

# Flow Measurement Equipment

## Flow Controllers

### Introduction

The flow measurement product line offers three types of flow controllers:

- Series 5700 General Purpose.
- Series 5750 General Purpose Purge Controller.
- Series 5800 Purge Type Flow Controller.

Each is designed to maintain a constant set flow rate regardless of variations in the line pressure. All of these basic arrangements are suitable for gas and liquid service.

The Series 5700 General Purpose type has a broad range of applications. It can be used with almost any equipment or within any flow system in which the process fluid is compatible with stainless steel construction. It is ideally suited for the Armored Purge Meters, Armored Flow Meters, Direct-View Flow Meters, Glass-tube Varea-Meter® units, and all Straight-through Varea-Meter® units.

The Series 5800 and 5750 purge type flow controllers are engineered specifically for use with the Glass-tube Purge Meters, Low-flow Meters, and Arma-View® II Armored Purge Meters. Inlet and outlet connections match up for easy adaptation.

### Features

#### Simple, Direct Design

The clean, straight-through design makes it simple to integrate these controllers within a system. Installation piping is direct and uncomplicated.

#### Reliable and Accurate Operation

These controllers maintain a constant set flow rate by sustaining a constant pressure drop across their orifices. The size of the orifice is varied while the pressure drop is held constant. This balance provides a set flow despite changes in the supply pressures.

### Key Benefits

- Choice of integral and stand alone design allows for flexible installation options
- Easily adapt to existing meters
- Reliable and accurate operation despite changes in the supply pressures
- Chemically resistant to many process conditions
- Wide spectrum of flow rates and pressures allowable
- Easy to integrate controllers within the system with direct and uncomplicated

### Sturdy Construction

The housing for the general purpose controllers is constructed of 316 SS. The purge flow controller can be either 316 SS or brass construction.

