

- Designed For Vapor Extraction, Air Sparge and other industrial air flow applications.
- Scaled for standard cubic feet per minute (SCFM) and can be used on pressure and high vacuum applications.
- Meter sizes designed to provide an ample working range and are less prone to failure through impact exposure.
- Larger than comparable meters on the market which provides a fine scale control for a higher degree of accuracy.

Specifications:

- Materials:
 - ◇ Body: Acrylic with PVC (gray) or Polypropylene (white) replaceable end tails
 - ◇ 304 SS Float and travel rod
 - ◇ Viton® O-rings and seals
- Maximum 85 psig pressure rating
- Maximum Temperature rating of 125°F
- Accuracy: +/- 4% of full scale flow

Options:

PRM can provide meters scaled for custom applications. Typical lead time is 3-5 weeks from time of order. Custom meters require a minimum quantity commitment of 50 meters.



SCFM scale based on 1 atm air @ 68° F
Rotameter readings must be adjusted for pressure and temperature. Discover more about air flow readings:
<https://www.prmfiltration.com/scfm-acfm-calculator>



FMDFG03: 0.3-3 scfm
 1/2" FNPT
 8" tall
 1.3" OD



FMDFG15: 1-8 scfm
 1/2" FNPT
 8" tall
 1.3" OD



FMDFG25: 1-15 scfm
 1" FNPT
 10.5" tall
 2" OD



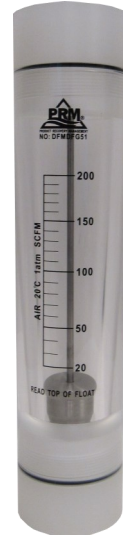
FMDFG40: 2-25 scfm
 1.5" MNPT
 12" tall
 2" OD



FMDFG4050:
5-50 scfm
 1.5" MNPT
 12" tall
 2" OD



FMDFG50: 10-100 scfm
 2" FNPT
 13.5" tall
 3" OD



FMDFG51: 20-200 scfm
 2" FNPT
 13.5" tall
 3" OD

INSTALLATION & USE:

PRM rotameters are available in a broad choice of flow ranges with direct reading scales for air, gas or water. Installation, operation and maintenance are very simple and only a few common sense precautions must be observed to assure long, trouble-free service.

Before proceeding with the installation of your PRM Rotameter, check to be sure you have the model and flow range you require. PRM Flowmeters are designed for use at pressures up to 85 psi and temperatures up to 125°F. **DO NOT EXCEED THESE LIMITS!**

The installation should not be exposed to strong chlorine atmospheres or solvents such as benzene, acetone, carbon tetrachloride, etc. The mounting panel should be free of excessive vibration since it may prevent the unit from operating properly.

Inlet Piping Run: It is good practice to approach the flowmeter inlet with as few elbows and restrictions as possible. In every case the inlet piping should be at least as large as the connection to the flowmeter. **Discharge Piping:** As on the inlet, discharge piping should be at least as large as the flowmeter connection.

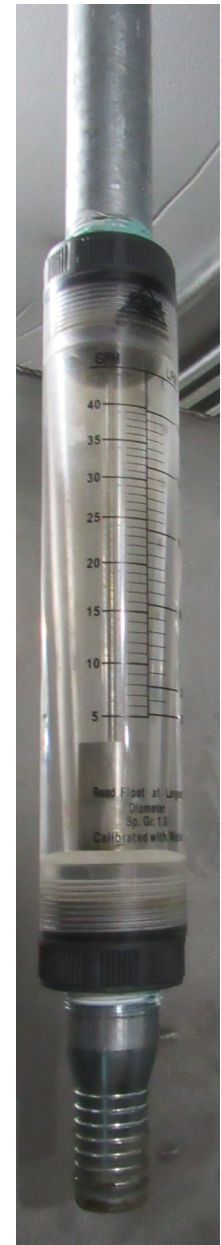
POSITION AND MOUNTING All PRM Rotameters must be mounted in a vertical position with the inlet connection at the bottom and outlet at the top .

