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COMPONENTS • MANUFACTURING  
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## CFOS Gas Stick

Integrated,  
Stainless,  
Forged,  
& Ready for Work.

 Valex



Bulk gas sticks typically consist of the marriage of three components: a shutoff valve, a pressure control regulator, and gauge. Our CFOS gas stick combines these components into a singular, simple-to-use, integrated device.

A forged one-piece stainless steel regulator body with integrated pressure gauge, and optional pre-installed shut-off valve, makes for less field connections, and eases installation. Each stick is CFOS cleaned, and embodies a broad set of features.

## Product Description

- Size Range: 1/4" – 3/4"
- Compression fitting and tube connection options
- Forged 316L stainless-steel construction



## Features & Benefits

- Cleaned for Oxygen Grade Service (CFOS) in accordance with CGA G-4.1
- Compact length for ease of installation in confined spaces
- Stainless 74  $\mu\text{M}$  pre-filter screen
- Integrated mounting holes with optional strut channel mounting bracket
- 100% functional and helium-leak tested
- Cleanroom Nitrogen-purged and double-bagged
- Each stick includes a Certificate-of-Compliance to Valex specification SP-9240
- .003 Micron outlet filter options available

## Performance Specification

### Regulator Flow Capacity

0.15 Cv & 1.8 Cv options

### Pressure

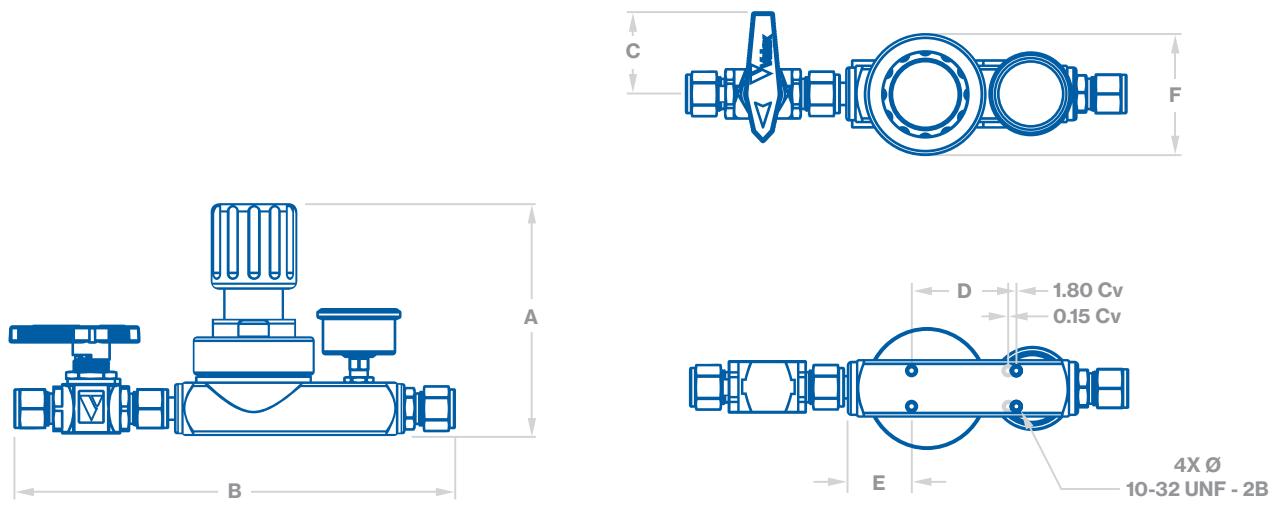
Max. Operating Pressure	500 PSIG (35 BARG)
Outlet Pressure Range	15 to 150 PSIG (1.0 to 10.3 BARG)

### Helium Leak Rate

Inboard	$\leq 1 \times 10^{-6}$ atm • cc/s
Across-the-Seat	$\leq 1 \times 10^{-4}$ atm • cc/s

### Temperature Range

32°F to 160°F (0°C to 70°C)
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**Dimensions for Type G2 (Listed as Millimeters\*)**

Assembly Size	A	B	C	D	E	F
1/4" (0.15 Cv)	98 - 107	176.8	31.0	45.0	31.5	48.0
1/2" (1.80 Cv)	131 - 140	224.1	46.5	59.7	36.3	68.6

