GENTEC®

www.gentec.com



SPECIALTY GAS REGULATORS & ACCESSORIES *International Edition*

Regulators • Pressure Gauges • Valves • Filters • Special Applications

Solutions for Life

QMS REGISTERED 0541

API Spec Q1 Registered

TABLE OF CONTENTS

GENTEC® Specialty Gas Products

Solutions for Life

01. Company Overview

02. Regulator Port Components

03. Selecting GENTEC® Gas Regulators

04. Regulator Family



05.-14. General Purpose Forged Brass Regulators

05. G152 General Purpose, Medium Flow Regulator

07. G152T General Purpose, Medium Flow Regulator

09. HP152L High Purity, Medium Flow Line Regulator

11. HP152 High Purity, Medium Flow Regulator

13. HP152T High Purity, Medium Flow Regulator



15.-36. High Purity Regulators

15. R12 Series Low Flow Regulator

17. R13 Series Low Flow Regulator

19. R15 Series Medium Flow Regulator

21. R17 Series High Flow Regulator

23. R19 Series High Flow Regulator

25. R21 Series Low Flow Regulator

27. R22 Series Medium Flow Regulator

29. R23 Series Medium Flow Regulator

31. R30 Series Dual Stage Regulator

33. R31 Series Dual Stage Regulator

35. R34 Series Dual Stage Regulator

TABLE OF CONTENTS

GENTEC® Specialty Gas Products



37.- 44. High Pressure Regulators

37. R42 Series High Pressure Regulator
39. R43 Series High Pressure Regulator
41. R44 Series High Pressure Regulator
43. R45 Series High Pressure Regulator



45.- 58. Special Purpose Regulators

45. R51 Series Corrosion Resistant Regulator
47. R53 Series Tied Diaphragm Regulator
49. R54 Series Tied Diaphragm Regulator
51. R63 Series Dome Loaded Regulator
53. R64 Series Dome Loaded Regulator
55. R81 Series Steam Heated Vaporizing Regulator
57. H229 Series Portable Cylinder Regulator



59.- 70. Back Pressure Regulators

59. R72 Series Back Pressure Regulator
61. R73 Series Back Pressure Regulator
63. R74 Series Back Pressure Regulator
65. R75 Series Back Pressure Regulator
67. R77 Series Back Pressure Regulator
69. R78 Series Back Pressure Regulator



71.- 79. Accessories

71. Regulator Protocol Station and Gauges
73. Valves and Filters
77. Purge Tools and Fittings
79. Cylinder Connections and Brackets

80. **Materials of Construction**
81. **Gas Service**
86. **Material Compatibility**
87. **Allocation Table**
88. **Warranty Information**





Company Overview

Genstar Technologies is a global leader in Gas Flow Control Systems for the industrial, specialty gas and medical sectors. We pride ourselves in our ability to provide our customers with high quality, value-added products and services that go beyond the industry standards. As a result, we have a global network of thousands of satisfied customers in over 60 countries.

Our Team

Our highly educated team of engineers, salespeople, technicians, managers, and customer service personnel are dedicated to providing you with products with the highest quality, reliability and performance. We hold the highest standards to our manufacturing processes; our total process management maximizes our production efficiency while ensuring product quality.

We work closely with all of our customers to design products specific to your needs. This includes developing new products, redesigning existing products, and customizing configuration / packaging. It is our priority to foster a strong relationship with each and every customer.

Quality Assurance

All of our products are manufactured under stringent quality control. We are ISO 9001:2001, ISO13485, and API certified. Our products meet UL, CE, SEMI, and various international standards and certifications.

Manufacturing Capabilities

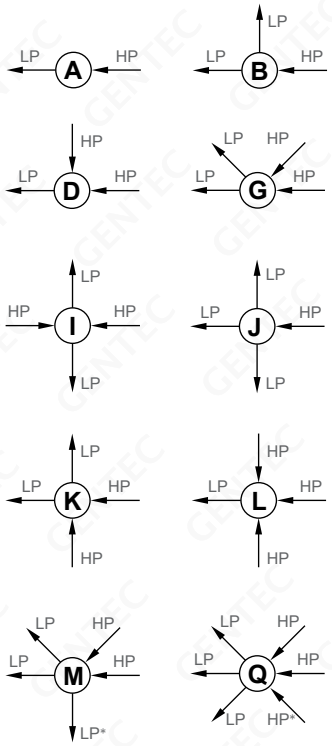
The manufacturing facility is equipped with CNC machines, electro-polishing equipment, and precision automated orbital welding systems, among other features, to ensure the production of the highest quality products.

Clean Room Facilities

Our class 10/100/1000 clean rooms are designed for Ultra High Purity (UHP) products. UHP products undergo precision machining, surface finishing, electro-polishing and passivation. All UHP products are cleaned by 18MΩ DI water in a cascade ultrasonic tank. To ensure the highest UHP product quality, they are then vacuum-dried and double-bagged.



Regulator Port Configurations



* For R31 Series, the "Aux." port is plugged. This port can be used for purging purpose only.

* For the "Aux." port of R31 Series, this port is plugged and cannot be used for relief valve installation.

1. Inlet (High) Pressure Gauge

- Fabricated from German imported Bourdon tubes
- High accuracy and stability

2. Inlet Connection

- Multiple connections available
- Compliant with CGA/BSP/DIN/JIS/GB standards

3. Safety Valve

- Accurate relief of pressure
- Reliable and positive shut-off

4. Outlet Connection

- Multiple connections available

5. Outlet (Low) Pressure Gauge

- Fabricated from German imported Bourdon tubes
- High accuracy and stability

6. Regulator Body

- Fabricated from high-strength corrosion-resistant material
- Fabricated with advanced CNC machines to produce the highest quality of parts
- Wetted area are polished to ensure a clean and smooth flow
- 316L & Hastelloy diaphragms produce a metal-to-metal, leak-proof seal

7. Diaphragm Valve

- Designed to withstand temperature and vibration fluctuations
- Assure a consistent outlet flow
- Ergonomically designed control knob for easy adjustment

Note: Please consult the GENTEC® facility about special port configurations or requests.

Gas Service and Material Compatibility

1. Assess the gas application against the material of construction of the regulator.
2. Regulator components that come into contact with the gas stream called “wetted surfaces” should be compatible with the intended gas service.
3. CGA connections are determined by gas usage. Please refer to the “Cylinder Connection Table,” on page 56 for the recommended connection. International fittings also available.

Gas Purity

High Purity grade gases will require more “diffusion resistant” components than lower purity grade gases. Diffusion means that gases can either desorb or adsorb from the seat or diaphragm material of the regulator resulting in impurity contamination of the gas stream. Stainless Steel diaphragms should also be used since Elastomeric (rubber-based) diaphragms tend to absorb and outgas and they can compromise gas purity.

Outlet Connections

Specific outlet connections are determined by usage, flow, and pressure requirements. Most regulators are available with custom fittings and configured at the time of ordering. GENTEC® offers a wide range of outlet fittings in addition to hose connections, needle and diaphragm valves, and tube fittings.

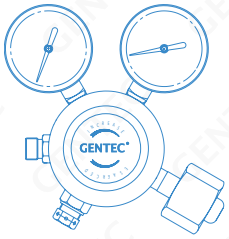
Single vs. Dual Stage

Single-Stage Regulators reduce pressure by passing through a pressure reducing valve area in one step to deliver a pressure within a specific range. These regulators demonstrate a slight increase in delivery pressure as the cylinder pressure falls during use, also known as “Inlet Pressure Decay.” This reduced Inlet Pressure Decay provides less force against the regulator valve causing it to open wider resulting in increased outlet pressure.

Dual-Stage Regulators perform a similar function as Single-Stage Regulators. The Dual-Stage Regulator delivery pressure remains constant as the cylinder pressure decreases. However, greater accuracy in pressure control is maintained because the pressure is reduced by passing through two pressure reducing valves instead of one. The first stage reduces the incoming high pressure into the second stage. The second stage then reduces the remaining pressure to the desired working pressure. Because the inlet pressure on the second stage is relatively stable from the first stage, Dual-Stage Regulators maintain constant delivery pressure and do not require periodic adjustment as the cylinder pressure decreases.

In summary, for a Single-Stage Regulator, the outlet pressure may increase as the cylinder pressure drops. In a Dual-Stage Regulator, the outlet pressure should remain constant as the cylinder pressure drops.