It is important to understand that a rotameter is affected by variations in temperature and air pressure. This rotameter has been calibrated at the Standard operating conditions of 14.7 psia (0 psi) pressure and 70° F. When using the rotameter at a different temperature and pressure than where it was calibrated, the following formula will provide a correction factor:

$$Q_2 = Q_1 \times \sqrt{\frac{P_1 \times T_2}{P_2 \times T_1}}$$

Where:

- Q1 = Actual or Observed Flowmeter Reading
- Q2 = Standard Flow Corrected for Pressure and Temperature
- P1 = Actual Pressure (14.7 psia + Gauge Pressure)
- P2 = Standard Pressure (14.7 psia, which is 0 psig)
- T1 = Actual Temperature (460 R + Temp °F)
- T2 = Standard Temperature (530 R, which is 70°F)



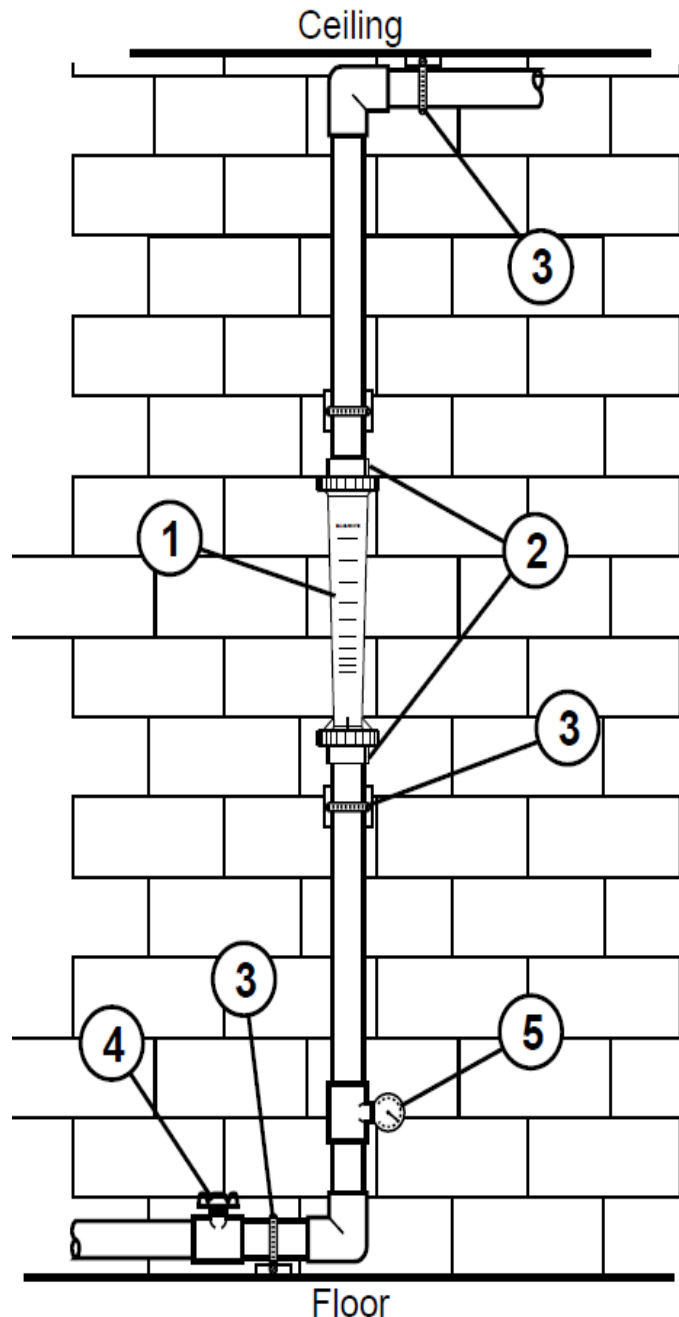
1. Misalignment will damage the meter!
Flowmeter must be installed in an exact vertical plane to ensure accuracy. Be certain of proper plumbing alignments. Misalignment may cause the o-ring seals to leak. The meter body material can be damaged by UV rays. Do not install in direct sunlight.

2. Pipe dope and glue will damage the meter!
Use only Teflon® tape on the threaded adapters. If you are installing your flowmeter to a glued pipe configuration, install the flowmeter after all glued fittings are dried and lines are purged of all fumes. Never hold the meter body with pliers or like tools. Union nuts should be hand tightened only. **DO NOT OVER-TIGHTEN!**

3. Vibration and heavy loads will damage the meter!
Wall, floor and ceiling mounts and supports must be carefully aligned with the meter body and sturdy enough to support the plumbing and prevent vibration. Never allow the flowmeter to support the weight of related piping.

4. Solenoid valves will damage the meter!
Avoid a system that will impose a sudden burst of flow to the meter. Such a burst will cause the float to impact the float stop with destructive force. Solenoid valves, or other quick opening valves cannot be used unless meter is protected against sudden bursts of flow.

5. High pressures and temperatures will damage the meter!
The maximum acceptable temperature and pressure is interdependent. The maximum acceptable working pressure is dependent on the actual fluid temperature. The maximum acceptable fluid temperature is dependent on the actual working pressure.



Maximum 85 psig pressure rating
Maximum Temperature rating of 125°F