

COMPONENTS • MANUFACTURING
ONE Trusted SOURCE
TESTING • ASSEMBLY



CFOS Gas Stick

Integrated,
Stainless,
Forged,
& Ready for Work.





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 μ 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

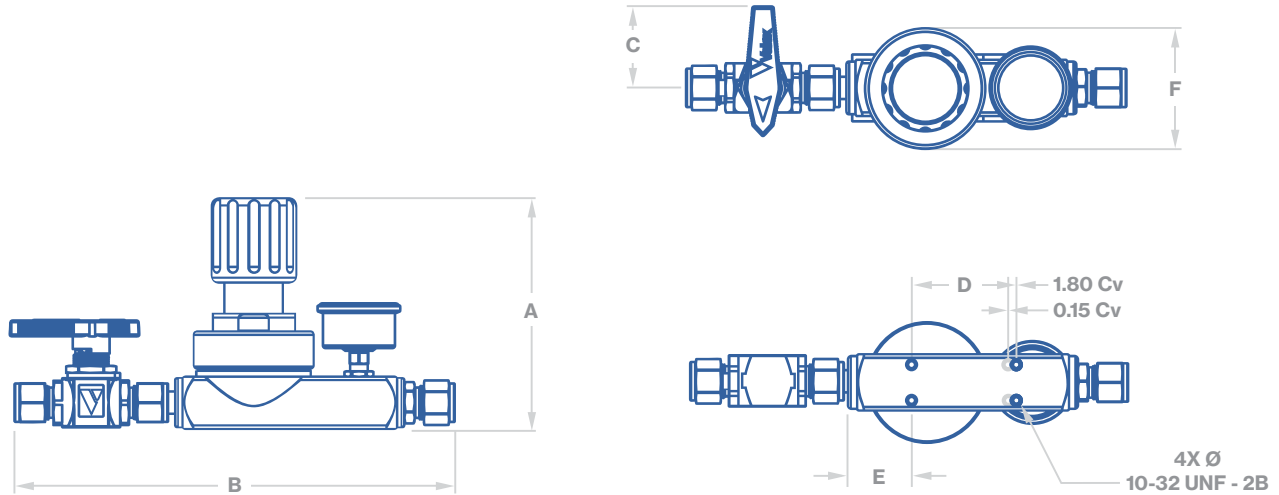
Max. Operating Pressure 500 PSIG (35 BARG)
 Outlet Pressure Range 15 to 150 PSIG
 (1.0 to 10.3 BARG)

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)

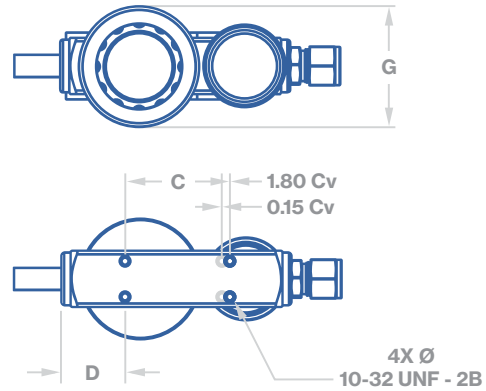
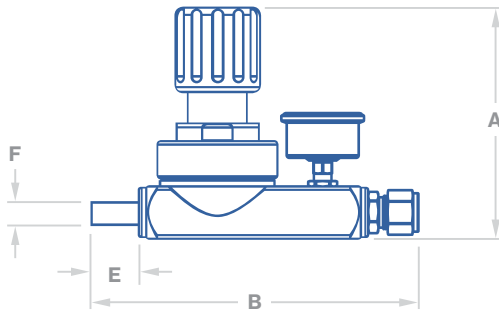


Dimensions for Type G2 (Listed as Millimeters*)

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.