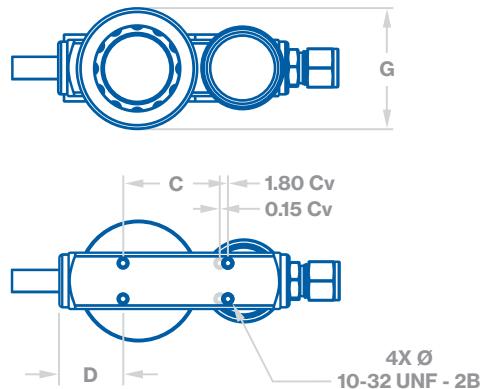
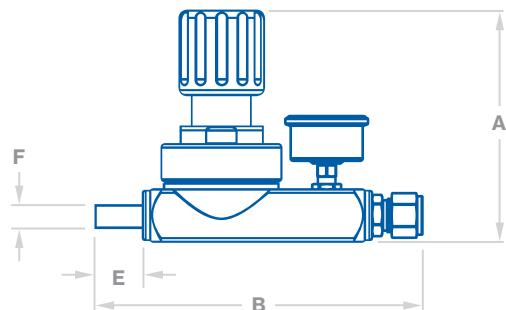
\* Dimensions are approximate, may vary from listed values, and assumes compression nuts are finger tight.  
Please consult factory for dimensions on other configurations.





CFOS  
Gas Stick

TYPE  
G3



### Dimensions for Type G3 (Listed as Millimeters\*)

Assembly Size	A	B	C	D	E	F	G
1/4" (0.15 Cv)	98 - 107	126.0	45.0	31.5	19.1	162.6	48.0
3/8" (0.15 Cv)	98 - 107	154.9	45.0	31.5	21.6	241.3	48.0
1/2" (1.80 Cv)	131 - 140	158.0	59.7	36.3	26.9	322.6	68.6
3/4" (1.80 Cv)	131 - 140	190.5	59.7	36.3	26.9	485.1	68.6

\* Dimensions are approximate, may vary from listed values, and assumes compression nuts are finger tight. Please consult factory for dimensions on other configurations.

### Pressure Gauge Specification



Enclosure Rating	IP65
Pressure Range	-30inHg-0-160 PSIG (-1 to 11 BARG)
Pressure Accuracy	± 3% of Full Scale
Gauge Size	47mm Diameter
Case Bezel	304 SS / Glass

### Materials of Construction (Wetted)

Component	Material
<b>Stick Body</b>	
Forged Base	316L SS
<b>Ball Valve</b>	
Body / Ball	316L / CF3M / CF8M SS
Seat / Seals	PTFE
<b>Regulator</b>	
Diaphragm	316 SS
Poppet	316L SS
Poppet Spring	316L SS
Poppet Seat	PTFE
Poppet Guide	PTFE
Guide Seat	316L SS
<b>Gauge</b>	
Fitting	304 SS