GENTEC® GENERAL PURPOSE REGULATORS

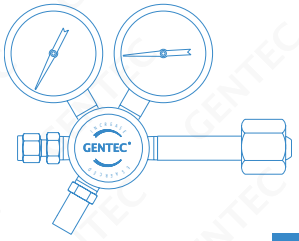


1

Recommended for use with inert and non-corrosive pure and mixed gas applications where elastomeric outgassing is not critical.

These regulators are not recommended for analytical or high purity applications. Typical applications include general laboratory or plant use. GENTEC® regulators can provide safety relief valves to protect downstream equipment from over-pressurization. Needle and Diaphragm Valves on the outlet are also available.

GENTEC® HIGH PURITY REGULATORS

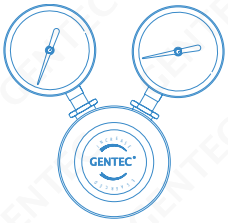


2

Recommended for use with inert, flammable, and semi-corrosive pure and mixed gas applications.

Typical applications include GC analytical instrumentation, chromatographic carrier gas, and process gas regulation. These units minimize outgassing and inboard diffusion through the use of stainless steel convoluted diaphragms, high purity seats and seal rings.

GENTEC® ULTRA & HIGH PURITY CORROSION RESISTANT REGULATORS



3

Recommended for use with semi-corrosive and some toxic applications.

The stainless steel convoluted metal-to-metal diaphragm seal provides superior leak performance and eliminates the need for seal rings. This metal-to-metal seal eliminates outgassing and inboard diffusion in the gas stream.

G152 SERIES

General Purpose Medium Flow Regulator



GENTEC® G152 Series is a Single-Stage Brass Regulator designed for general purpose laboratory applications where occasional readjustment of the working pressure is acceptable.

Not recommended for high purity application in which outgassing due to elastomeric components would adversely affect the process.

G152-DKK-C320-01-NR

Product Features

- 2" Neoprene Diaphragm
- 2" Dual-Scale Pressure Gauges in gold steel casing
- Optional outlet: Needle Valve or Diaphragm Valve
- Conforms to CGA E-4 standard for Gas Pressure Regulators

Materials

- **Body:** Forged Brass
- **Bonnet:** Nickel-Plated Forged Brass
- **Seat:** PU
- **Diaphragm:** Neoprene
- **Seal:** Nylon
- **Adjusting Knob:** ABS plastic

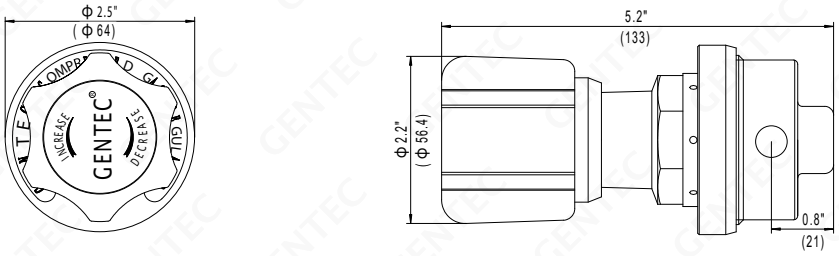
Specifications

- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Operating Temperature Range:** 0 to 140°F (-17 to 60°C)
- **Weight:** 3.13 lb (1.42 kg)

Applications

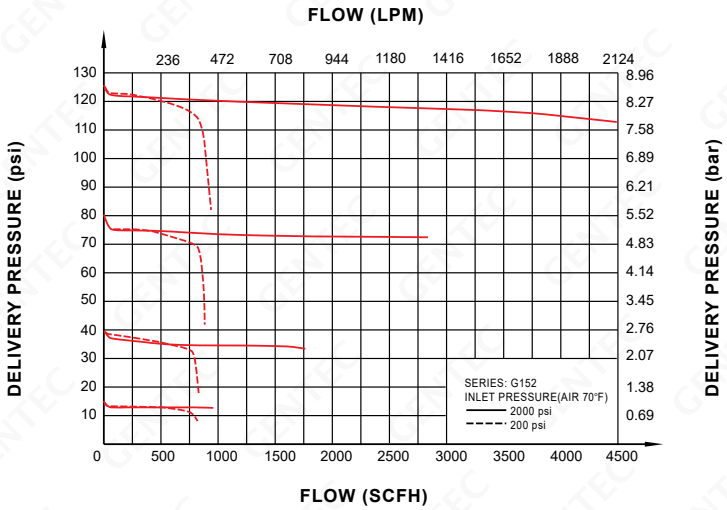
- Non-Corrosive Gases
- Purging
- Leak Testing
- Gas Shielding

Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX: G152	- D	K	K	- C320	- 01	- NR
Series	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
G152	D: 3000 psi (206 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) M: 0-15 psi (1 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C346: CGA346 C320: CGA320 C350: CGA350 C510: CGA510 C540: CGA540 C580: CGA580 C590: CGA590 C326: CGA326 DN05: DIN477 No.5 BS02: BS341 No.2 Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 14B: 1/4" Hose Barb Other connections available*	Blank: None D: Diaphragm Valve N: Needle Valve R: Relief Valve

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.

G152T SERIES

General Purpose Medium Flow Regulator



G152T-DGK-C540-01-NR

GENTEC® G152T Series is a Dual-Stage Brass Regulator designed for general purpose laboratory applications where continuous outlet flow and pressure are desired.

Not recommended for high purity application in which outgassing due to elastomeric components would adversely affect the process.

Product Features

- Neoprene Diaphragm: 1-1/4" for Single-Stage, 2" for Dual-Stage
- 2" Dual-Scale Pressure Gauges in gold steel casing
- Optional outlet: Needle Valve or Diaphragm Valve
- Conforms to CGA E-4 standard for Gas Pressure Regulators

Materials

- **Body:** Forged Brass
- **Bonnet:** Nickel-Plated Forged Brass
- **Seat:** PU
- **Diaphragm:** Neoprene
- **Seal:** Nylon
- **Adjusting Knob:** ABS plastic

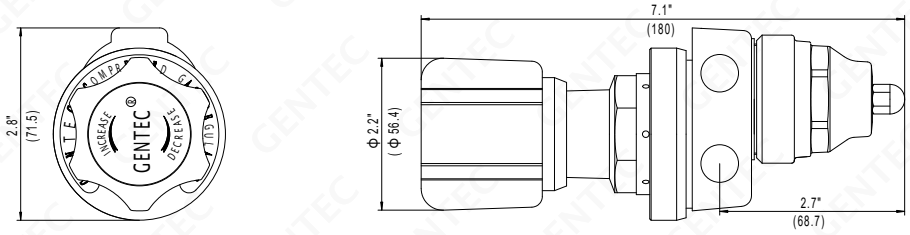
Specifications

- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Operating Temperature Range:** 0 to 140°F (-17 to 60°C)
- **Weight:** 4 lb (1.8 kg)

Applications

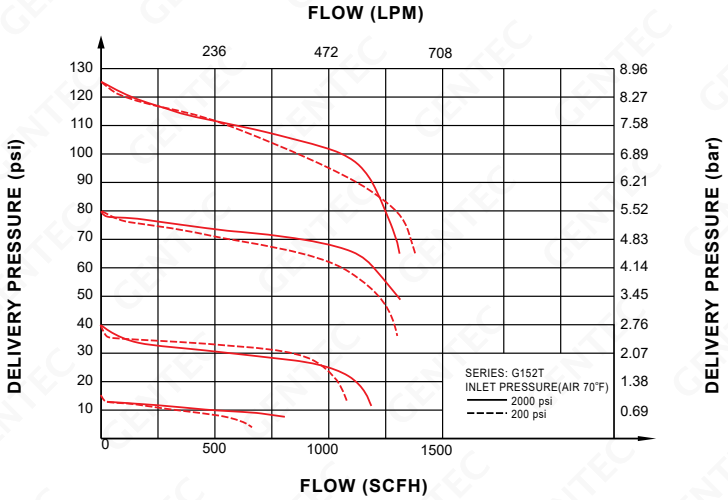
- Non-Corrosive Gases
- Purging
- Leak Testing
- Gas Shielding

Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX: G152T	- D	G	K	- C540	- 01	- NR
Series	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
G152T	D: 3000 psi (206 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) M: 0-15 psi (1 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C346: CGA346 C320: CGA320 C350: CGA350 C510: CGA510 C540: CGA540 C580: CGA580 C590: CGA590 C326: CGA326 DN05: DIN477 No.5 BS02: BS341 No.2 Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 14B: 1/4" Hose Barb Other connections available*	Blank: None D: Diaphragm Valve N: Needle Valve R: Relief Valve

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.

