

Purgemaster Flowmeter

Series A6100 and A6200



Instruction Manual

IM/A61/62 Issue 1

1 Limits of Operation

Maximum Operating Pressure and Temperature (Glass Tubes)

MATERIAL			
S/S 316 / VITON		BRASS / BUNA	
Fluid Temperature		Fluid Temperature	
Max.	Design	Max.	Design
120°C	38°C	95°C	38°C
18 bar	18 bar	14 bar	18 bar

Warning.

- This is not a guarantee that tubes will not break within the operating limits due to circumstances beyond our control e.g. impact, thermal shock or incorrect installation.
- Glass tube flowmeters should only be operated with the protection shield in place. Limits of operation must always be observed. Failure to do so may result in damage and/or injury.
- It is important that the wetted parts of the meter are compatible with the process fluid. The use of incompatible O-ring materials can cause the tube to break.
- Glass metering tubes should not be used for either hot or strong alkalis, fluorine, hydrofluoric acid, steam or water above 93°C. These fluids can cause damage which is not always obvious on visual inspection.

2 Installation

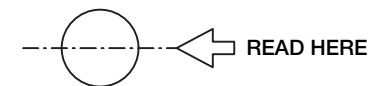
The flowmeter must be installed vertically in the pipeline with the highest scale values at the top.

To reduce the risk of float oscillation it is recommended that the distances to the next throttling location upstream and downstream be kept to a minimum.

3 Operation

Flow should be introduced to the meter gradually. Failure to do so may result in violent movement of the float causing damage to the instrument.

Ball floats are always read at the horizontal diameter.



The specified accuracy of this instrument only applies at the given operating conditions. Errors are introduced if there are variations in density or viscosity.

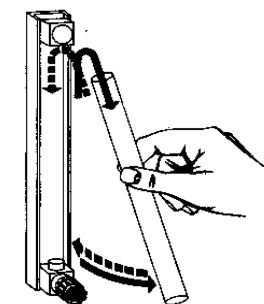
Fluids containing small amounts of solid material can be tolerated, although this can increase wear and in some cases affect accuracy. It is recommended that a filter is installed if solids are present.

4 Maintenance

Warning. This may cause deterioration of optical and/or mechanical properties which could result in damage and/or injury.

The only maintenance required is the occasional cleaning of the tube and float. The tube can be removed from the meter in situ. Proceed as follows.

1. Shut off flow to the meter. Drain or purge if possible. Be absolutely sure that all pressure has been relieved.
2. Remove the shield from the body by squeezing one side inward to disengage.
3. Remove the tube by pushing upwards against the spring then pull outwards (see diagram).



Continued...

- Gently clean the tube and float with soapy water or a suitable solvent and a soft cloth or brush. Trogamid tubes must not be cleaned with solvent.
- The shield should be cleaned with soapy water. In cases where this is not sufficient kerosene may be used.
- To replace the adapter O-rings, first remove the retaining clip using a thin pointed tool. With the clip removed the adapter can be lifted from the fitting and the O-rings replaced.
- Lightly grease all O-rings prior to replacement.

Note. If the instrument is to be used for Oxygen service a special grease must be used e.g. Voltalef 90.

- Reverse these steps to reassemble.

5 Accessories

For information regarding alarm sensors and amplifiers please refer to the Purgemaster data sheet, [DS/A61/62-EN](#).

For information regarding differential pressure regulator see Instruction Bulletin 53R-2100.

6 Spares

Spare parts can be purchased from ABB Ltd. Parts lists are available on request. Please call our technical support department.



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