

Mass Flow Control Valves

Models 5835 and 5836

Description

The Brooks® Mass Flow Control Valve is a normally closed proportional control valve. The Brooks Flow Control Valve is normally closed and is used with a Brooks mass flow meter, to make a closed loop system. The valve consists of a dc coil, a plunger with valve seat, guide springs and an orifice. Flow rate is controlled by varying the voltage to the coil, causing a magnetic force which raises the plunger/seat from the orifice allowing gas to flow.

Specifications

Capacities

Models 5835 and 5835P: 0-5 slpm* maximum (N₂);
Model 5836: 0-100** slpm maximum (N₂)

*Standard Pressure and Temperature: 14.7 psia (760 mmHg) and 0°C.

**The maximum flow rates are with 25 psig inlet pressure and atmosphere exhaust. The flow capacity will vary with different gasses and pressures.

Maximum Operating Pressure

Model 5835 and 5836: 1500 psig
Model 5835P: 4500 psig

Pressure Differential

5-50 psi (Models 5835 and 5835P): 10-50 psi (Model 5836) depending upon customer requirements

Temperature

Ambient/gas: 40°F to 150°F (4°C to 65°C)

Materials of Construction

Wetted Parts - Standard: Stainless steel with Viton® fluoroelastomers or Buna seals; Optional: Stn. stl. with Kalrez® seals

Connections

Models 5835 and 5835P: 5/16 x 24 UNF (AN 10050-2) integral

Standard Adapters -

1/8" or 1/4" compression type tube

1/8" or 1/4" female NPT

Optional Adapters -

1/4" male VCO™ or VCR™

1/4" female VCR

Model 5836: 1/4" female NPT integral

Standard Adapters -

1/4" or 3/8" compression type tube

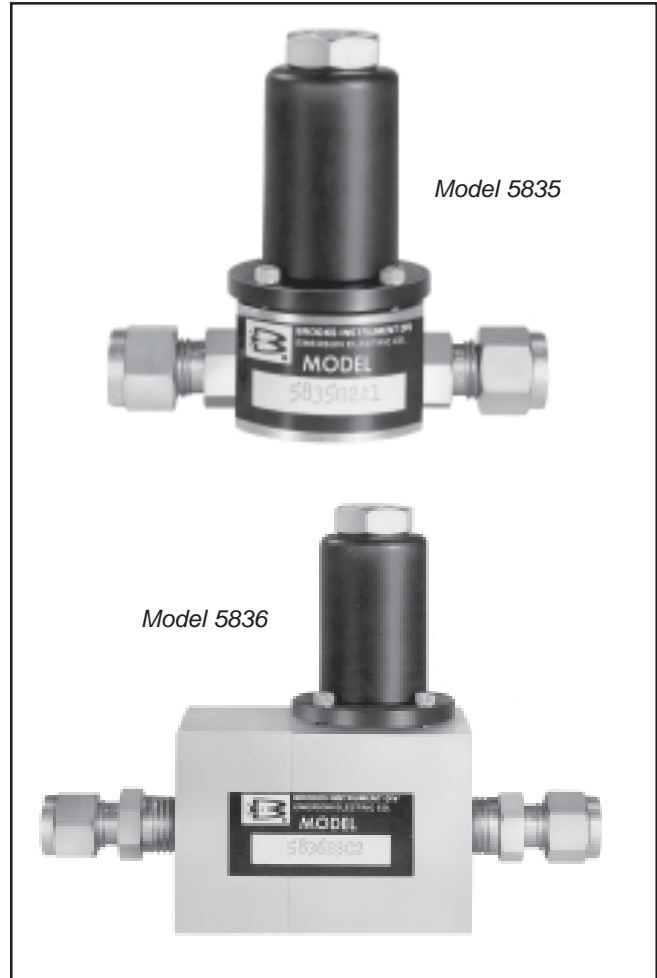
(3/8" is recommended for 20 slpm)

Electrical

Resistance: 95 ohms nominal

Approx. operating voltage: 7-13 Vdc (max. 24 Vdc)

Approx. operating current: 150 mA dc (max. 250 mA dc)



Dimensions

Models 5835 & 5835P: Refer to Figure 1

Models 5836: Refer to Figure 2

Ordering Information

To order, please specify:

1. Model
2. Connection size/type
3. Quantity Required
4. Max. Operating Temperature/Pressure
5. Flow Rate
6. Elastomers
7. Gas

