

Flowmeter with Precision Needle Valve (for Accurate Flow Control)

# MODEL RK1250 SERIES

The Model RK1250 Series Flowmeter is a completely re-named model of existing RK1200, designed as a flowmeter that can be integrated into the customer's equipment. A combination of a grade high precision float type flowmeter with a needle valve capable of very accurate flow control provides a flowmeter ideal for measurement and control of trace flows.



B

Flow Meter

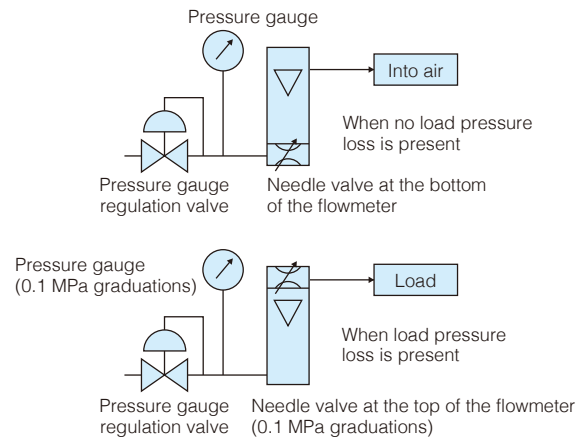
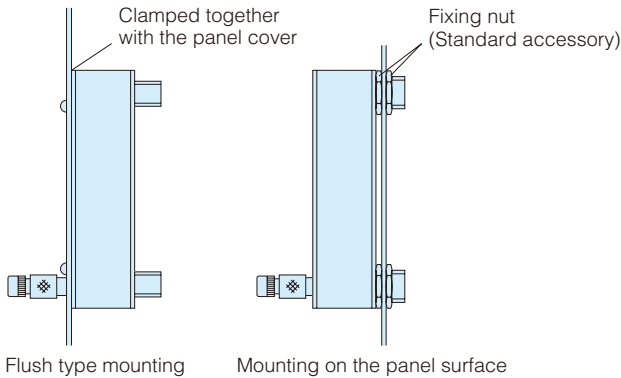
MODEL RK1250 SERIES

- Capable of controlling ultra-minute flows**  
Can respond to a wide range of flows from ultra-minute flows of 0.5-3 ML/MIN to flows of 3-30 L/min.
- The incorporated precision needle valve allows a delicate control of flows.**  
The effective revolving speed of the needle valve can be maximized by specifying a maximum flow and normal supply pressure.
- Wide variations**  
Four total lengths of the flowmeter are available: 126, 156, 206, and 256 mm, for your selection according to your needs.
- Two types of valve arrangement**  
The needle valve can be laid out either at the top or at the bottom of the meter. Choose the type that best suits your needs.
- Measurement and control of water flows also possible**  
Measurement and control of water flows not exceeding 1 L/min are also possible.

**Applications**

- For integration into your equipment panel
- For gas devices to be used on the semiconductor manufacturing site
- For biotechnology industries
- For vacuum line control

**Example of Use with Model RK1250**



**Dimensions**

**Dimensions of parts per length designation code**

Part	Code	12	15	20	25
A		60	90	140	190
B		86	116	166	216
C		126	156	206	256
D		100	130	180	230

