



Flowmeter with Bellows Needle Valve (for Low-leak Flow Measurement and Control)

MODEL RK1500 SERIES

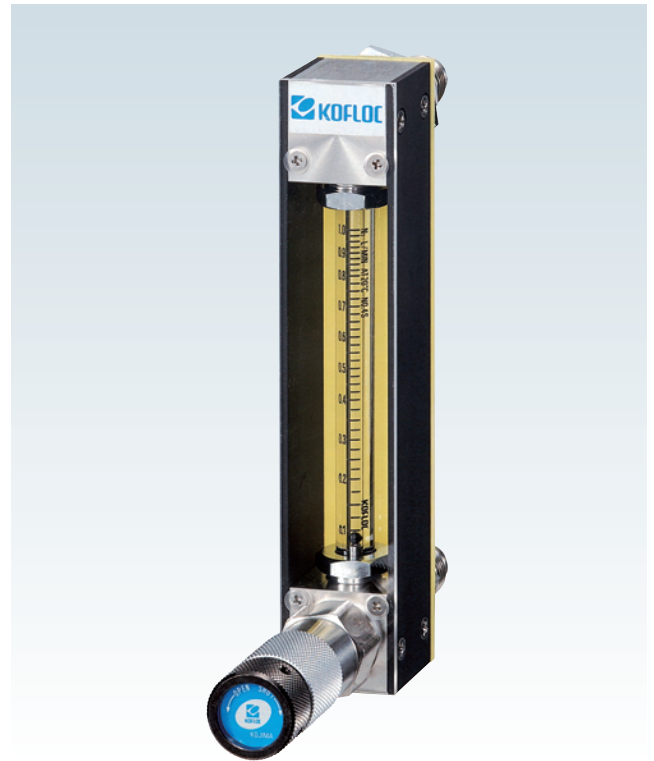
The Model RK1500 Series Flowmeter is equipped with a bellows seal type needle valve so that it can withstand high vacuum, high pressure, high temperature and toxic gases.

Features

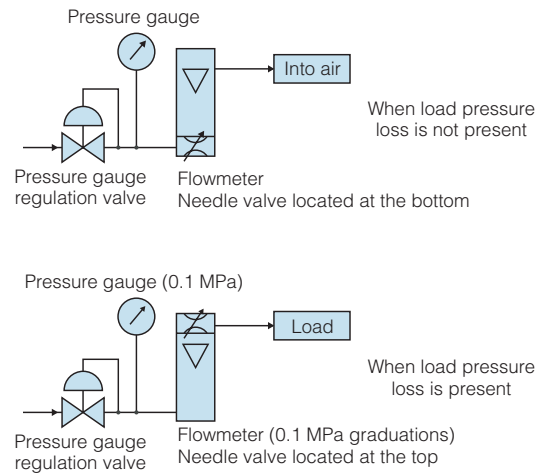
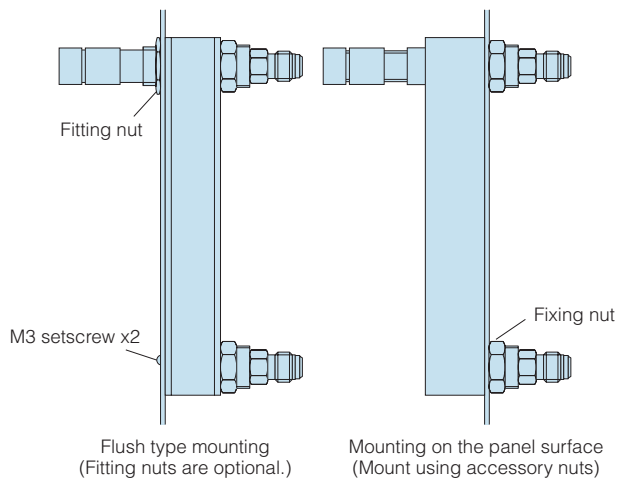
- High reliability against leak is ensured because 100% leak test is conducted before shipping, using a helium leak detector.
- Bellows seal type needle valve perfectly eliminates leak from the valve stem.
- Superior corrosion resistance is ensured by using SUS 316, Viton(tm), fluorocarbon resin and Pyrex glass only for wetted parts and those which are exposed to other fluids.
- Enhanced stability and repeatability are ensured using a flowmeter consisting of a precision-formed try-flat, rib-guided glass tube and a ultra-precision ball float in combination with a sophisticated needle valve.

