

In an effort to be more eco-friendly, Brooks is no longer supplying printed instruction manuals with product shipments to reduce our paper consumption. For these product's complete instruction manual, please download it at brooksinstrument.com/documentation

• GT1600 Series

This Quick Start Guide applies to the following Brooks product(s):

Sincerely,
Brooks Instrument

Dear Customer,

Thank you for your purchase. We appreciate this opportunity to service your flow measurement and control needs with a Brooks Instrument device. Brooks' award-winning meters and controllers consistently rank at the top of their category for accuracy, reliability and user preference, as judged by the audience that matters - real users of flow instrumentation, like you.

But Brooks' products are only half of the story. You are backed by Brooks' unsurpassed local technical expertise in virtually every corner of the planet. Your local Brooks product and application specialist is truly your "partner in flow". They have been extensively trained to help you select the optimal solutions for your flow measurement or control needs and offer years of experience solving application problems just like yours.

Should you require any additional information concerning Brooks' products and services, please contact your local Brooks Sales and Service office listed on the back cover of this guide.

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 Hatfield, PA 19440-0903 USA
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 Tel (215) 362 3700
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A list of all Brooks Instrument locations and contact details can be found at www.BrooksInstrument.com

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Care must be taken in the system plumbing to this instrument to prevent sudden excessive pressure or flow surges. Protective devices should be installed upstream from this instrument, such as flow controllers, pressure regulators, pressure snubbers and rupture discs.

If this instrument contains electronic components it is susceptible to damage by static electricity. Proper handling procedures must be observed during the removal, installation or other handling of the circuit boards or devices.

If this instrument contains electronic components consult the complete instruction manual for proper wiring.

CAUTION

- Read all instructions prior to installing, operating and servicing this product.
- Follow all warnings, cautions and instructions marked on and supplied with this product.
- Do not operate this equipment in excess of the specifications listed on the meter. Failure to heed this warning can result in serious personal injury and/or damage to the equipment.
- If the inlet and outlet valves adjacent to the flowmeter are to be closed for any reason, the flowmeter must be completely drained. Failure to do so may result in thermal expansion of the liquid which can cause rupture of the meter and possible personal injury.
- If it become necessary to remove the meter from the system after exposure to toxic, pyrophoric, flammable or corrosive gas, purge the meter thoroughly with a dry, inert gas such as nitrogen before disconnecting the gas connections. Failure to correctly purge the meter could result in fire, explosion or death. Corrosion or contamination of the meter upon exposure to air may also occur.

WARNING

Read this page before proceeding!

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 February, 2019

Quick Start Guide

High Flow Glass Tube Variable Area Flow Meters

Variable Area Flowmeters



GT1600 Series

Installation (See Figure 1)

- Carefully remove the covers from each end of the flowmeter.
- Install the flowmeter with the inlet at the bottom and the outlet at the top.
- When installing the flowmeter in the process line, follow accepted plumbing practices for flanged or threaded fittings.
- Install the flowmeter within 5° of true vertical. Use of a level is recommended to determine the proper alignment.
- Installation of a bypass piping arrangement is recommended, see Figure 1, Typical Flowmeter Installations. Bypass piping permits the meter to be isolated from the flow for servicing and cleaning.

Pressure Equipment Directive (2014/34/EU)

Note: Equipment falls under Sound Engineering Practice (SEP) according to the directive.

It is recommended that a final leak test of the system plumbing and the meter be performed before subjecting it to the process fluid.

NOTE: If the device includes an Alarm, please reference the complete instruction manual for proper installation instructions.

Operation

After the flowmeter has been installed in the flow system, it is ready for operation. An optional built-in needle control valve may be provided to control the flow through the flowmeter. These control valves are designed for control. Excessive tightening may damage the valve seat and limit its effectiveness as a control valve. If tight shut-off is required, it is recommended that a separate shut-off valve is installed in the process line immediately before the flowmeter.

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Equipment Receipt and Return Procedures

Receipt of Equipment

When the equipment is received, the outside packing case should be checked for damage incurred during shipment. If the packing case is damaged, the local carrier should be notified at once regarding his liability. A report should be submitted to the nearest Brooks Instrument location listed on the Global Service Network page on our website:

brooksinstrument.com/service-support

Remove the envelope containing the packing list. Carefully remove the instrument from the packing case. Make sure spare parts are not discarded with the packing materials. Inspect for damaged or missing parts.

Return Shipment

Prior to returning any instrument to the factory for any reason, visit our website for instructions on how to obtain a Return Materials Authorization Number (RMA #) and complete a Decontamination Statement to accompany it: brooksinstrument.com/service-support All instruments returned to Brooks also require a Material Safety Data Sheet (MSDS) for the fluid(s) used in the instrument. Failure to provide this information will delay processing of the instrument.

Instrument must have been purged in accordance with the following:

⚠ WARNING

Before returning the device, purge thoroughly with a dry inert gas such as Nitrogen before disconnecting process connections. Failure to correctly purge the instrument could result in fire, explosion or death. Corrosion or contamination may occur upon exposure to air.

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Installation

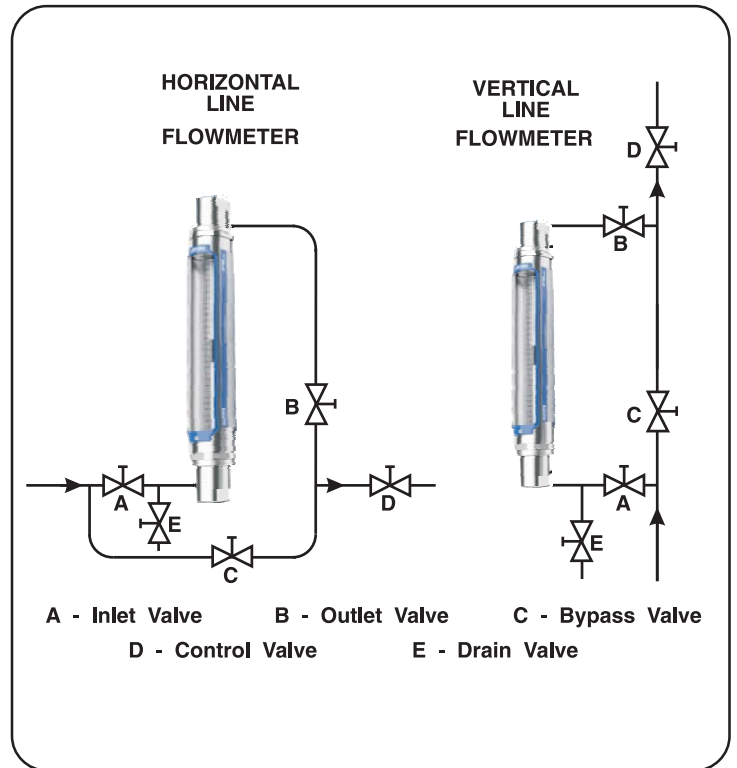


Figure 1 Typical Flowmeter Installation

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