



# Operating Instructions

---

863 Valley View Road, Eighty Four, PA 15330  
724-941-9701 • skcinc.com

## Field Rotameters

This rotameter is packed to protect against damage during shipment. If damage occurs, notify the carrier immediately. Also, check that you have received the correct model and flow range required for your application.

### Calibration

SKC rotameters are secondary standards and should be calibrated by the user with a primary standard calibrator at regular intervals. Since rotameters are affected by temperature and atmospheric pressure, rotameter calibration should be performed under the conditions of use or a mathematical correction should be used.

### Operation

Operate the rotameter in a vertical position to assure accuracy. Use it in a manner that minimizes vibration and flow pulsation; both conditions may affect the rotameter.

Flow rate is indicated by the point on the printed scale at which the center of the ball float comes to rest. The field rotameter inlet must always be at atmospheric pressure (i.e., exposed to the atmosphere). The rotameter is the last device connected to the sampling train. Connect the inlet of the sampling pump to the outlet of the sampling medium. Connect the inlet of the sampling medium to the outlet of the rotameter.

### **CAUTION**

**This rotameter is designed for use with non-hazardous gases at pressures up to 100 psig and temperatures up to 65 C (150 F).**

**Do not use hazardous gases or liquids and do not exceed temperature or pressure limits. Use with hazardous fluids or beyond pressure and temperature limits may cause failure, which could result in personal injury.**

## Maintenance

Occasionally clean the rotameter if dirt appears in it or if float movement is restricted. To clean:

1. Remove the top plug, float stop, and ball float.
2. Wash the tapered hole, ball float, float stop, and top plug with a mild liquid detergent and a soft brush. Rinse all parts with clean water and dry thoroughly. Avoid using solvents.
3. Reinstall the ball float, float stop, and top plug. Use a small amount of halocarbon grease or any other compatible O-ring lubricant to ease installation of the top plug and prolong O-ring life.

## Specifications

Meas. Range (L/min)	Scale (inch)	Accuracy* ±	Subdivisions (L/min)	Cat. No.
0.05-0.5	2	5%	0.02	320-2A05
0.1-1	4	3%	20 <sup>◊</sup>	320-4A1
0.4-5	4	3%	0.1	320-4A5
2-20	4	3%	0.5	320-4A20L
4-50	4	3%	1.0	320-440
3-30	4	3%	1.0	320-530
3-30	4	3%	1.0	320-100

\* Full Scale

◊ Product scale is marked in ccm (cc/min), which is equivalent to ml/min.

<b>Float:</b>	Black glass or stainless steel ball
<b>Body:</b>	Clear acrylic
<b>Seals:</b>	Buna N O-ring
<b>Pressure:</b>	100 psig maximum
<b>Temperature:</b>	150 F (65 C) maximum
<b>Fittings:</b>	Brass with hose connector; Tygon® tubing on all models except Cat. No. 320-530, which has black latex rubber tubing; and, on some models, Luer taper adapter

## SKC Limited Warranty and Return Policy

SKC products are subject to the SKC Limited Warranty and Return Policy, which provides SKC's sole liability and the buyer's exclusive remedy. To view the complete SKC Limited Warranty and Return Policy, go to [skcinc.com/warranty](http://skcinc.com/warranty).