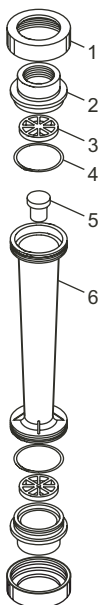


## 6B07 Exploded View and Parts List



Item	Cat alog Number	Description	Amount
1	D-452004N	Union Nut, Nylon	2
2	D-452330N	Adapter 2" FNPT, Polysulfone	2
3	D-452002	Float Stop, Polysulfone	2
4	D-452043N	O-ring, Viton	2
5	Float	2-20 GPM, PTFE 5-50 GPM, PTFE 8-80 GPM, PTFE	1
6	Meter body	Polysulfone	1

### DAKOTA INSTRUMENTS LIMITED WARRANTY

FLOW METERS are warranted to be free of defects in material and workmanship for up to 12 months from the date of factory shipment. Warranty coverage is limited to repair or replacement of the defective flowmeter only. Dakota does not assume responsibility for any other damage that may occur.

This warranty does not cover damage to the flow meter that results from misuse or alterations, nor damage that occurs as a result of: meter misalignment, improper installation, over tightening, use of non-recommended chemicals, use of non-recommended adhesives or pipe dopes, excessive heat or pressure, or allowing the meter to support the weight of related piping. Flow meters are tested and calibrated with water and air only. Although meters may be suitable for other chemicals, Dakota cannot guarantee their suitability.

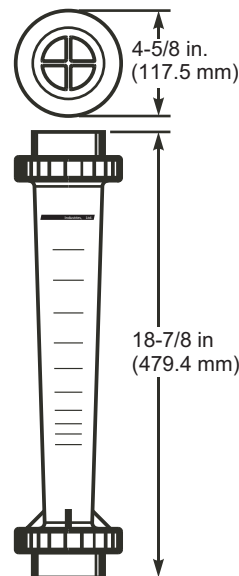
Flow meters are repaired at the factory only. Call or write the factory to receive a Return Authorization Number, carefully pack the flow meter to be returned, including a brief description of the problem. Note the RA number on the outside of the shipping carton.

Website: <http://dakotainstruments.com>  
E-mail: [info@dakotainstruments.com](mailto:info@dakotainstruments.com)  
Toll Free USA and Canada: 1(800) 879-7713  
Tel. 1+(845) 770-3200 Fax. 1+(845) 770-3210

**DAKOTA INSTRUMENTS**

20 Corporate Drive  
Orangeburg NY 10962 USA

## Installation Instructions 6B07



### Materials of Construction

Meter Body:	Polysulfone
Float :	PTFE (Based on model)
Adapters:	Polysulfone
Float Stop:	Polyethylene
Union Nuts:	Nylon
O-Rings:	Viton®
Scale:	Permanent, dual scale silkscreen (black ink)
Accuracy:	± 2% of full scale reading

### Your Dakota 6B07 Series

- Your Dakota flow meter was designed to be easy to install.
- Please read the instruction Guideline on the next page before installing your flow meter.
- This flowmeter is an instrument, special care should be taken when handling and installing.

### Inspection of the Flow meter and Compatibility

- Check for damage while unpacking the flow meter.
- Remove any instruction sheets and shipping materials that may have been inserted into the meter body for shipping reasons.
- Remove the box containing the float. Note the floats position before removing the float from the meter body (tube). The float must be installed in the same direction when assembling the flowmeter.
- Remove the pipe fitting adapters with o-rings and the union nuts. Note the proper location of the o-ring in the groove. Be sure the o-ring is properly seated during installation.
- Be sure the meter and the materials of construction are suitable for your application.
- The maximum temperature and pressure is shown on the following pages.
- Although the meter may be suitable for use with other fluids, Dakota meters are tested with water and air only. If you are not sure that the meter is compatible with your fluid, consult Dakota.
- The meter can be damaged by UV light. Do not install the meter in direct sunlight.
- **Dakota guarantees the meter is suitable with air and water only.**

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## Installation Guideline

**Caution:** Follow these instructions to avoid failure.

**Danger:** Wear eye protection when installing or removing flow meter.

### 1. Misalignment will damage the meter!

Flow meter 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 PTFE tape on the threaded adapters. Polysulfone meter body and fittings cannot tolerate PVC Glue and/or pipe dope. Even fumes can cause severe damage. If you are installing your flow meter to a glued pipe configuration, install the flow meter 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!