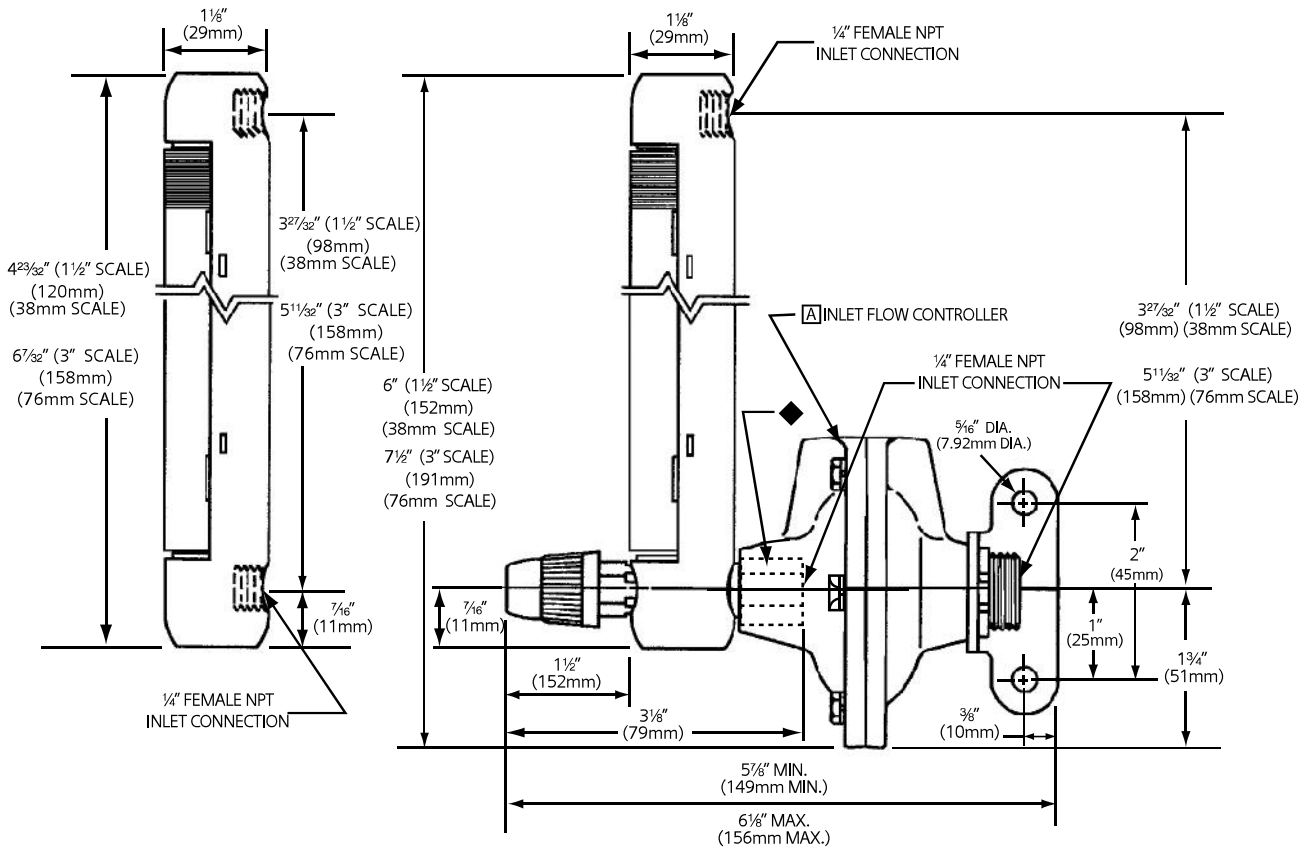


## Series 5800 Purge Type Flow Controller

This unit is designed specifically for use with the Glass-tube Purge Meters and Low-flow Meters. The inlet and outlet connections are immediately compatible with the meters. Connections are simple and direct; the expense of awkward static piping is eliminated. Controllers can be used for gas or liquid, and are available in inlet and outlet configurations.

The units are available in two capacity ranges. Either capacity can be provided in brass or stainless steel construction for a choice of temperature limits.

Technical Data	High Cap.	Low Cap.
<b>Max. capacity (at STP)</b>		
<b>Gas</b>	193 SCFH	30 SCFH
<b>Liquid</b>	40 GPH	5 GPH
<b>Maximum temperature and materials of construction</b>	200° F – Brass (Black Paint Finish) with Buna-N Diaphragm 250° F – 316 Stainless Steel with TFE Diaphragm	
<b>Max. inlet pressure</b>	250 psi	250 psi
<b>Pressure drop (at max. flow rate)</b>	8 psi	6 psi
<b>Connections inlet/outlet</b>	1/4-inch NPT	1/4-inch NPT



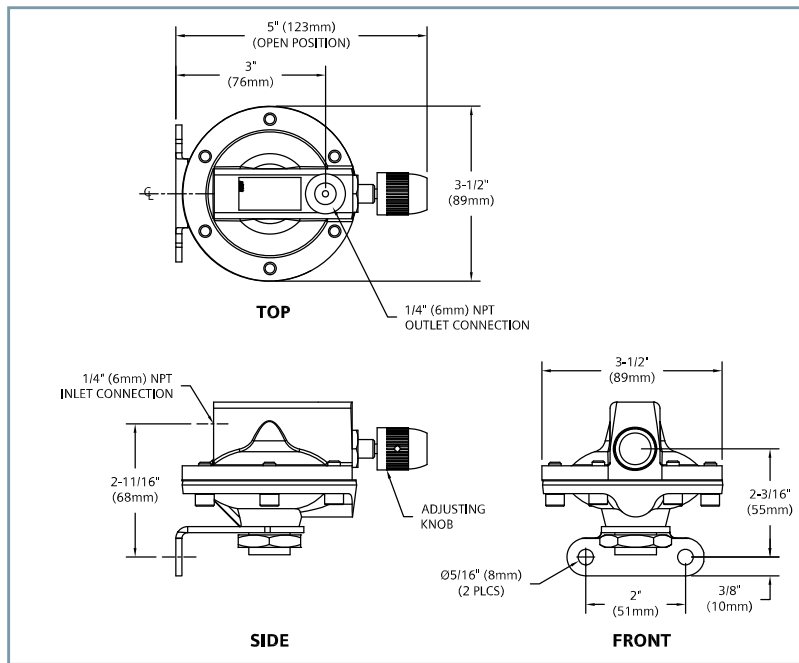
### Notes:

A Accessory item furnished only if specifically listed in quotation and as checked on the drawing.  
Not used with purge meter.