HP152L SERIES

High Purity Medium Flow Line Regulator



HP152L-FHK-11-11

GENTEC® HP152L Series is a Single-Stage High Purity Brass Line Regulator designed for high purity applications where occasional readjustment of the working pressure is acceptable.

Not recommended for corrosive gases.

Product Features

- 2” 316L Stainless Steel Diaphragm
- 2” Dual-Scale Pressure Gauges
- Conforms to CGA E-4 standard for Gas Pressure Regulators

Materials

- **Body:** Nickel-Plated Forged Brass
- **Bonnet:** Nickel-Plated Forged Brass
- **Seat:** PU
- **Diaphragm:** Neoprene
- **Adjusting Knob:** ABS plastic

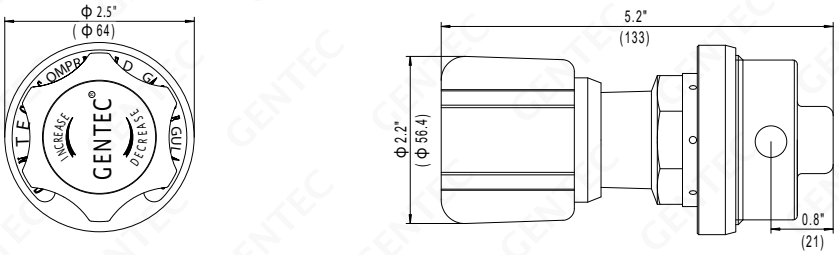
Specifications

- **Maximum Inlet Pressure:** 500 psi (34 bar)
- **Maximum Outlet Pressure:** 150 psi (10 bar)
- **Operating Temperature Range:** 0 to 140°F (-17 to 60°C)
- **Weight:** 2.65 lb (1.2 kg)

Applications

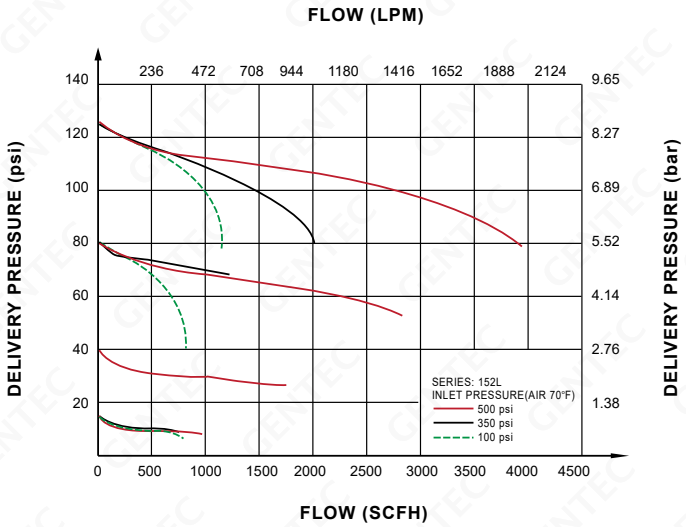
- Pipeline pressure regulation
- Point of use pressure regulation

Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX: HP152L	- F	H	K	- 11	- 11
Series	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections
HP152L	F: 500 psi (34 bar)	H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) M: 0-15 psi (1 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 14B: 1/4" Hose Barb Other connections available*

*: For more connection options contact Gentec.

HP152 SERIES

High Purity Medium Flow Regulator



HP152-DKK-C350-01-NR

GENTEC® HP152 Series is a Single-Stage High Purity Brass Regulator designed for high purity applications where occasional readjustment of the working pressure is acceptable.

Not recommended for corrosive gases.

Product Features

- 2” 316L Stainless Steel Diaphragm
- 2” Dual-Scale Pressure Gauges
- Optional outlet: Needle Valve or Diaphragm Valve
- Conforms to CGA E-4 standard for Gas Pressure Regulators

Materials

- **Body:** Nickel-Plated Forged Brass
- **Bonnet:** Nickel-Plated Forged Brass
- **Seat:** PU
- **Diaphragm:** 316L Stainless Steel
- **Adjusting Knob:** ABS plastic

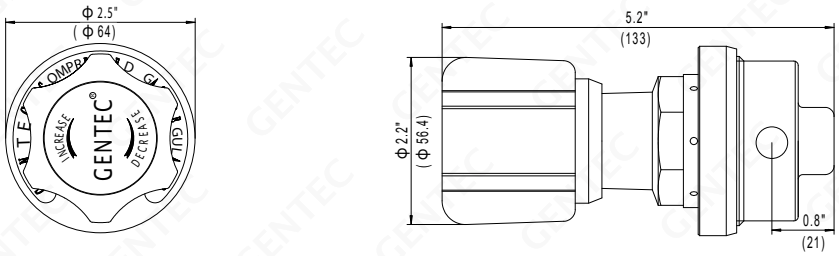
Specifications

- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Operating Temperature Range:** 0 to 140°F (-17 to 60°C)
- **Weight:** 2.65 lb (1.2 kg)

Applications

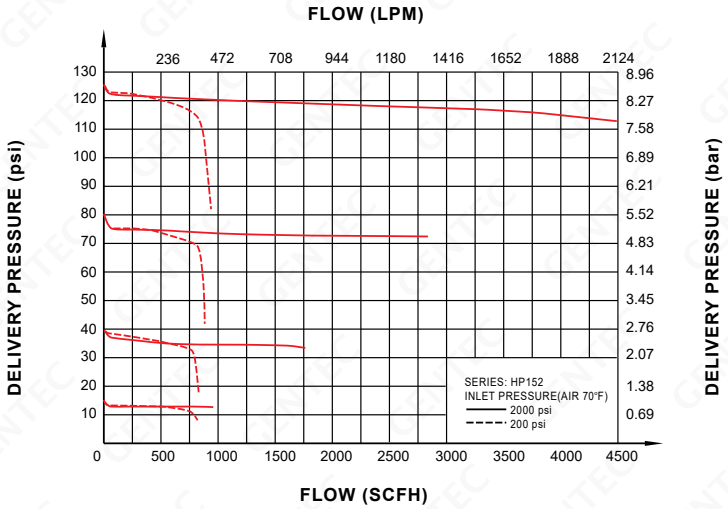
- Calibration of Pressures Gauges & Test Equipment
- Supply of carrier gases for Gas Chromatography

Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX: HP152	- D	K	K	- C350	- 01	- NR
Series	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
HP152	D: 3000 psi (206 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) M: 0-15 psi (1 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C346: CGA346 C320: CGA320 C510: CGA510 C540: CGA540 C580: CGA580 C590: CGA590 C326: CGA326 Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 12: 3/8" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 14B: 1/4" Hose Barb Other connections available*	D: Diaphragm Valve N: Needle Valve R: Relief Valve
	F: 500 psi (34 bar)	H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) M: 0-15 psi (1 bar)	P: psi / bar K: psi / kPa W: No Gauge	C510: CGA510 C300: CGA300 Other connections available*		

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.

HP152T SERIES

High Purity Medium Flow Regulator



HP152T-DIK-C540-01-NR

GENTEC® HP 152T Series is a Dual-Stage High Purity Brass Regulator designed for high purity applications where a consistent outlet pressure and flow are desired.

Not recommended for corrosive gases.