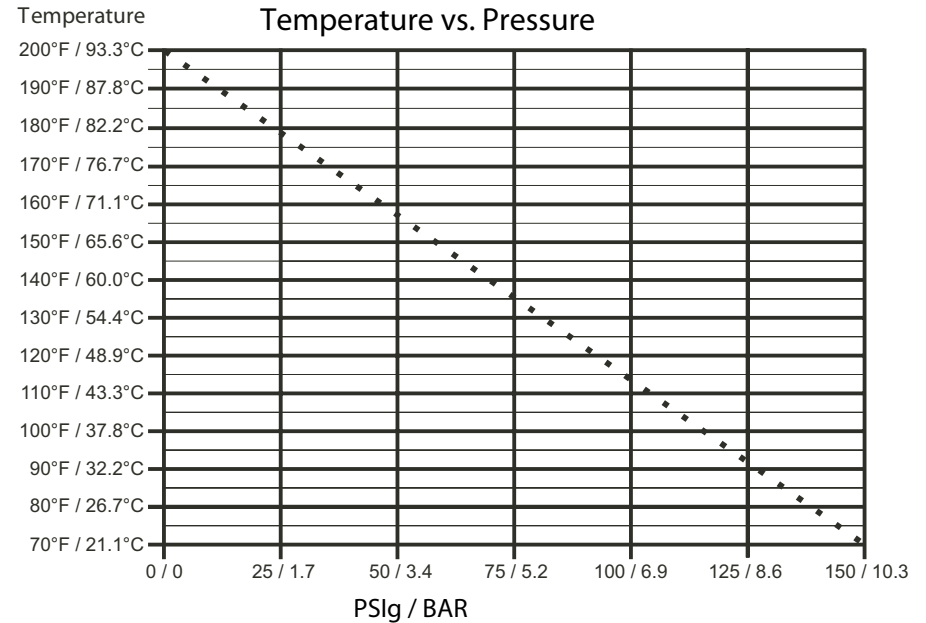
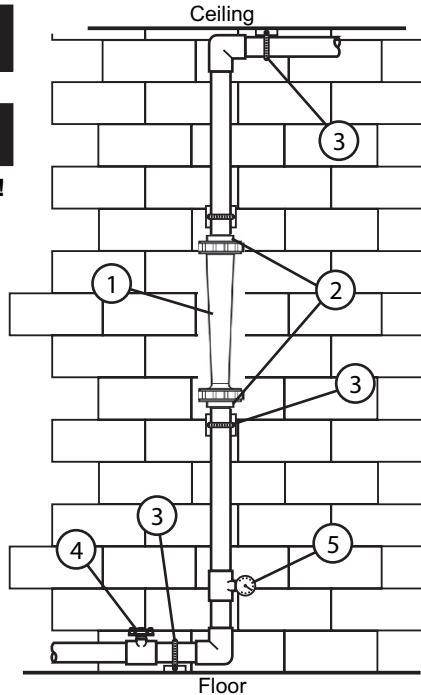
Wall, floor and ceiling mounts and supports must be carefully aligned with the meter body and sturdy enough to support the plumbing and prevent vibration. Never allow the flow meter to support the weight of related piping.

### 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 working temperature and pressure is interdependent. The maximum acceptable working pressure is dependant on the actual fluid temperature. The maximum acceptable fluid temperature is dependant on the actual working pressure. (see Temperature Vs. Pressure chart).



## Pressure and Temperature

Pressure and temperature limits are inversely proportional. At the maximum suggested pressure the temperature should approach 70°F / 21.1°C; at the maximum suggested temperature the pressure should approach zero psi. We cannot guarantee our flow meters will not be damaged either at or below the suggested limits simply because of many factors which influence meter integrity; stress resulting from meter misalignment, damage due to excessive vibration and/or deterioration caused by contact with certain chemicals as well as direct sunlight. These situations and others tend to reduce the strength of the materials from which the meters are manufactured.

## Application Note

**Flow meters are tested and calibrated for water or air only.**

**Although meters may be suitable for other chemicals, Dakota cannot guarantee their suitability. It is the responsibility of the user to determine the suitability of the flow meter in their application.**

## Maintenance

The "Exploded View" drawing illustrates assembly of the 6B07 series meter. If your flow meter needs to be cleaned refer to this drawing when reassembling the unit. The tapered tube may be cleaned with a soft bottle brush. Use a MILD soap and water solution for cleaning purposes. Hard water deposits can be removed with a 5% acetic acid solution (vinegar). Note the floats "up" position.

**DAKOTA INSTRUMENTS**