

SC423XL Series Gas Flow Controller

Low Flow, Vacuum Applications, Stainless Steel



Value Proposition:

The SC423XL Series Flow Controller is a unique device which supplies a constant flow with a self correcting action to compensate for changes in downstream pressure. The SC423XL was designed for air and analyzer sampling systems which require very low flow rates (less than 10 scc/m). Connected to a vacuum cylinder, the SC423XL provides consistent flow control despite changes in the vacuum.

Product Features:

- Rugged Design
- Flow Control as low as 1 scc/m
- Adjustable Flows
- Hastelloy® C-22 Diaphragms
- Stable Flows as Vacuum Pressure Changes for 28 in. Hg to 5 in. Hg
- Stable Flows over Wide Temperature Band
- Color Coded Orifices
- Special CFC Free Cleaning
- Tamper Proof
- Oxygen cleaned in accordance with ASTM G93 Level C

Specifications:

Material of Construction	
Wetted	
Body	316L Stainless Steel
Piston	316L Stainless Steel
Diaphragm	Hastelloy® C-22
Seat	FKM
Seals	FKM
Inlet Fitting	316 Stainless Steel
Outlet Fitting	316 Stainless Steel
Non-Wetted	
Cap	316 Stainless Steel
Nut	316 Stainless Steel
Filter	Sintered Hastelloy®

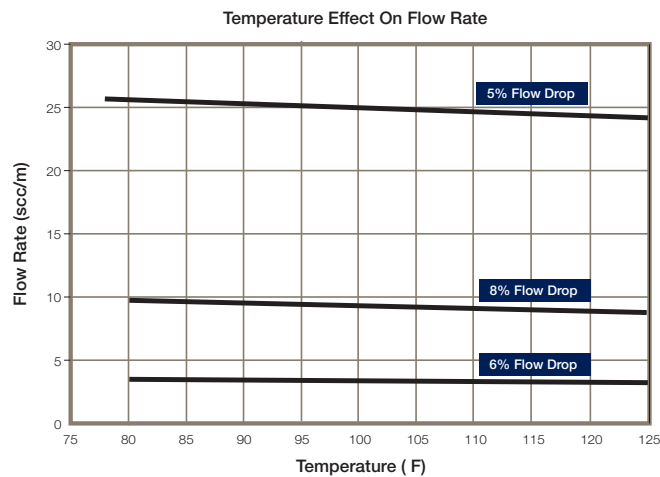
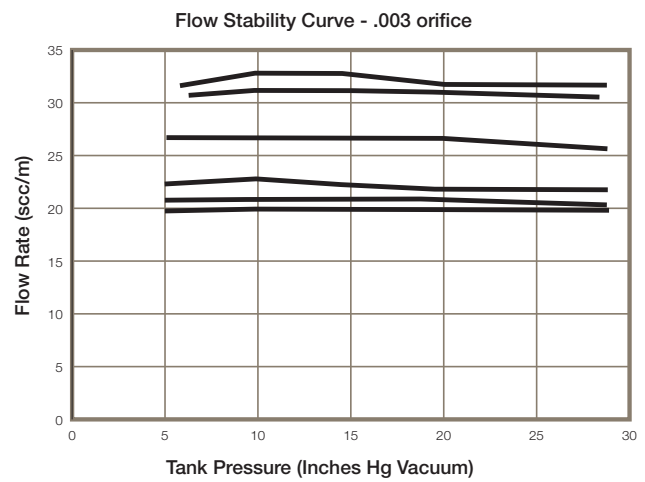
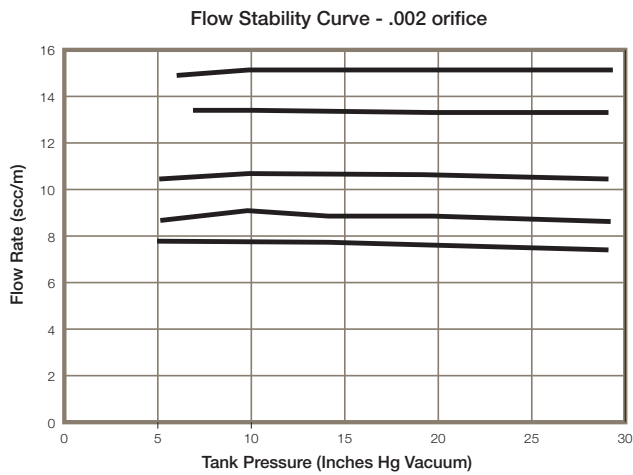
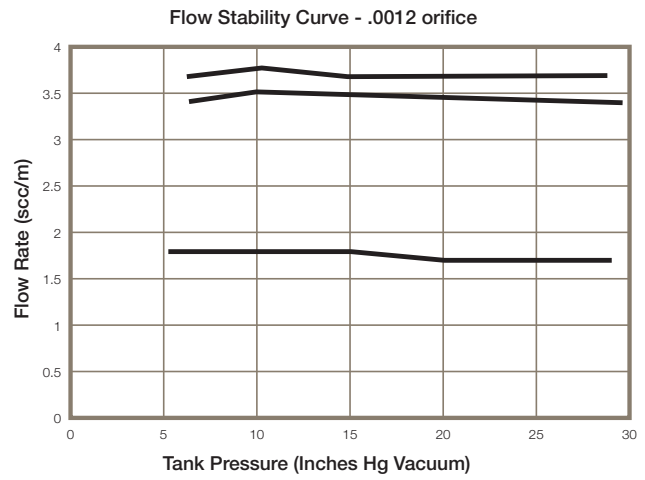
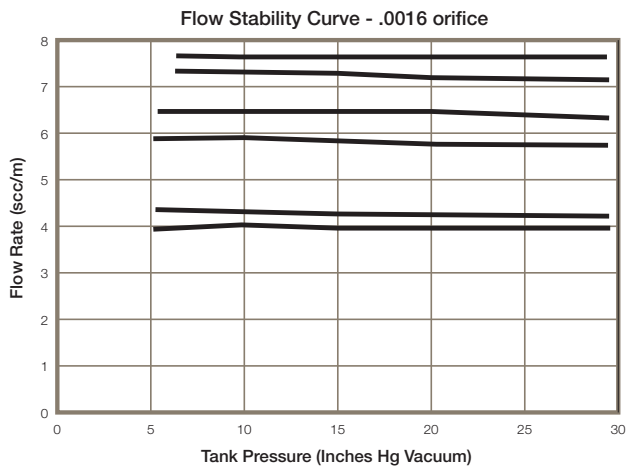
Functional Performance	
Leak Rate	Inboard Test Method
External	1 x 10 ⁻⁶ scc/sec He
Approximate Weight	1.75 lbs. (0.80 kg)

