

# Brooks-Mite "27"<sup>TM</sup> Low Flow Purgemeters Model 2700

- Ten-to-one rangeability
- Body and tube are a single piece of impact resistant FDA approved polycarbonate thermoplastic forming the ribbed tube, bezel, and integral float stops
- Easy to read design. Bezel type center mounting puts the flow tube at the front of the panel for high visibility. No shrouds or windows cover the tube
- Flush panel mounting bezel and hardware - standard
- Ribbed tube construction stabilizes the float throughout the range for increased performance
- Standard direct read scales for air and water
- Metal connector inserts prevent damage from overtightening. Rotatable connector acts as line union which simplifies piping
- O-ring construction on connections, seal plugs and valve

## DESCRIPTION

Advanced concepts and design at very low cost - the Brooks-Mite "27" Series is a flowmeter of high impact FDA approved polycarbonate. A standard direct reading scale affords maximum simplicity of installation and operation. The unit is designed as a practical approach to low flow rate indication of noncorrosive liquids and gases at lowest possible cost. It is available with or without the optional integral control valve.

## SPECIFICATIONS

### Capacities and Pressure Drop

Refer to Tables 1 and 2

### Accuracy

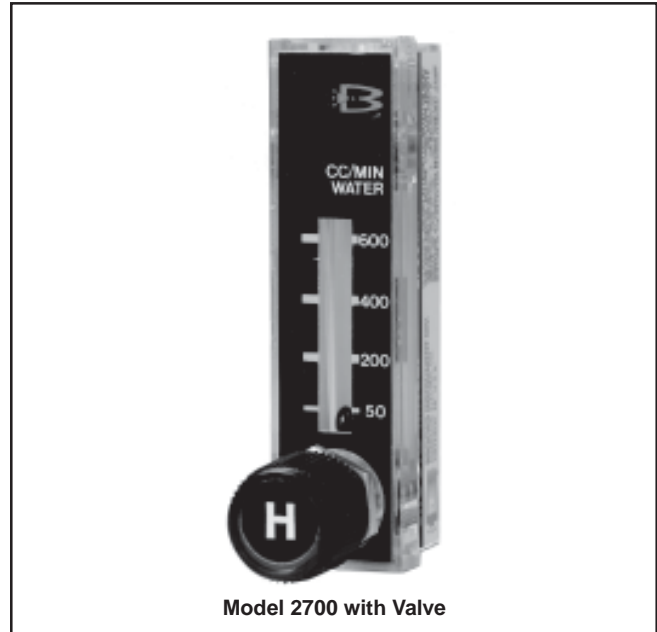
±10% of full scale

### Repeatability

1% full scale

### Rangeability

10 to 1



### Pressure

100 psig at temperatures from -20° to 130°F (Fluid temperature below 32°F may cause frosting of plastic meter body)

### Meter Dimensions

Refer to Figure 1

### Ordering Information and Model Code

Refer to Table 3

### Materials of Construction

Meter body, clean-out plug, float stop: FDA approved polycarbonate

Floats: Glass, 316 Stainless Steel

Line Connectors: Stainless Steel

O-rings: Buna-N or Viton fluoroelastomers

### Scales

Length: 37mm, nominal

Type: Direct read scale silk screened on adhesive backed black insert for air or water service (see capacity table for available ranges), millimeter scale with table for air or water service

Optional: Special direct read scale ranges

**Table 1 Maximum Capacities (Std. Scales)**

Tube Size	Float Mat'l	Air scfh	Water gph	Air nlph	Water l/h	Air nm <sup>3</sup> /hr
2	Glass	3.0	0.40	80	1.5	--
	SS	5.5	1.1	150	4	--
4	Glass	10	1.5	300	6	--
	SS	20	4.5	500	15	--
6	Glass	50	10	--	30	1.5
	SS	100	20	--	80	2.0

Capacities are metering conditions of 70°F (21.1°C) and 14.7 psia (101.3 kPa)

S (Standard) designates reference condition of 70°F and 14.7 psia  
 n (normal) designates reference condition of 0°C and 101.3 kPa

**Table 2 Pressure Drop**

Size	Float	ΔP Inches W.C. (No Valve)
2	Glass	1/4
	316 Stainless Steel	1
4	Glass	1
	316 Stainless Steel	3-1/2
6	Glass	8
	316 Stainless Steel	32

The figures above represent the pressure drop in inches of water column across the meter with the float in maximum flow rate position.

**Dimensions**

See Figure 1

**OPTIONAL EQUIPMENT**

Integral flow control valve on inlet or outlet

**ORDERING INFORMATION**

To order, please specify:

1. Model number
2. Materials of construction
3. Scale data
4. Complete metering data  
 Type of fluid  
 Maximum, minimum and normal flow, operating temperature, operating back pressure, specific gravity
5. Options, if desired
6. For ranges other than above, consult factory