**<Cut Dimensions>**

### Standard Specifications

	Gases	Liquids
<b>Fluids</b>	Air, N <sub>2</sub> , O <sub>2</sub> , H <sub>2</sub> , He, Ar, and CO <sub>2</sub> (Calibration by actual gas) For other gases, consultation is necessary regarding whether conversion conditions or calibration by actual gas is to be used. * Optional: Scale indicating two types of fluids	Standard fluid: Water For other liquids, consultation is necessary regarding whether conversion conditions or calibration by actual liquid is to be used.
<b>Flow range</b>	0.5-5 mL/min to 3-30 L/min (See the Capacity Table below.) * Optional: 0.5-3 mL/min	0.5-5 mL/min to 0.1-1 L/min (See the Capacity Table below.) * Optional: 0.5-3 mL/min
<b>Accuracy</b>	FS±2% (Measurement point) * Optional: FS±1% (Measurement point)	FS±2% (Measurement point)
<b>Proof pressure</b>	1.0 MPa(G) for 100 mL/min or less 0.7 MPa(G) for 5 L/min or less 0.5 MPa(G) for 10 L/min or more	1.0 MPa(G) for 5 mL/min or less 0.7 MPa(G) for 150 mL/min or less 0.5 MPa(G) for 200 mL/min or more
<b>Available scale</b>	10:1 * Optional: 20:1	

	SS	BS
<b>Materials</b>		
<b>Body block</b>	SUS316	Brass
<b>Tapered tube</b>	Hard glass	
<b>Packing</b>	FKM	NBR
<b>Float</b>	Hard glass, SUS316	
<b>Protective cover</b>	Acrylic resin	
<b>Temperature resistance</b>	MAX60°C	
<b>Connection end</b>	Rc1/4	

### Capacity Table

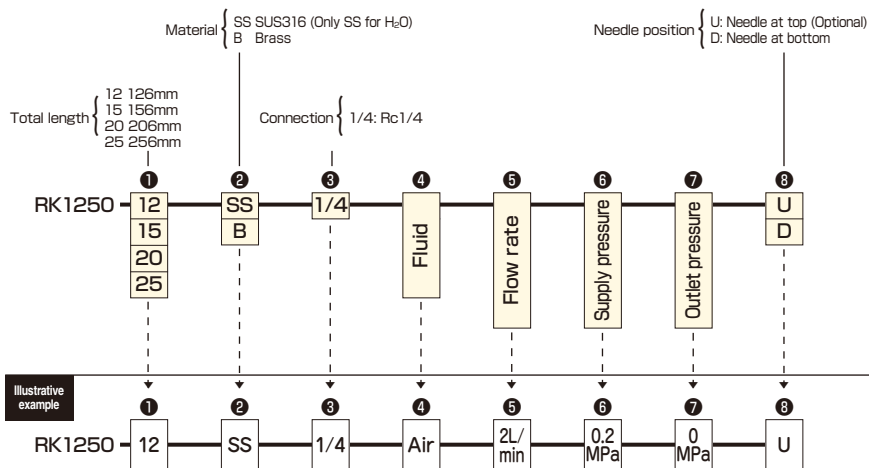
#### Air (Flow rate at atmospheric pressure)

Total length	Max. flow rate																		
	5 mL/min	10 mL/min	20 mL/min	30 mL/min	50 mL/min	100 mL/min	150 mL/min	200 mL/min	300 mL/min	500 mL/min	1 L/min	2 L/min	3 L/min	5 L/min	10 L/min	15 L/min	20 L/min	30 L/min	
126mm	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
156mm	—	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
206mm	—	—	—	—	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
256mm	—	—	—	—	—	○	○	○	○	○	○	○	○	○	○	○	○	○	○

#### H<sub>2</sub>O at 20°C

Total length	Max. flow rate										
	5 mL/min	10 mL/min	20 mL/min	30 mL/min	50 mL/min	100 mL/min	150 mL/min	200 mL/min	300 mL/min	500 mL/min	1 L/min
126mm	○	○	○	○	○	○	○	○	○	○	○
156mm	○	○	○	○	○	○	○	○	○	○	○
206mm	○	○	○	○	○	○	○	○	○	○	○
256mm	○	○	○	○	○	○	○	○	○	○	○

### Ordering



### Options

- F.S. ±1% (Measurement point)
- 0.5~3mL/min Air (atm)  
Note) length 126mm only.
- FFKM O-ring  
Note) No needle valve shut off O-ring.  
Note) No filter for under 1L/min full scale.
- Dual scale
- 20:1 scale