## Valve Lockout Bracket

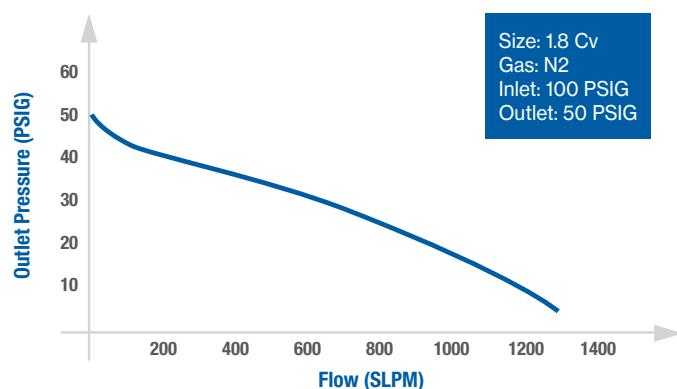
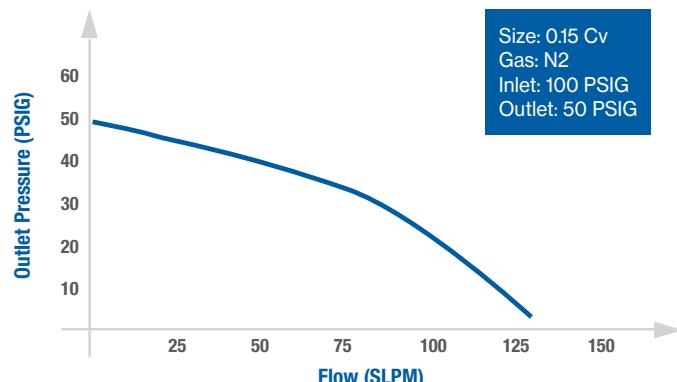
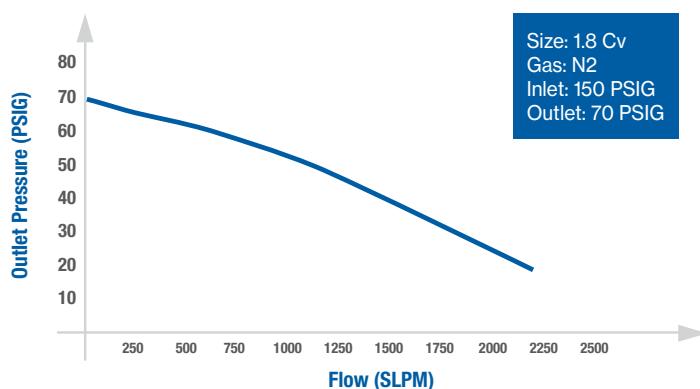
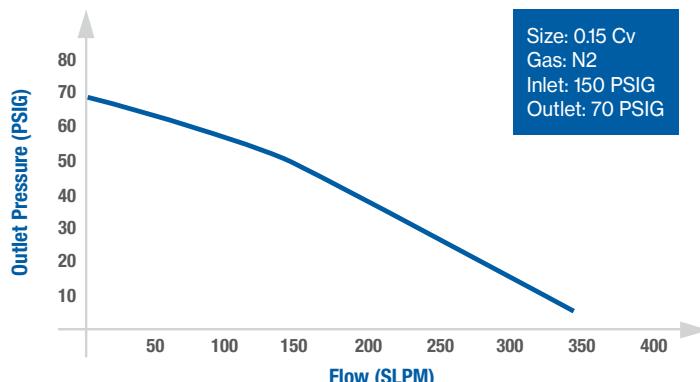


Ball valve lock-closed bracket option is available.  
Option does not include lock or key.

SS = Stainless Steel

# Flow Curves

CFOS  
Gas Stick



## Ordering Information<sup>1</sup>

G | 2 | A - 0 | 4 | 0 | 4 | C - 1 - 0 | 0

**G | 2**

### Type

G2 = Regulator & Gauge with Mini Ball Valve

G3 = Regulator & Gauge Only

**0 | 4**

### Outlet Size

04 = 1/4"

06 = 3/8"

08 = 1/2"

12 = 3/4"

**0**

### Lockout & Mounting Bracket Options

0 = Not Required

1 = Mounting Bracket (Strut Channel Compatible)

2 = Valve Lockout

3 = Valve Lockout & Mounting Bracket

**A**

### Regulator Size<sup>2</sup>

A = 0.15 Cv

B = 1.8 Cv

**C**

### Connection Type<sup>4</sup>

C = Compression in, Compression out

T = Tube in, Compression out

**0**

### Outlet Filter Option (.003 µM)

0 = Not Required

1 = TEM Filter (low flow)

2 = TEM Filter (high flow)

3 = Entegris Filter

**0 | 4**

### Inlet Size<sup>3</sup>

04 = 1/4"

06 = 3/8"

08 = 1/2"

12 = 3/4"

**1**

### Gauge

1 = -30inHg-160 psig

<sup>1</sup> Not all possible part number configurations are available. Please contact Valex for availability.