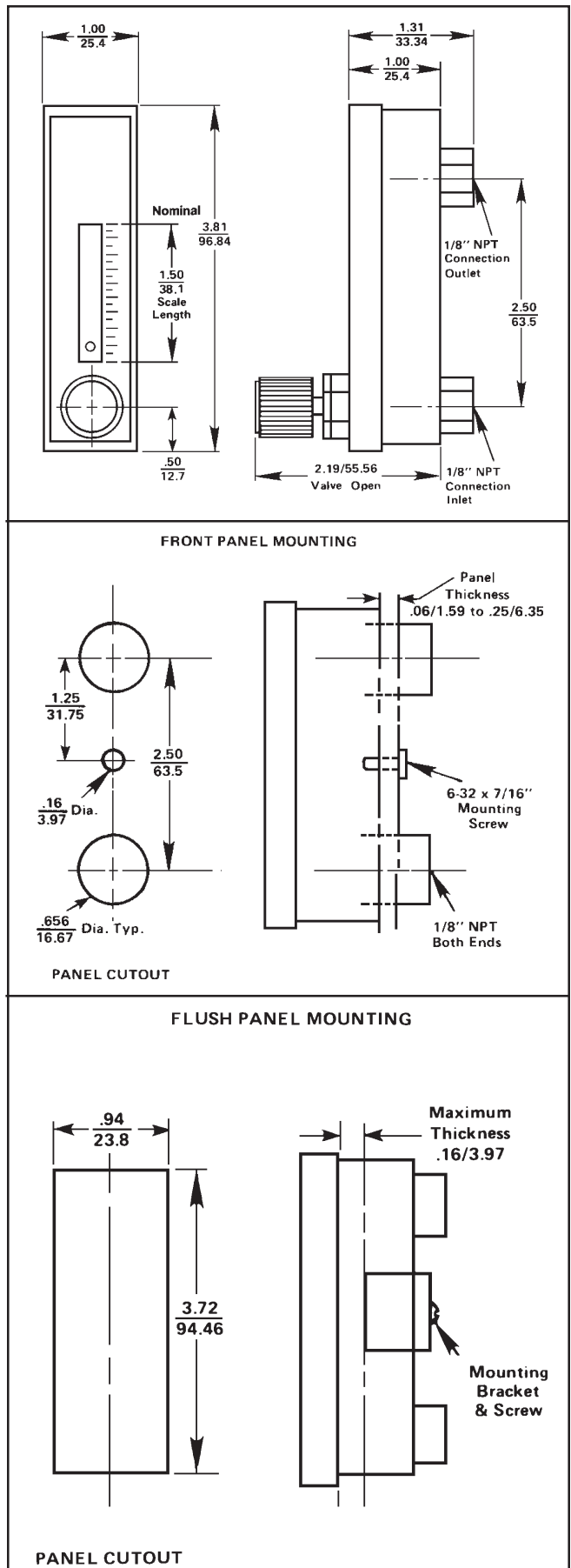


Figure 1 Dimensions

**Table 3 Ordering Information and Model Code**

<b>MODEL</b>	<b>PLASTIC PURGE METER</b>
2700-	SIZE 2 OR 6
2700A	SIZE 4

<b>CODE</b>	<b>FITTING AND O-RING MATERIAL</b>
A	STAINLESS STEEL AND VITON (STANDARD)
D	STAINLESS STEEL AND BUNA-N
<b>CODE</b>	<b>VALVE LOCATION</b>
1	NONE
6	INLET
7	OUTLET
<b>CODE</b>	<b>CONNECTION SIZE</b>
A	1/8" NPT
<b>CODE</b>	<b>TUBE SIZE</b>
2	SIZE 2
4	SIZE 4
6	SIZE 6
<b>CODE</b>	<b>FLOAT MATERIAL</b>
A	GLASS
B	STAINLESS STEEL
<b>CODE</b>	<b>FLOW MEDIUM</b>
1	SCFH AIR @ STP
2	GPH WATER
3	NLPH AIR @ STP
4	NM3PH AIR @ STP
5	LPH WATER

CODE	NOTE FLOAT	FLOW CAPACITIES (AIR @ STP OR WATER)				
		SCFH AIR	GPH WATER	NLPH AIR	NM3PH AIR	LPH WATER
A	GLASS		0.4 (2)			1.5 (2)
B	S.S.		1.1 (2)			4.0 (2)
C	GLASS		1.5 (4)			6.0 (4)
D	GLASS	3.0 (2)		80 (2)		
E	S.S.		4.5 (4)			15 (4)
F	S.S.	5.5 (2)		150 (2)		
G	GLASS	10 (4)	10 (6)	300 (4)		30 (6)
H	S.S.	20 (4)	20 (6)	500 (4)		80 (6)
J	GLASS	50 (6)			1.5 (6)	
K	S.S.	100 (6)			2.0 (6)	
L	MILLIMETER	(ALL SIZES & FLOAT MATERIALS)				

2700A A 6 A 4 A 1 G TYPICAL MODEL CODE

NOTE: TUBE SIZE SHOWN IN PARENTHESES ( )

## BROOKS LOCAL AND WORLDWIDE SUPPORT

Brooks Instrument provides sales and service facilities around the world, ensuring quick delivery from local stock, timely repairs and locally based sales and service facilities.

Our dedicated flow experts provide consultation and support, assuring successful applications of the Brooks flow measurement and control products.

Calibration facilities are available in local sales and service offices. The primary standard calibration equipment used to calibrate our flow products is certified by our local Weights and Measures Authorities and traceable to the relevant international standards.

## START-UP SERVICE AND IN-SITU CALIBRATION

Brooks Instrument can provide start-up service prior to operation when required. For some process applications, where ISO-9001 Quality Certification is important, it is mandatory to verify and/or (re)calibrate the products periodically. In many cases this service can be provided under in-situ conditions, and the results will be traceable to the relevant international quality standards.

## CUSTOMER SEMINARS AND TRAINING

Brooks Instrument can provide customer seminars and dedicated training to engineers, end users and maintenance persons. Please contact your nearest sales representative for more details.

## HELP DESK

In case you need technical assistance:

Americas ☎ 1-888-554-FLOW  
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Due to Brooks Instrument's commitment to continuous improvement of our products, all specifications are subject to change without notice.

### TRADEMARKS

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