Applications

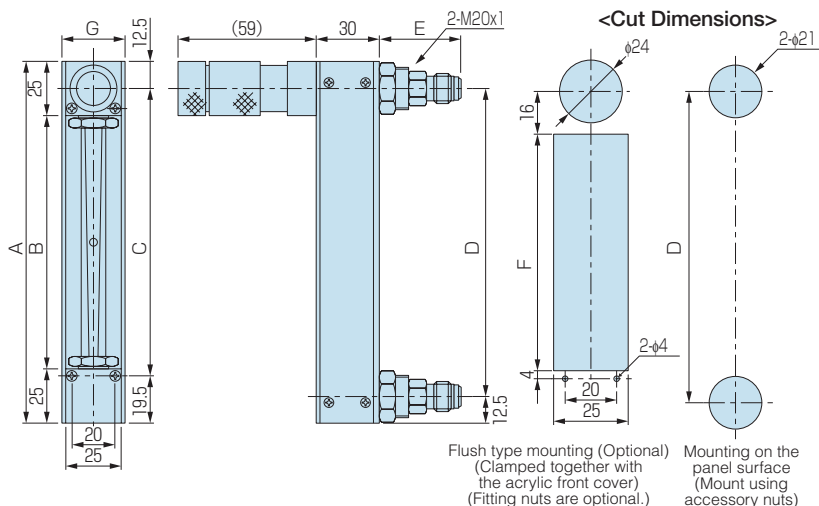
- For vacuum systems
- For semiconductor manufacturing lines



Example of use



Dimensions



Dimensions of parts per length designation code

Part Code	A	B	C	D	E			F	G
					1/4SW	1/8SW	1/4VCR		
12	120	88	70	95	39	37	37	68	29
15	150	118	100	125	39	37	37	98	29
20	200	168	150	175	39	37	37	148	31
25	250	218	200	225	39	37	37	198	31

Standard Specifications

	Gases	Liquids
Fluids	Air, N ₂ , O ₂ , H ₂ , He, Ar, and CO ₂ (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.
Flow range	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
Accuracy	FS±2% (Measurement point) * Optional: FS±1% (Measurement point)	FS±2% (Measurement point)
Proof pressure	1.0 MPa for 100 ML/MIN or less 0.7 MPa for 5 L/MIN or less 0.5 MPa for 10 L/MIN or more	1.0 MPa for 5 ML/MIN or less 0.7 MPa for 150 ML/MIN or less 0.5 MPa for 200 ML/MIN or more
Available scale	10:1 * Optional: 20:1	
Materials	SS	
Body block	SUS316	
Tapered tube	Pyrex [®] , glass	
Packing	Viton [®] , fluorocarbon resin	
Float	Pyrex, SUS 316, glass	
Protective cover	Acrylic resin	
Temperature resistance	MAX60°C	

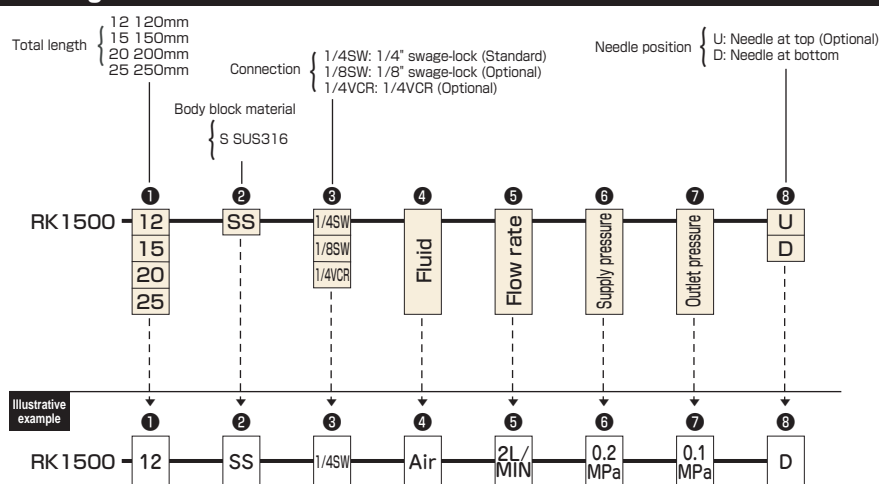
Capacity Table

Max. flow rate	Air																	
	5	10	20	30	50	100	150	200	300	500	1	2	3	5	10	15	20	30
Total length	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	L/MIN	L/MIN	L/MIN	L/MIN	L/MIN	L/MIN	L/MIN	L/MIN
120mm	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
150mm	—	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
200mm	—	—	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
250mm	—	—	—	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

H₂O

Max. flow rate	H ₂ O										
	5	10	20	30	50	100	150	200	300	500	1
Total length	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	ML/MIN	L/MIN
120mm	○	○	○	○	○	○	○	○	○	○	○
150mm	○	○	○	○	○	○	○	○	○	○	○
200mm	○	○	○	○	○	○	○	○	○	○	○
250mm	○	○	○	○	○	○	○	○	○	○	○

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.