

# Field Rotameters

Lightweight, Rugged, Portable

- Easy-to-read scales
- Lightweight, rugged, and portable
- Low cost
- Provisions for panel mounting
- Multiple flow ranges



**Model 320-4A20L**

## Description

These small and lightweight single-ball rotameters represent a new and durable design of portable air flowmeters. SKC Field Rotameters are crafted of see-through acrylic with tapered hose connectors attached to solid brass fittings. A removable section of Tygon® tubing with a Luer taper adapter is included. A float ball is clearly visible behind decaled graduations on the rectangular face. The easy-to-read scales are ideal for performing routine verifications of airflow easily in the field with reproducible results.

## Applications

- Low flow and high flow air samplers
- Gas analyzers
- Chromatography systems



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## Rotameter Calibration

SKC rotameters are secondary standards and should be calibrated by the user with a primary standard calibrator at regular intervals. When using a rotameter at a different temperature and pressure than where it was calibrated, calibrate the new flow rate using the following formula:

$$Q_{eg} = Q_m \times \sqrt{\frac{P_1}{P_2} \times \frac{T_2}{T_1}}$$

$Q_{eg}$  = Equivalent for atmospheric conditions at calibration  
(L/min or ml/min)

$Q_m$  = Measured flow (L/min or ml/min)

$P_1, T_1$  = Pressure and temperature ( $^{\circ}\text{K}$  ( $^{\circ}\text{C} + 273$ )) at sampling location

$P_2, T_2$  = Pressure and temperature ( $^{\circ}\text{K}$  ( $^{\circ}\text{C} + 273$ )) at location of calibration

## Performance Profile

<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, and Luer taper adapter

## Ordering Information

Measuring Range (L/min)	Scale (inches)	Full Scale Accuracy ±	Cat. No.
0.05 to 0.5	2	5%	320-2A05
0.1 to 1.0	4	3%	320-4A1
0.4 to 5.0	4	3%	320-4A5
3 to 30	4	3%	320-100†
2 to 20	4	3%	320-4A20L
4 to 50	4	3%	320-440
3 to 30	4	3%	320-530**

\*\* Fittings adapted for use with HV30 Sample Pump

† Fittings adapted for use with QuickTake Sample Pumps

## 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 <http://www.skcinco.com/warranty.asp>.



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