Product Features

- 2" 316L Stainless Steel Diaphragm
- 2" Dual-Scale Pressure Gauges
- Optional outlet: Needle Valve or Diaphragm Valve
- Conforms to CGA E-4 standard for Gas Pressure Regulators

Materials

- **Body:** Nickel-Plated Forged Brass
- **Bonnet:** Nickel-Plated Forged Brass
- **Seat:** PU
- **Diaphragm:** 316L Stainless Steel
- **Adjusting Knob:** ABS plastic

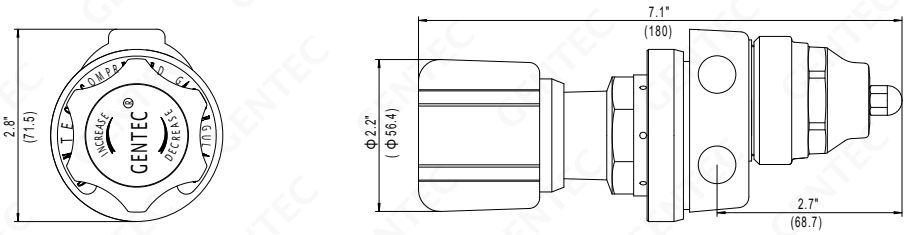
Specifications

- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Operating Temperature Range:** 0 to 140°F (-17 to 60°C)
- **Weight:** 2.65 lb (1.2 kg)

Applications

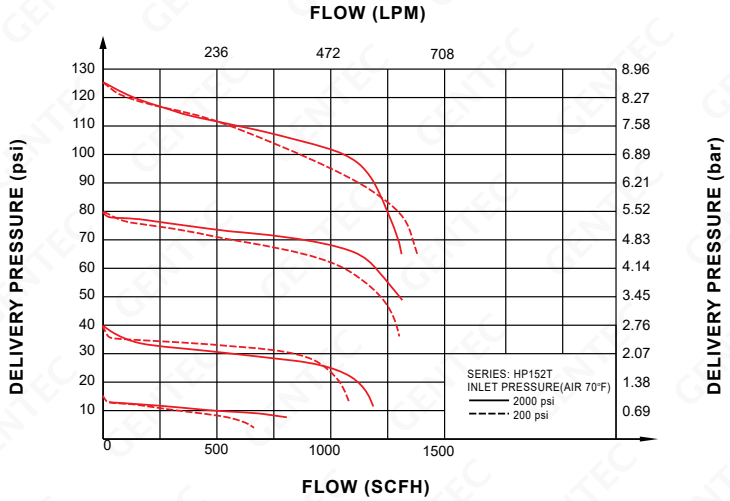
- Calibration of Pressures Gauges & Test Equipment
- Applications where constant delivery pressure required
- Supply of carrier gases for Gas Chromatography

Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX: HP152T	- D	I	K	- C540	- 01	- NR
Series	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
HP152T	D: 3000 psi (206 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) M: 0-15 psi (1 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C346: CGA346 C320: CGA320 C350: CGA350 C510: CGA510 C540: CGA540 C580: CGA580 C590: CGA590 C326: CGA326 DN05: DIN477 No.5 BS02: BS341 No.2 Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 12: 3/8" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 14B: 1/4" Hose Barb Other connections available*	D: Diaphragm Valve N: Needle Valve R: Relief Valve

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.

GENTEC® R12 Series Regulator is a diaphragm-sensed single-stage high purity regulator.



R12SLMK-DLP-C540-71

Product Features

- Single-Stage Configuration
- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 1/4" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PCTFE, PTFE
- **Diaphragm:** 316L Stainless Steel
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

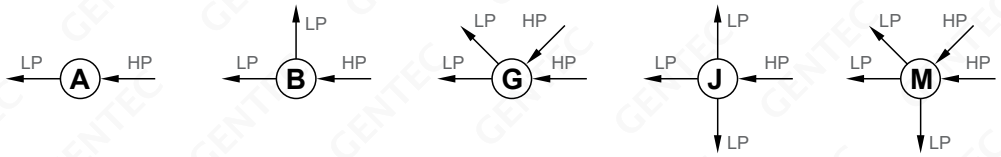
Applications

- Gas Chromatography
- Gas Manifold Systems
- Research Laboratories
- Process Analyzer
- Petrochemical Industry
- Semi-conductor Industry

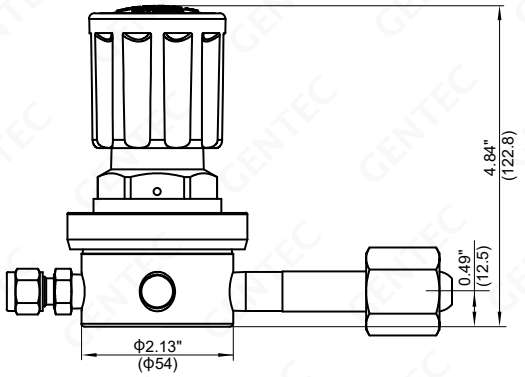
Specifications

- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Safety Test Oressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -20 to 150˚F (-29 to 66˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.15
- **Weight:** 3.3 lb (1.5 kg)

Body Port

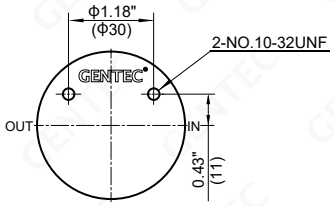


Dimensions

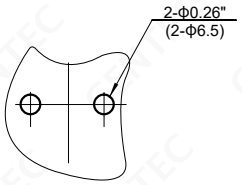


Dimensions: in (mm)

A

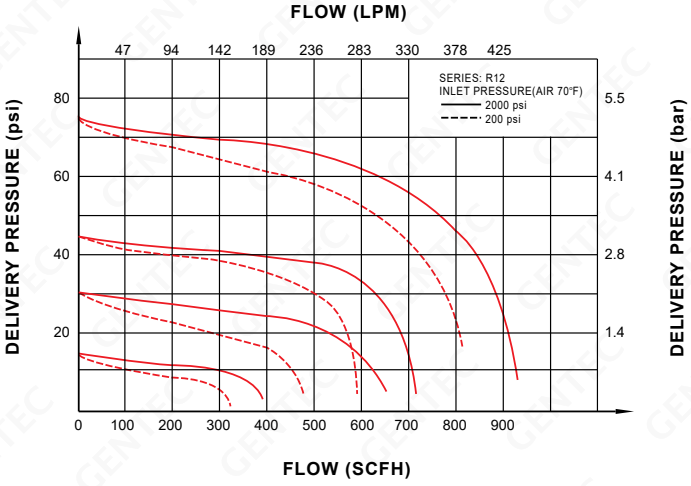


A



Rear Bracket Mount

Flow Data



Ordering Information

EX: R12SL	M	K	- D	Q	P	- 00	- 00	- R
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R12SL (316L)	A B G J M	K: PCTFE T: PTFE	D: 3000 psi (206 bar) E: 1500 psi (103 bar) F: 500 psi (34 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar) M: 0-15 psi (1 bar) Q: 30" Hg Vac-30 psi (2 bar) S: 30" Hg Vac-100 psi (7 bar) T: 30" Hg Vac-200 psi (14 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C346: CGA346 C320: CGA320 C350: CGA350 C510: CGA510 C540: CGA540 C580: CGA580 C590: CGA590 C326: CGA326 DN05: DIN477 No.5 BS02: BS341 No.2 Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 12: 3/8" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 14B: 1/4" Hose Barb Other connections available*	Blank: None R: Relief Valve N: Needle Valve D: Diaphragm Valve

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.

GENTEC® R13 Series Regulator is a diaphragm-sensed single-stage high purity regulator.



R13SLGT-DIK-52-71

Product Features

- Single-Stage Configuration
- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 1/4" NPT(F)
- 1.5" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel, Nickel-Plated Brass
- **Seat:** PCTFE(R13SL), PTFE(R13B)
- **Diaphragm:** 316L Stainless Steel
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

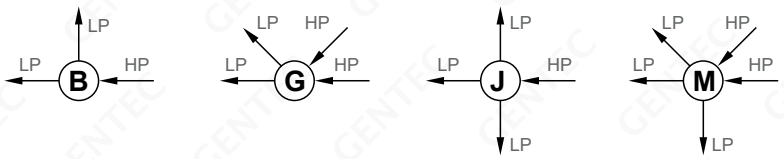
Applications

- Gas Chromatography
- Research Laboratories
- Process Analyzer
- Petrochemical Industry
- Semi-conductor Industry
- Power Plant

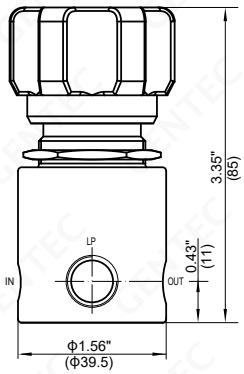
Specifications

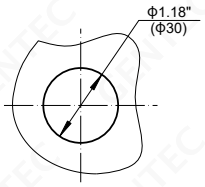
- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 150 psi (10 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.06
- **Weight:** 1.3 lb (0.6 kg)

