## **DATA SHEET**

#### Pressure Measurement



Model 8601 Pressure Regulator

# **Model 8601**

**Mechanical Pressure Regulator** 

Model 8601 mechanical pressure regulators are compact, economical, high-precision supply pressure regulators. They are direct-acting, non-relieving units that provide bubble-tight shut-off on helium at 100 psi.

- Compact design
- Suitable for line or panel mounting
- Pressure gauge connection
- Bubble-tight shut-off to 100 psi
- Replaceable stainless steel inlet filter element

#### **Product Specifications**

<u> </u>		_ •		
a	pa	C	T\	•

Max. Inlet Supply Pressure

Max. Working Temperature

**Total Pressue Drop** 

Connections

Standard Seals & Fittings

**Fittings** 

**Dimensions** 

**Maximum Temperature** 

**Typical Characteristics** 

Supply Pressure Effect Flow Regulation

**Ambient Temperature Effect** 

Base Line Oscillation

Valve Adjustment & Oper.Range

Materials of Construction

Body

**Bonnet** Valve Seat

Valve Stem

Diaphragm Range Spring

Filter

The pressure regulator is ideal for use at up to a maximum of 1,000 sccm air

150 psi (1,034 kPa)

Standard: 140°F (60°C), Optional: 350°F (177°C)

Minimum: 10 psi, Maximum: 150 psi

Standard: 1/8" NPT; Optional 1/4" NPT, 1/8" or 1/4" compression fitting, 1/4" ID hose adaptors

Brass w/Buna-N, Stainless Steel w/Viton fluoroelastomer

1/8" FNPT or 1/4" FNPT

See Dimensions Figure

250°F/121°C

Helium 60 psig supply, 50 psig output

Less than 1% in first fifteen minutes to total of no more than 1.5% long term

0 psi increase in supply will not change output more than 0.07 psi

From 3 sccm to 70 sccm helium, output pressure will not decrease more than:

0.08 psig (0-10, 0-30 psi Regulators) 0.10 psig (0-60 psi Regulators), 0.125 psig (0-100 psi Regulators), 0.15 psig

(0-150 psi Regulators) Standard 60 psi range, 0.020 psi/°F

.0025 psi

Fifteen turns for 0-10, 0-30, 0-60, 0-100, 0-150 psig output range

Standard: Aluminum; Optional: 316 Stainless Steel

Aluminum

Standard: Brass; Optional 316 Stainless Steel

816 Stainless Steel

Reinforced Buna-N, Viton-A° fluoroelastomers

Music Wire, zinc plated

40 micron, 316L Sintered Stainless Steel with Viton fluoroelastomers or Buna retainer sleeve

View Model 8601 **Product Page** 



## Service and Support

Brooks is committed to assuring all of our customers receive the ideal flow solution for their application, along with outstanding service and support to back it up. We operate first class repair facilities located around the world to provide rapid response and support. Each location utilizes primary standard calibration equipment to ensure accuracy and reliability for repairs and recalibration and is certified by our local Weights and Measures Authorities and traceable to the relevant International Standards.

Visit www.BrooksInstrument.com to locate the service location nearest to you.

#### 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.

#### SEMINARS AND TRAINING

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

Due to Brooks Instrument's commitment to continuous improvement of our products, all specifications are subject to change without notice.

#### TRADEMARKS

Brooks ......Brooks Instrument, LLC All other trademarks are the property of their respective owners.



DS-PR-8601-eng/2021-01

#### **Global Headquarters**

**Brooks Instrument** 407 West Vine Street Hatfield, PA 19440-0903 USA

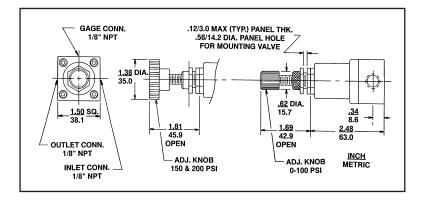
Toll-Free (USA): 888-554-FLOW T: 215-362-3500

BrooksAM@BrooksInstrument.com

A list of all Brooks Instrument locations and contact details can be found at <a href="https://www.BrooksInstrument.com">www.BrooksInstrument.com</a>

©Copyright 2021 Brooks Instrument, LLC All rights reserved. Printed in U.S.A.

## **Product Dimensions**



## **Ordering Information**

To order, please specify:

- 1. Model Number
- 2. Materials of Construction
- 3. Output Range
- 4. Connection Type & Size
- 5. Options, If desired.

### **Model Code**

Code Description	Code Option	Option Description	
I. Base Model Number	8601D	Pressure Regulator - Side Connection	
II. Body Material - Wetted	1	Aluminum	
	2	Stainless Steel	
III. Diaphragm & Valve Seat Materials	A	Buna-N and Brass/Buna-N (Aluminum only)	
	В	Viton and Brass/Viton (Aluminum only)	
	С	Buna-N and Stainless Steel/Buna-N	
	D	Viton and Stainless Steel/Viton	
IV. Range	1	0-10 psi / 0-0.7 Bar	
	2	0-30 psi / 0-2 Bar	
	3	0-60 psi / 0-4 Bar	
	4	0-100 psi / 0-7 Bar	
	5	0-150 psi / 0-10 Bar	
V. Connection Size & Type	Α	1/8" NPT Female	
	В	1/4" NPT Female	
VI. Accessories	А	None	
	В	Panel Mounting	
	F	Gage Port Plugged	

#### Sample Standard Model Code

	II	III	IV	V	VI
8601D	1	Α	1	Α	Α