Operating Conditions	
Maximum Inlet	Atmospheric
Outlet	Vacuum
Flow (see Flow Curve)	Low as 1 scc/m
Temperature	-40°F to 200°F (-40°C to 94°C)

Hastelloy® C-22 is a registered trademark of Haynes International, Inc.
For additional information on materials of construction, functional performance and operating conditions, please contact factory.

SC423XL Series

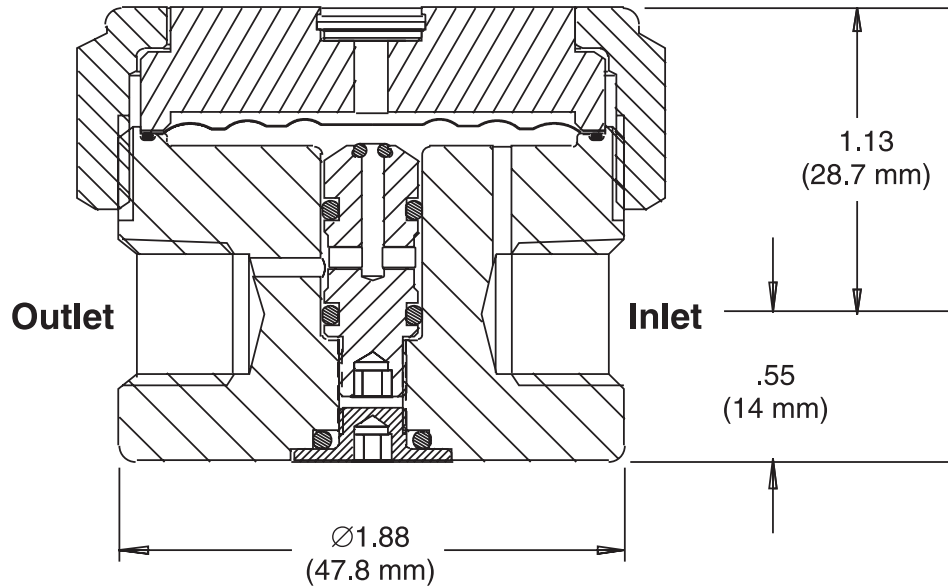
Flow Curves:



Specialty Regulators

SC423XL Series

Dimensional Drawing:



Ordering Information:

Building a Part Number: *Example: SC423XLS2444*

Example Part Number:	SC423XL	S	24	4	4
Ordering Parameters/Options:	Series	Body Material	Sample Time/Flow Rate	Inlet Connection	Outlet Connection
Table Reference: (see below)	A	B	C	D	E

A - Series	
SC423XL	Gas Flow Controller

B - Body Material	
S	316L Stainless Steel

C - Sample Time/Flow Rate	
3	27.1 - 27.7 sccm (yellow)
8	10.0 - 10.4 sccm (green)
12	6.5 - 6.9 sccm (blue)
24	3.1 - 3.4 sccm (red)

D - Inlet Connection	
4	1/4" NPT Female (All Gauge Ports are 1/4" NPT Female)

E - Outlet Connection	
X	No Connections
4	1/4" NPT Female (All Gauge Ports are 1/4" NPT Female)