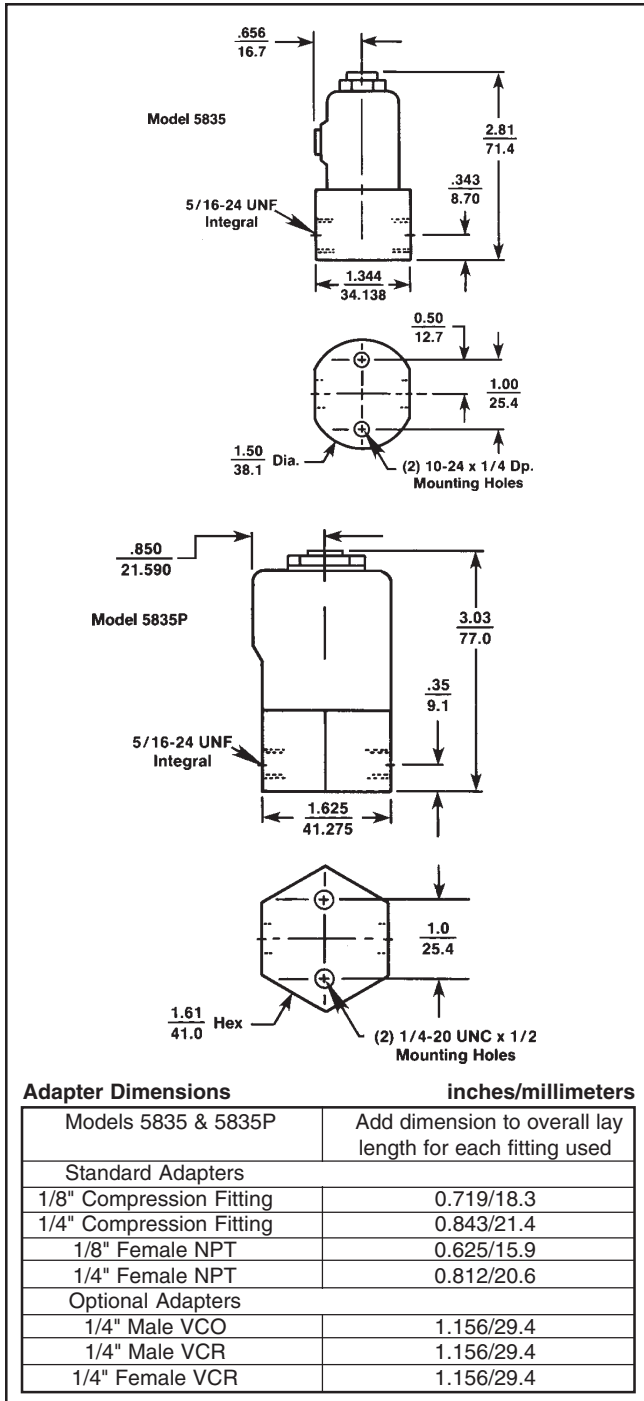


Figure 1 Dimensions Models 5835 & 5835P

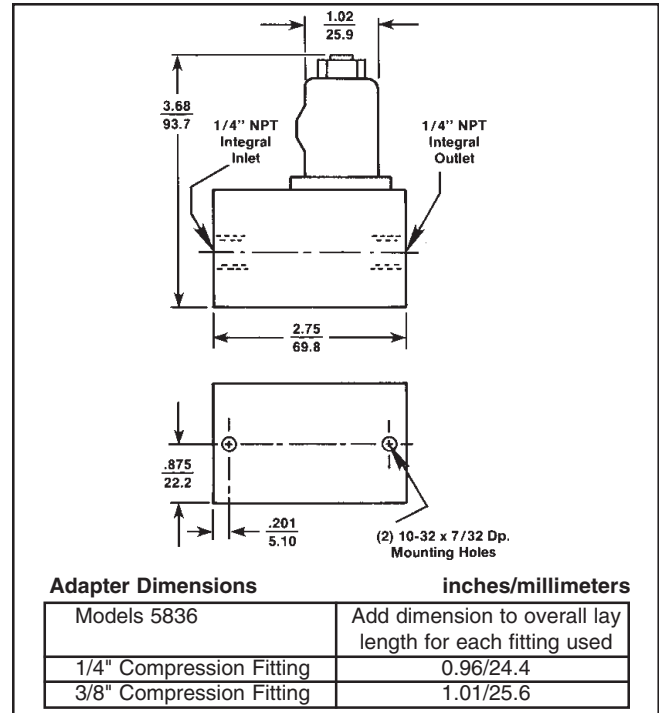
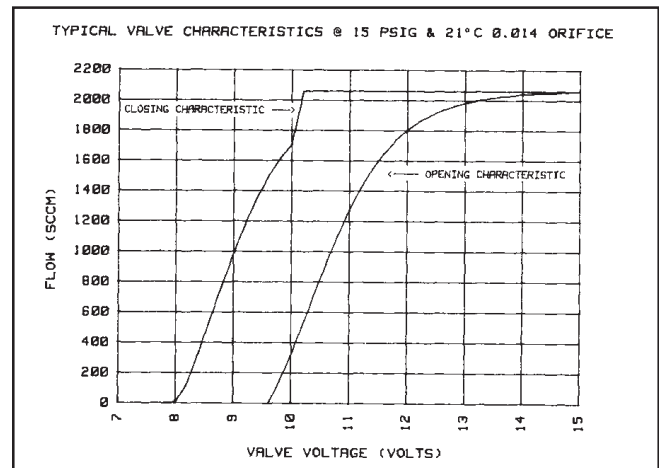


Figure 2 Dimensions Model 5836



Typical Operating Characteristics

TRADEMARKS

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 Kalrez DuPont Dow Elastomers
 Viton DuPont Performance Elastomers
 VCO, VCR Cajon Co.

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