Body Port



Dimensions

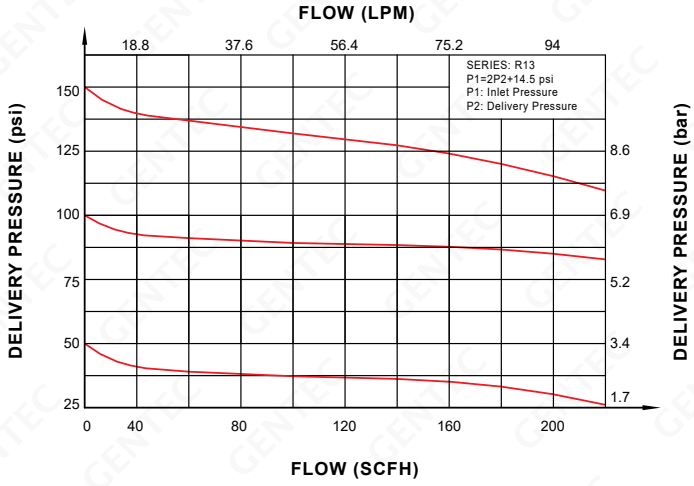




Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data



Ordering Information

EX:	R13SL	G	K	- F	H	P	- 11	- 11	- P
	Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
	R13B (Brass) R13SL (316L)	B G J M	T: PTFE (R13B) K: PCTFE (R13SL)	D: 3000 psi (206 bar) E: 1500 psi (103 bar) F: 500 psi (34 bar)	H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) J: 0-75 psi (5 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar) M: 0-15 psi (1 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) 01: 1/4" NPT(M) C330: CGA330 C350: CGA350 C580: CGA580 C660: CGA660 C590: CGA590 DN05: DIN477 No.5 BS02: BS341 No.2 52: G5/8"-RH(F) Other connections available*	00: 1/4" NPT(F) 10: 1/8" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK Other connections available*	P: Panel Mount

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.

GENTEC® R15 Series Regulator is a diaphragm-sensed single-stage high purity regulator.



R15SLBE-DIP-04-04

Product Features

- Single-Stage Configuration
- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 1/2" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PTFE, PEEK
- **Diaphragm:** 316L Stainless Steel
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

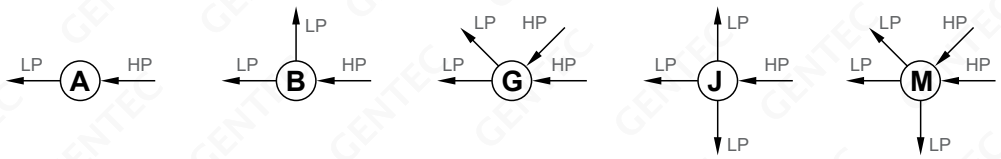
Applications

- Semiconductor Industry
- Research Laboratories
- Process Analyzer
- Gas Chromatography
- Petrochemical Industry
- Purge system

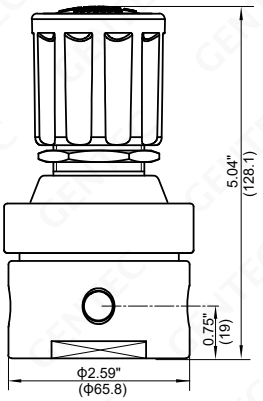
Specifications

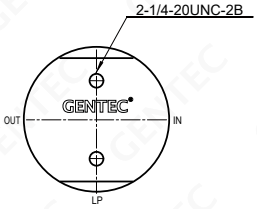
- **Maximum Inlet Pressure:** 4500 psi (310 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 1.0
- **Weight:** 2.0 lb (0.9 kg)

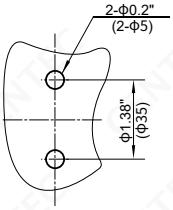
Body Port



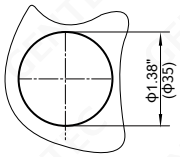
Dimensions







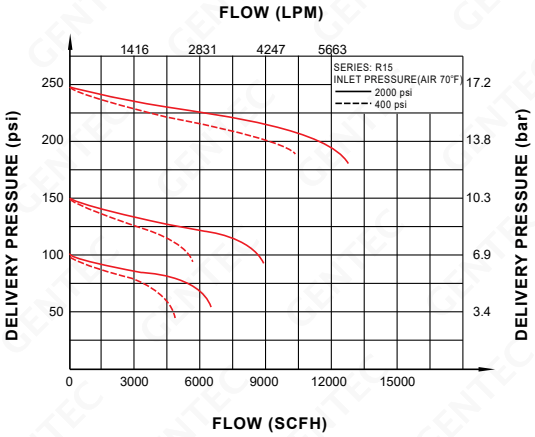
Rear Bracket Mount

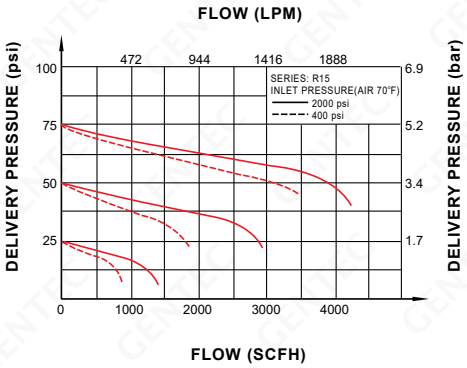


Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data





Ordering Information

EX: R15SL	J	T	- F	G	K	- 04	- 04	- P
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R15SL (316L)	A B G J M	T: PTFE E: PEEK	C: 4500 psi (310 bar) D: 3000 psi (206 bar) E: 1500 psi (103 bar) F: 500 psi (34 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar)	P: psi / bar K: psi / kPa W: No Gauge	04: 1/2" NPT(F) Other connections available*	04: 1/2" NPT(F) Other connections available*	Blank: None P: Panel Mount R: Relief Valve

*: For more options contact GENTEC.



R17SLGB-FIP-08-08

GENTEC® R17 Series Stainless Steel Regulator is a diaphragm-sensed single-stage high flow regulator.

Product Features

- Single-Stage Configuration
- Inlet & Outlet Port Size: 1” NPT(F)
- 2” Pressure Gauge

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PU, NBR
- **Diaphragm:** 316L Stainless Steel, PTFE
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

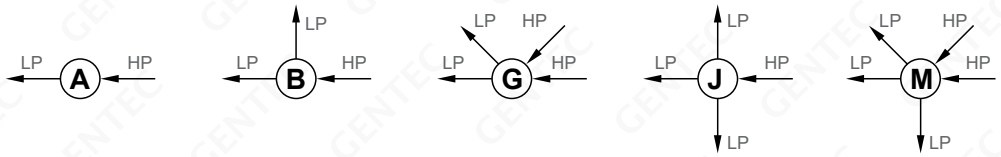
Specifications

- **Maximum Inlet Pressure:**
  PU Seat: 3000 psi (206 bar)
  NBR Seat: 500 psi (34 bar)
- **Maximum Outlet Pressure:**
  316L Diaphragm: 250 psi (17 bar)
  PTFE Diaphragm: 50 psi (3.4 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 5.2
- **Weight:** 13.2 lb (6 kg)

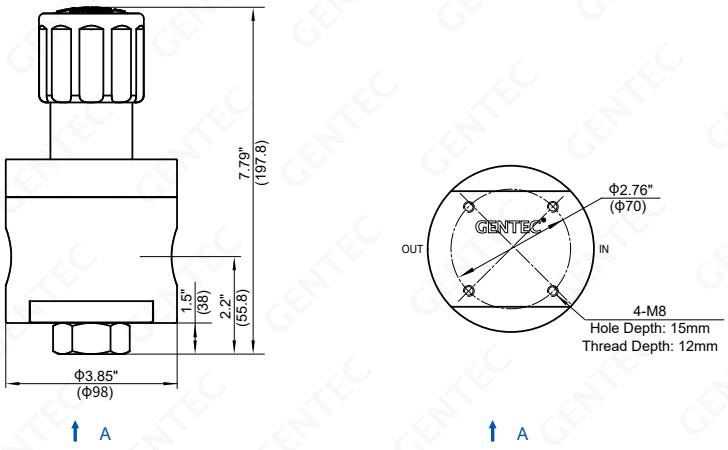
Applications

- Petrochemical
- Power Plant Equipment
- Low Pressure Tank
- Heat Treatment Equipment