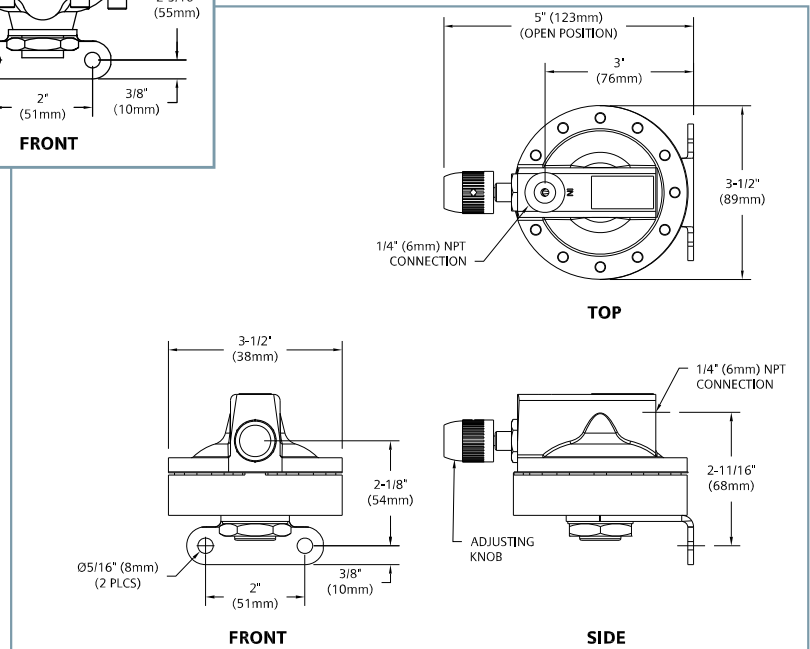
## Series 5750 General Purpose Purge Flow Controller

This unit is designed for the control of low-volume flows of aggressive chemicals in systems with varying pressures. It maintains constant flow regardless of pressure variations. An integral control valve provides easy setting of flow rate. It is offered in 316 SS construction, for inlet and outlet configurations. It can be assembled to a purge/low-flow meter, or as a standalone in the process line. Controllers are available in standard and high-pressure versions.

Technical Data	High Cap.	Medium Cap.	Low Cap.
<b>Max. capacity (at STP)</b> <b>Gas</b> <b>Liquid</b>	117 SCFH 25 GPH	23.4 SCFH 5 GPH	4.5 SCFH 0.8 GPH
<b>Maximum temperature and materials of construction</b>	300° F – 316 Stainless Steel with TFE Diaphragm		
<b>Max. inlet pressure</b>	350 psi for standard version 5750 1000 psi for high-pressure version 5750		
<b>Maximum differential</b>	300 psi between inlet and outlet pressures		
<b>Pressure drop (at max. flow rate)</b>	9 psi	6 psi	6 psi
<b>connections inlet/outlet</b>	¼-inch NPT	¼-inch NPT	¼-inch NPT
<b>shipping weight</b>	4 lbs.	4 lbs.	4 lbs.