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

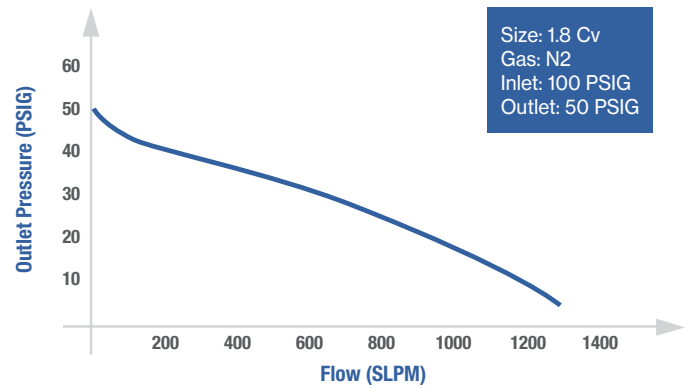
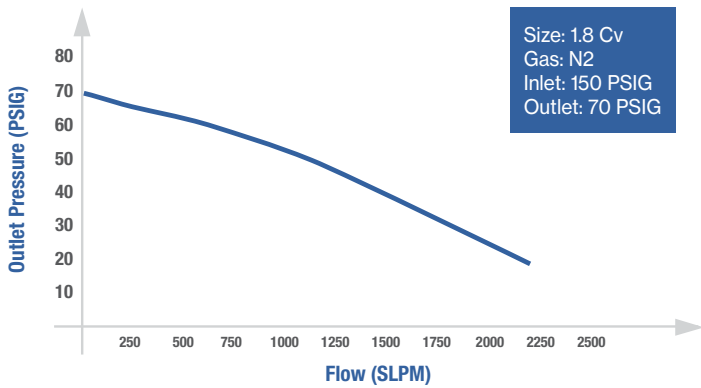
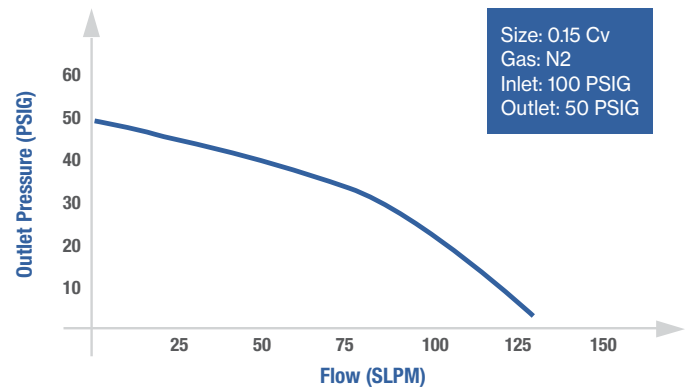
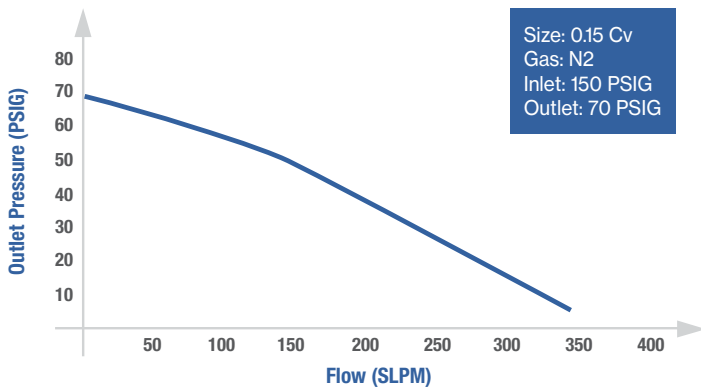
SS = Stainless Steel

Valve Lockout Bracket



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

Flow Curves



Ordering Information¹

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

A

Regulator Size²

- A = 0.15 Cv
- B = 1.8 Cv

0 | 4

Inlet Size³

- 04 = 1/4"
- 06 = 3/8"
- 08 = 1/2"
- 12 = 3/4"

0 | 4

Outlet Size

- 04 = 1/4"
- 06 = 3/8"
- 08 = 1/2"
- 12 = 3/4"

C

Connection Type⁴

- C = Compression in, Compression out
- T = Tube in, Compression out

1

Gauge

- 1 = -30inHg-160 psig

0

Lockout & Mounting Bracket Options

- 0 = Not Required
- 1 = Mounting Bracket (Strut Channel Compatible)
- 2 = Valve Lockout
- 3 = Valve Lockout & Mounting Bracket

0

Outlet Filter Option (.003 μM)

- 0 = Not Required
- 1 = TEM Filter (low flow)
- 2 = TEM Filter (high flow)
- 3 = Entegris Filter

¹ Not all possible part number configurations are available. Please contact Valex for availability.

² 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.

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

⁴ Connection Types (available): G2 sticks (Option "C"), G3 (Option "T")



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