Body Port

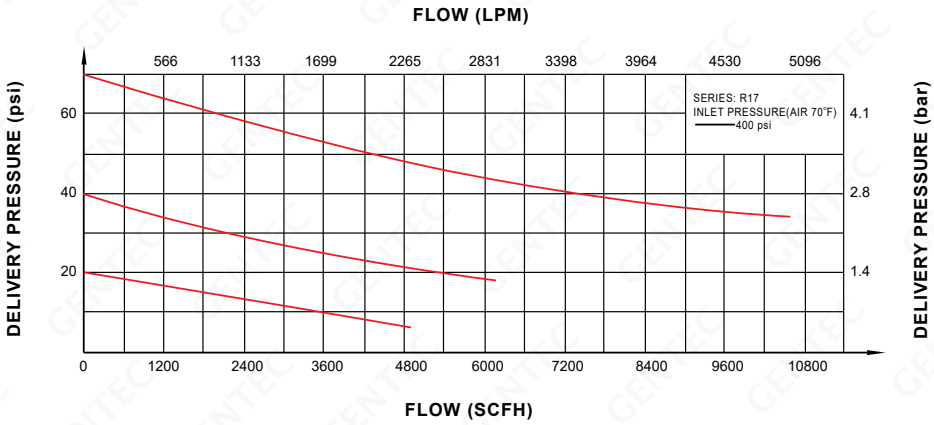


Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX:	R17SL	J	B	- F	K	P	- 08	- 08	- R
	Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
	R17SL (316L)	A B G J M	P: PU B: NBR	D: 3000 psi (206 bar) F: 500 psi (34 bar)	**316L Diaphragm** G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) J: 0-75 psi (5 bar) **PTFE Diaphragm** K: 0-50 psi (3 bar) L: 0-25 psi (1.7 bar) M: 0-15 psi (1 bar) N: 0-6 psi (0.4 bar)	P: psi / bar K: psi / kPa W: No Gauge	08: 1" NPT(F) Other connections available*	08: 1" NPT(F) Other connections available*	R: Relief Valve

*: For more options contact GENTEC.

GENTEC® R19 Series regulator is a diaphragm-type, single-stage pressure regulator that delivers stable outlet pressure, designed for applications requiring low outlet pressure and high flow rates.



R19SLAY-GIW-FNT24

Product Features

- Single-stage Diaphragm Type Regulator
- Pressure Gauge Interface: 1/4" NPT (F)
- Inlet & Outlet Connection: 1-1//2" NPT (F), 1-1/2" Weld stub

Materials

- **Body:** 316L Stainless Steel
- **O-rings**: EPDM, Viton®(Optional)
- **Seat:** EPDM, Viton®(Optional)
- **Diaphragm:** EPDM, PTFE(Optional), Viton®(Optional)

Max. Outlet Pressure (P2)	Seat	Diaphragm	O-ring
100 ≤ P2 ≤ 250 psi	EPDM	EPDM	EPDM
	Viton®	PTFE	Viton®
P2 < 100 psi	EPDM	EPDM	EPDM
	Viton®	Viton®	Viton®

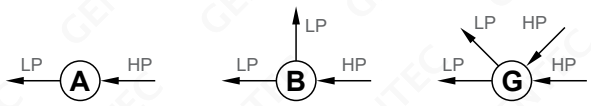
Applications

- Petrochemical
- Power Plant Equipment
- Low Pressure Tank
- Heat Treatment Equipment
- Cryogenic (Dewar) Gas Supply System
- Medical Gas Supply

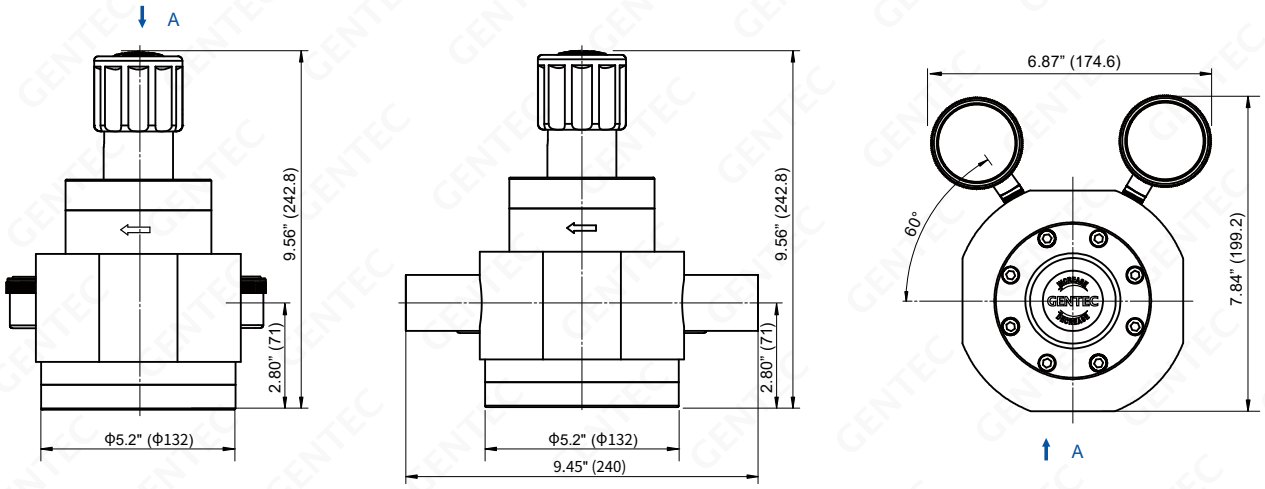
Specifications

- **Maximum Inlet Pressure:** 500 psi (34 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Safety test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Flow Coefficient (Cv):** 10.0
- **Wetted Surface:** Ra 15 µin
- **Weight:** 34.17 lb (15.5 kg)

Body Port

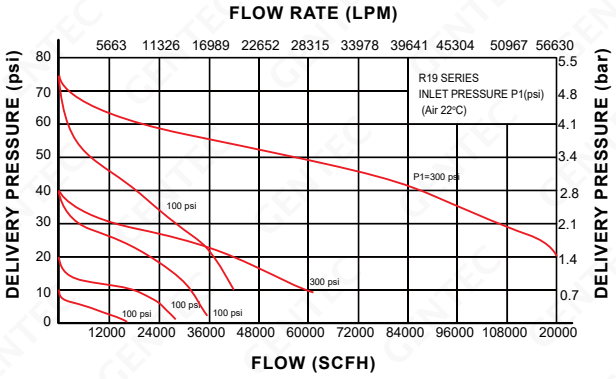


Dimensions

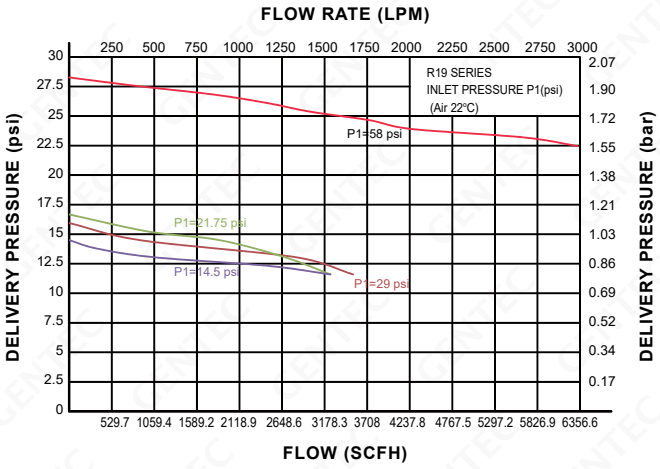


Dimensions: in (mm)

Flow Data



High-pressure Diaphragm Flow Curve



Low-pressure Diaphragm Flow Curve

Ordering Information

EX: R19SL	A	Y	- G	I	W	- FNT24
Series	**Body Ports**	**Seat Material**	**Inlet Pressure**	**Outlet Pressure**	**Gauge**	**Inlet/Outlet Connections**
R19SL (316L)	A B G	Y: EPDM R: Viton®(Optional)	G: 300 psi (20.6 bar) F: 500 psi (34 bar) (Optional)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) J: 0-75 psi (5 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.7 bar) M: 0-15 psi (1 bar) N: 0-6 psi (0.4 bar)	W: No Gauge P: psi / bar K: psi / kPa	FNT24: 1-1/2" NPT (F) TW24: 1-1/2" Weld stub When Inlet and Outlet connections are the same, please write a connection Code.



R21SLMK-DIK-C580-11-D



R21SLJT-FIK-11-11

GENTEC® R21 Series Regulator is a diaphragm-sensed single-stage high purity regulator.

