, and flow, and we will select an appropriate valve.

### 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.