



Bellows Needle Valve (for rigid control of leaks)

MODEL 2450 SERIES

This bellows seal type needle valve has been specifically developed so that it can satisfy the requirements for such areas in which leak is a concern of vital importance. Model 2450 Bellows Needle Valve has a construction to drastically prevent fluid leaks. In addition, it is outstanding in heat resistance and corrosion resistance, so the customer can use it with peace of mind not only in such adverse conditions where high vacuum, high pressure, high temperature or extremely low temperature is present but also for corrosive, toxic or costly fluids.

Features

- **Stringent leak test (2×10^{-9} Pam³/sec)**
100% leak test is conducted before shipping, using a helium leak detector.
- **Use of a precision needle**
The incorporated non-rotary type needle provides precise, smooth control of minute flows.
- **Compatible with both gases and liquids**
- **Superior temperature characteristic**
Flows are scarcely affected by ambient temperature fluctuations, remaining within an insignificant range of flow variations. This superior temperature characteristic is applicable to gases only, and not to liquids, because the viscosity of a liquid may greatly vary depending upon the temperature conditions.

Applications

- For vacuum systems
- For semiconductor manufacturing lines
- For production lines where toxic or corrosive gases are present

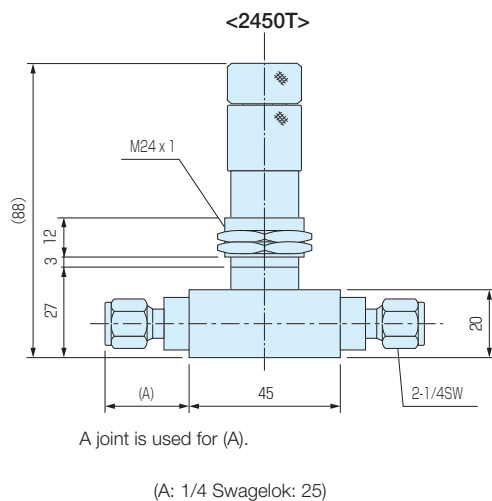
Standard Specifications

Rated flow ranges	See Table of Rated Flow Ranges on page 105.
Regulating screw rotating speed	Approx. 13-16 turns
Max. operating pressure	1MPa
Upper limit of working temperature	120°C
Fluids	Gases and liquids
Materials of parts exposed to fluids	SUS 316, Viton (joint), fluorocarbon resin
Connection end	1/4 swagelok (for joint) * Optional: 1/8SW

Optional Items

- **Special types of joints** (Please contact us for consultation.)

Dimensions



Layout Example with Model 2450