Product Features

- Single-Stage Configuration
- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 1/4" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel, Nickel-Plated Brass
- **Seat:** PCTFE, PTFE, Vespel®
- **Diaphragm:** 316L Stainless Steel, C-22
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

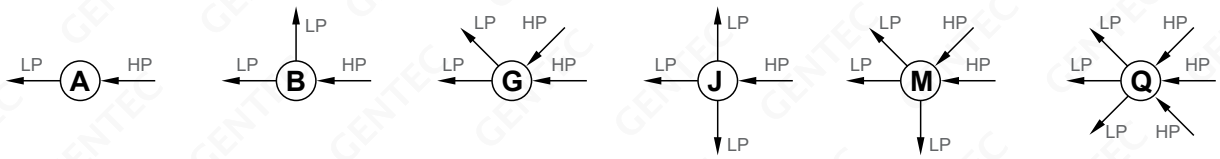
Specifications

- **Maximum Inlet Pressure:** 4500 psi (310 bar)
- **Maximum Outlet Pressure:** 500 psi (34 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.14
- **Weight:** 2.0 lb (0.9 kg)

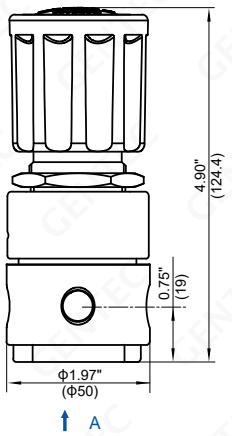
Applications

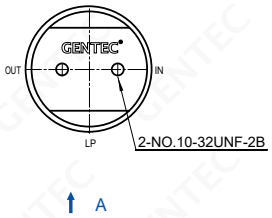
- Semiconductor Industry
- Research Laboratories
- Process Analyzer
- Gas Chromatography
- Petrochemical Industry
- Power Plants

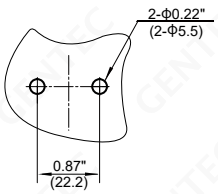
Body Port



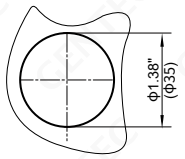
Dimensions







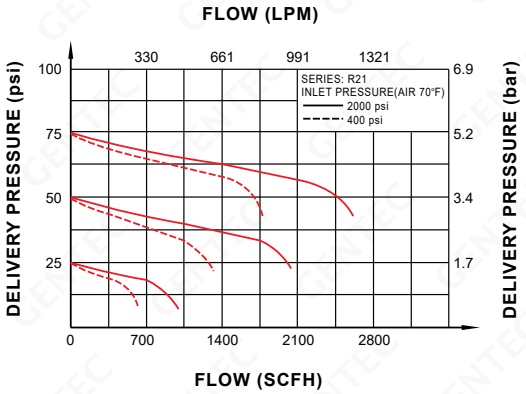
Rear Bracket Mount

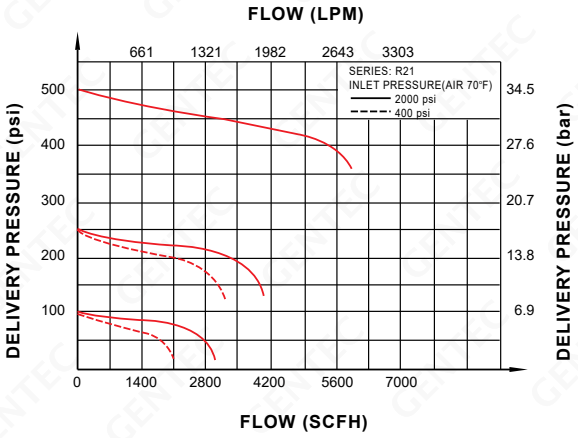


Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data





Ordering Information

EX: R21SL	M	K	- D	I	P	- C580	- 11	- D
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R21B (Brass) **R21SL** (316L)	A B G J M Q	K: PCTFE T: PTFE V: Vespel®	C: 4500 psi (310 bar) D: 3000 psi (206 bar) E: 1500 psi (103 bar) F: 500 psi (34 bar)	F: 0-500 psi (34 bar) G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar) Q: 30" Hg Vac-30 psi (2 bar) S: 30" Hg Vac-100 psi (7 bar) T: 30" Hg Vac-200 psi (14 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C346: CGA346 C320: CGA320 C350: CGA350 C510: CGA510 C540: CGA540 C580: CGA580 C590: CGA590 C326: CGA326 DN05: DIN477 No.5 BS02: BS341 No.2 Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK Other connections available*	Blank: None P: Panel Mount R: Relief Valve N: Needle Valve D: Diaphragm Valve H: C-22 Diaphragm

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.



R22SLJK-DIP-13-13

GENTEC® R22 Regulator is a diaphragm-sensed single-stage high purity regulator designed for applications where medium flow is desired.

Product Features

- Single-Stage Configuration
- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 1/2" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel, Nickel-Plated Brass
- **Bonnet:** Nickel-Plated Brass Barstock
- **Seat:** PCTFE, Vespel®
- **Diaphragm:** 316L Stainless Steel, C-22
- **Adjusting Knob:** ABS Plastic

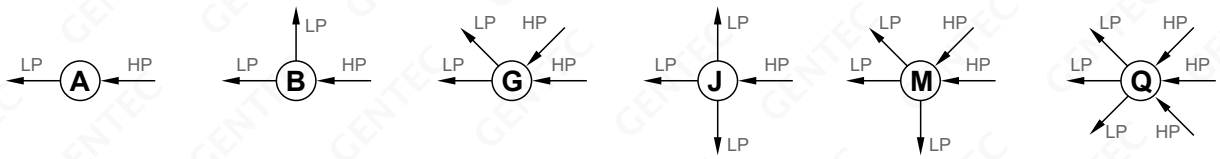
Applications

- Semiconductor Industry
- Gas Manifold Systems
- Research Laboratories
- Petrochemical Industry
- Power Plants

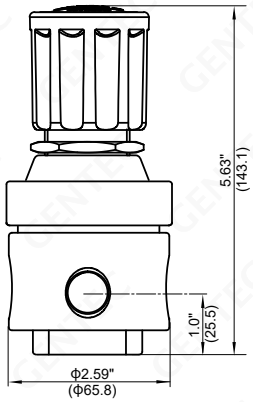
Specifications

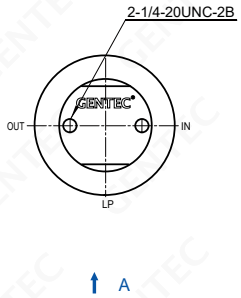
- **Maximum Inlet Pressure:** 4500 psi (206 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 1.0
- **Weight:** 3.5 lb (1.6 kg)

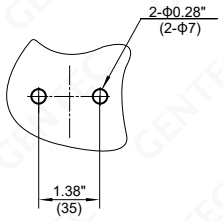
Body Port



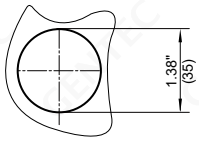
Dimensions







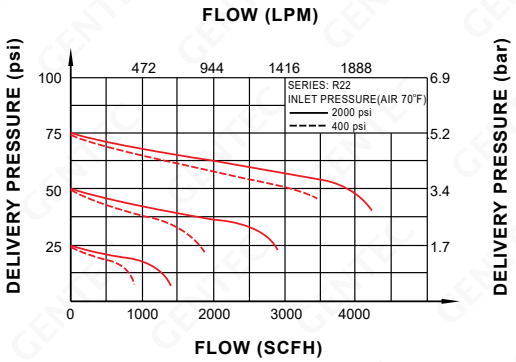
Rear Bracket Mount

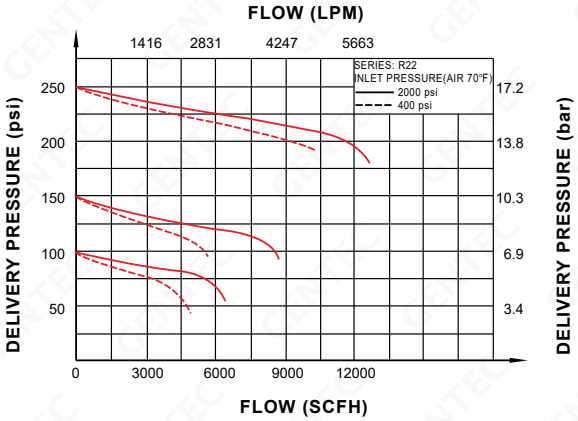


Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data





Ordering Information

EX:	R22SL	M	K	- F	G	K	- 13	- 13	- P
	Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
	R22B (Brass) **R22SL** (316L)	A B G J M Q	K: PCTFE V: Vespel®	C: 4500 psi (310 bar) D: 3000 psi (206 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar)	P: psi / bar K: psi / kPa W: No Gauge	04: 1/2" NPT(F) 05: 1/2" NPT(M) 13: 1/2" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 18: 12 mm GENLOK Other connections available*	04: 1/2" NPT(F) 05: 1/2" NPT(M) 13: 1/2" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 18: 12 mm GENLOK Other connections available*	Blank: None P: Panel Mount H: C-22 Diaphragm
				F: 500 psi (34 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar) Q: 30" Hg Vac-30 psi (2 bar) S: 30" Hg Vac-100 psi (7 bar) T: 30" Hg Vac-200 psi (14 bar)				

*: For more connection options contact Gentec.



