



## USB Series Critical Purity, Single-Stage, Brass Bar Stock, Cylinder Regulator

### SPECIFICATION

### Applications

#### Non-corrosive gases

- Brass body

#### Low flow applications

- Cv of 0.08

#### Slight rise in delivery pressure is not an issue as cylinder pressure goes down

- Single stage regulator

#### Recommended for gas purity up to Grade 5.5 (99.9995% pure)

- Metal to metal diaphragm to body in a bar stock body regulator

#### Designed for use with gas cylinders

- Directly mounted to the cylinder valve with gas related cylinder connection nut & nipple



### Key Features

#### Stainless steel diaphragm

- Eliminates “off gassing” associated with neoprene diaphragm into the gas stream

#### One-piece encapsulated seat design

- Ease of maintenance and ease of cleaning

#### Tamper-proof self re-seating internal valve

- Maintains regulator integrity and reduces maintenance

#### Brass bar stock body

- Designed to 1 x 10<sup>-9</sup> cc/sec. inboard helium leak rate to maintain gas purity levels

#### Easy panel mounting

- Front or back (panel mounting ring optional)

#### Seat assembly with built-in filter

- Traps foreign matter thus extending regulator life and reduces maintenance

### Ordering Information



### Part Number Matrix - USB

A	
GAS	INSCRIBE
Air- compressed	CGA 346
Argon	CGA 580
Argon mix	CGA 580
Carbon dioxide*	CGA 320
Helium	CGA 580
Hydrogen	CGA 350
Argon/methane	CGA 350
Nitrogen	CGA 580
Air - industrial	CGA 590
Nitrous oxide*	CGA 326
Oxygen	CGA 540
Other gas: provide CGA number	

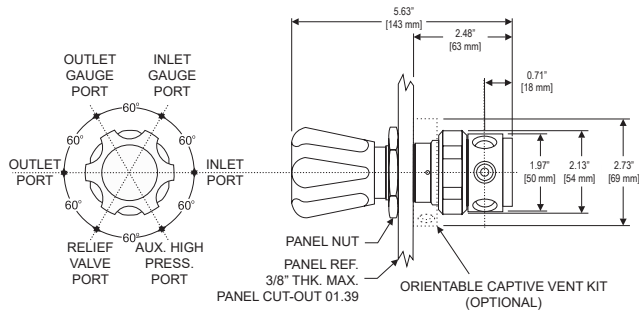
B	
DELIVERY PRESSURE	INSCRIBE
1-15 psi (0-30 psi gauge)	15
5-50 psi (0-100 psi gauge)	50
30-125 psi (0-200 psi gauge)	125
50-250 psi (0-400 psi gauge)	250
100-500 psi (0-1000 psi gauge)	500
C	
OUTLET ASSEMBLY	INSCRIBE
1/4" F.NPT	4FB
1/4" M.NPT	4MB
Diaphragm valve	DVB
1/8" Compression Brass	CB2
1/4" Compression Brass	CB4

D	
OPTIONS	INSCRIBE
Panel Mounting Ring	PMR
Pressure Relief Valve	PRV
E	
COUNTRY	INSCRIBE
USA	Leave blank
Germany	DIN
United Kingdom	BS
France	AFNOR
Italy	UNI
Argentina	IRAM
Australia & New Zealand	AS
Brazil	ABNT
Netherlands	NEN
Spain	ITC

\* For carbon dioxide and nitrous oxide service, it is strongly recommended to use electrically heated regulators. Should flow of carbon dioxide or nitrous oxide exceed 35 SCFH, regulator will freeze up and warranty will be null & void.

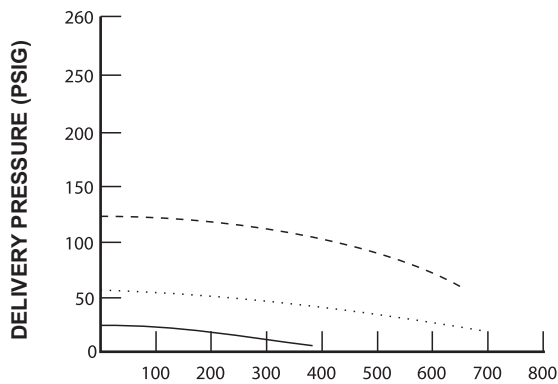
## Dimensions

Approximate dimensions

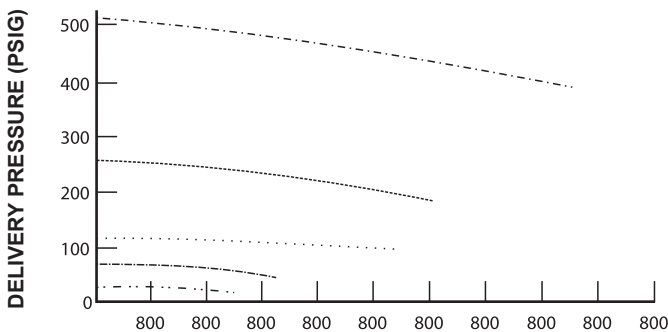


Specifications	
Maximum Inlet Pressure	3000 psig [207 barg]
Flow Coefficient	Cv = 0.08
Operating Temperature	-40°F to 140°F [-40°C to 60°C]
Gauge Diameter	2" [ 51 mm] dial
Inlet Gauge Range	0-4000 psig [0-276 barg]
Delivery Pressures and Related Gauges	See Part Number Matrix

## Flow Data



15 @ 200 PSIG INLET —————  
 50 @ 200 PSIG INLET .....  
 125 @ 200 PSIG INLET - - - - -



15 @ 2000 PSIG INLET .....  
 50 @ 2000 PSIG INLET - - - - -  
 125 @ 2000 PSIG INLET .....  
 250 @ 2000 PSIG INLET .....  
 500 @ 2000 PSIG INLET .....  
 800 800 800 800 800 800 800 800 800

Materials	
<b>Regulator</b>	
Body	Brass Bar Stock
Bonnet	Brass Bar Stock
Diaphragm	316L Stainless Steel
Nozzle	Brass
Seat and Seals	PTFE Teflon
Filter	Nickel-plated Sintered Bronze - 10 micron
Seat Return Spring	PH 17-7 Stainless Steel
Adjusting Knob	ABS Plastic
<b>Diaphragm Valve (if selected)</b>	
Body	Brass
Diaphragm	316 Stainless Steel
Seat	PCTFE (Kel-F™)
Knob	Black Phenolic