Standard Pressure

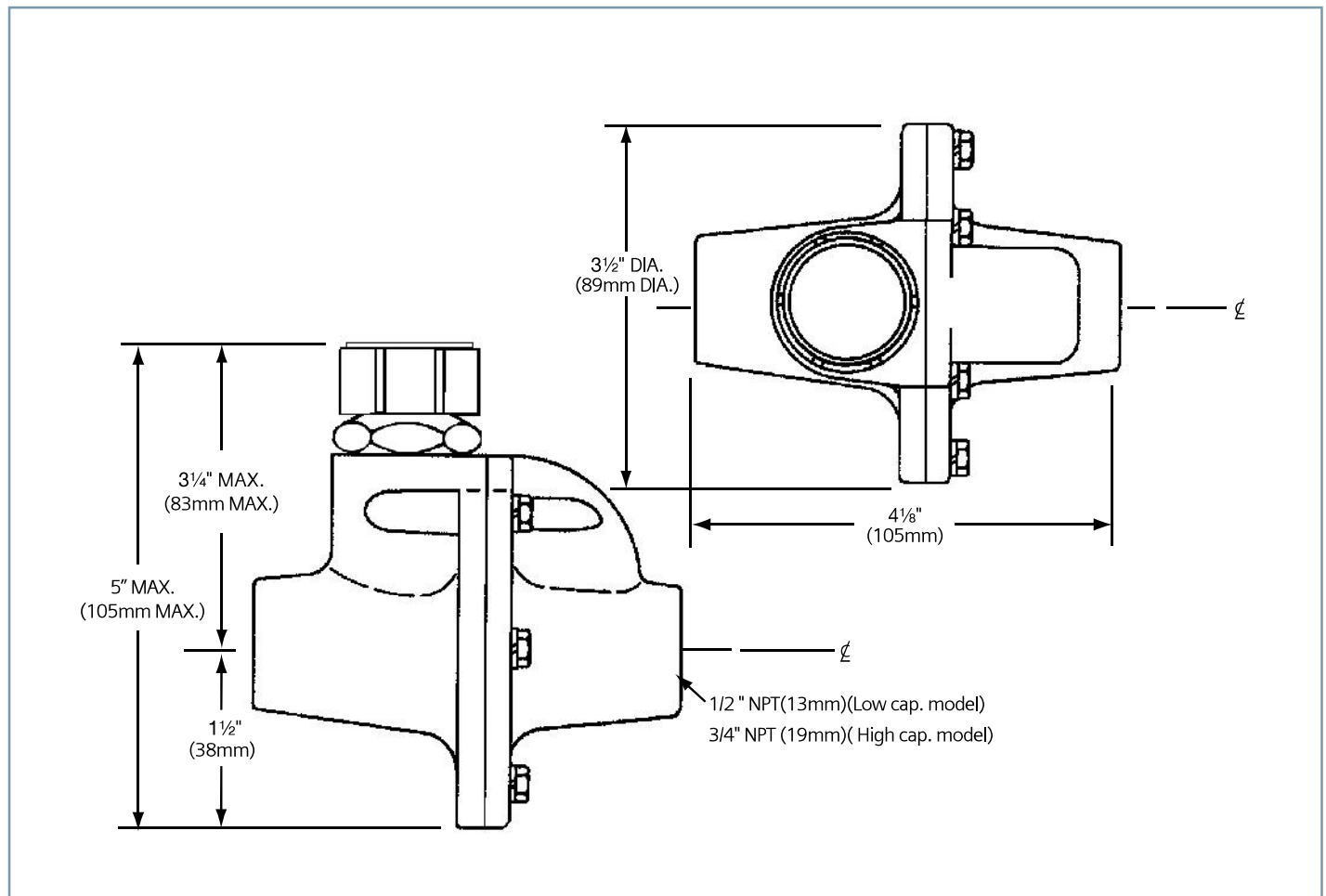


High Pressure

## Series 5700 General Purpose Purge Flow Controller

This unit can be used in any flow system in which the process fluid is compatible with the stainless steel construction. The straight-through design facilitates integration with most flow metering systems. Connections are simple and direct; expensive, awkward static piping is unnecessary. An integral control valve provides easy setting of flow rate. General purpose flow controllers are available in two capacity arrangements and can be used for liquid or gas service.

Technical Data	High Cap.	Low Cap.
Max. capacity (at STP) Gas Liquid	53 SCFM 10 GPM	5 SCFM 1 GPM
Maximum temperature and materials of construction	450° F – 316 Stainless Steel with TFE Diaphragm	
Max. inlet pressure	250 psi	250 psi
Pressure drop (at max. flow rate)	25 psi	15 psi
Connections inlet/outlet	$\frac{3}{4}$ -inch NPT	$\frac{1}{2}$ -inch NPT
Shipping weight	4½ lbs.	4½ lbs.



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