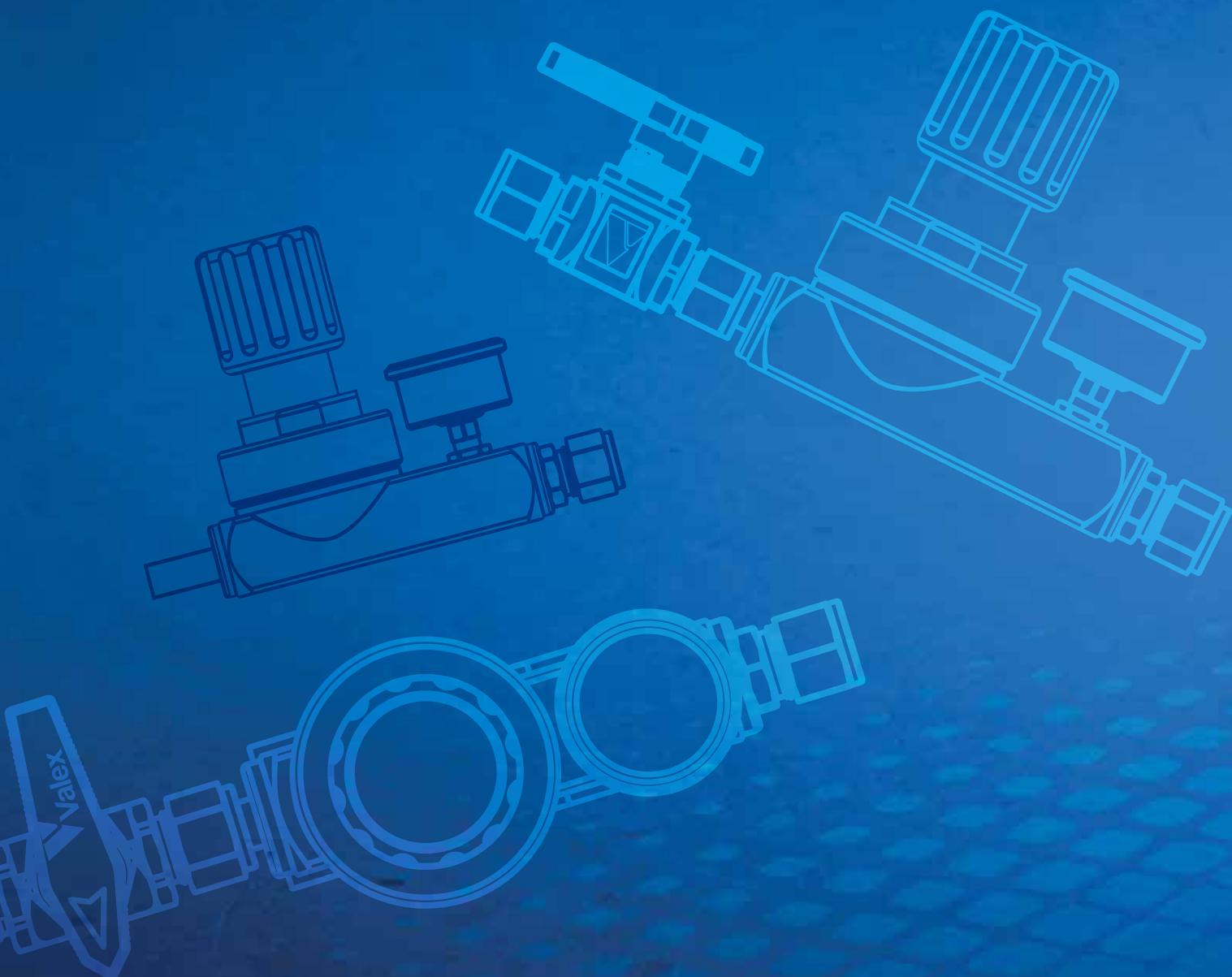
<sup>2</sup> Regulator Sizing: Typically .15 Cv is used for 1/4" gas sticks, while 1.8 Cv is used for 3/8" & 1/2" gas sticks.

<sup>3</sup> G3 Inlet Sizes: only offered in 1/4" and 1/2".

<sup>4</sup> Connection Types (available): G2 sticks (Option "C"), G3 (Option "T")

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## Benefit From World Leadership

World class components from Valex don't just end at tube, pipe and fittings. Our product offerings extend to ball valves, instrumentation valves, headers, manifolds, and more. For more information, please visit our website at [www.valex.com](http://www.valex.com), or contact your Valex representative for details. Benefit from world leadership, and benefit from Valex.



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