R23SLJK-DHW-06-06

GENTEC® R23 Series Regulator is a diaphragm-sensed single-stage "High Purity-style" regulator, designed for applications where high flow is desired. Available in stainless steel.

Product Features

- Single-Stage Configuration
- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 3/4" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PCTFE, Vespel®
- **Diaphragm:** 316L Stainless Steel, C-22
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

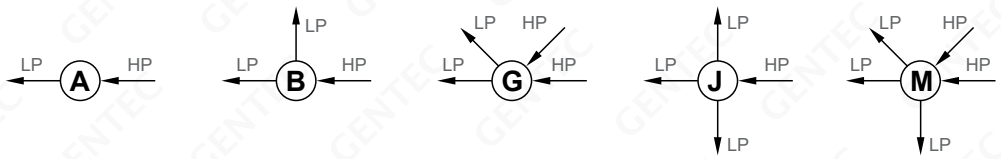
Applications

- Purging Systems
- Specialty Gas
- Pressure Control Facilities
- Gas Control Box

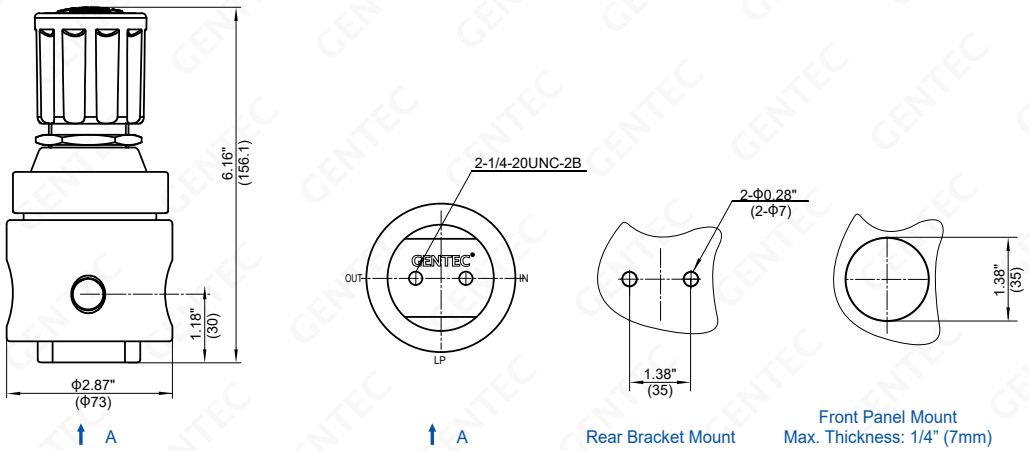
Specifications

- **Maximum Inlet Pressure:** 4500 psi (206 bar)
- **Maximum Outlet Pressure:** 150 psi (10 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 1.8
- **Weight:** 6.0 lb (2.7 kg)

Body Port

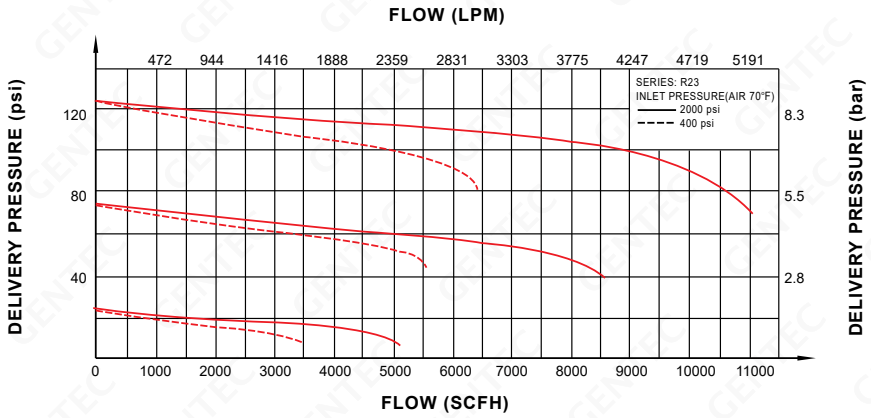


Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX: R23SL	J	K	- D	H	W	- 06	- 06	- P
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R23SL (316L)	A B G J M	K: PCTFE V: Vespel®	C: 4500 psi (310 bar) D: 3000 psi (206 bar) E: 1500 psi (103 bar)	H: 0-150 psi (10 bar)	P: psi / bar K: psi / kPa W: No Gauge	06: 3/4" NPT(F) Other connections available*	06: 3/4" NPT(F) Other connections available*	Blank: None P: Panel Mount H: C-22 Diaphragm
			F: 500 psi (34 bar)	H: 0-150 psi (10 bar) J: 0-75 psi (5 bar) L: 0-25 psi (1.5 bar) M: 0-15 psi (1 bar)				

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.



GENTEC® R30 Series Dual Stage High Purity Diaphragm Regulator designed for applications where a consistent outlet pressure and flow are desired. The R30 series is designed for applications where size is a concern. The small footprint is ideal for gas chromatography, gas detection equipment, and emission monitoring systems.

R30SLQT-DIP-C540-10-R

Product Features

- Dual-Stage Configuration
- Metal-to-Metal Seal
- Inlet Port Size: 1/4" NPT(F)
- Outlet Port Size: 1/8" NPT(F)
- 1.5" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel, Nickel-Plated Brass
- **Bonnet:** Stainless Steel
- **Seat:** PTFE
- **Diaphragm:** 316L Stainless Steel
- **Adjusting Knob:** ABS Plastic

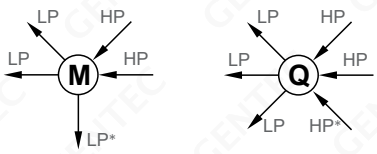
Applications

- Gas Chromatography
- Research Laboratories
- Process Analyzer
- Petrochemical Industry
- Pharmaceutical & Biotechnology
- Gas Detection Equipment
- Emission Monitoring Systems

Specifications

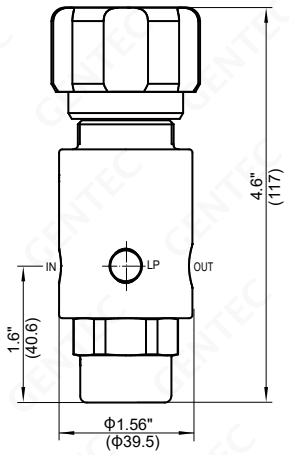
- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 150 psi (10 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.05
- **Weight:** 1.6 lb (0.73 kg)

Body Port

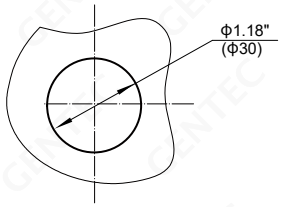


* : The "Aux." port is plugged, it can be used for testing only.

Dimensions

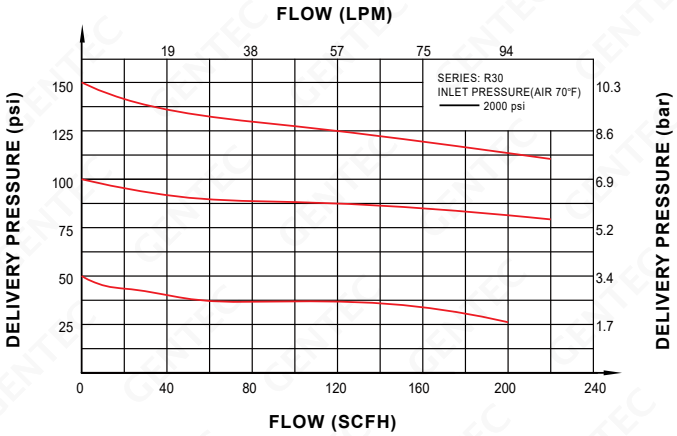


Dimensions: in (mm)



Front Panel Mount
Max. Thickness: 1/4" (7mm)

Flow Data



Ordering Information

EX: R30SL	Q	T	- D	I	P	- 00	- 20	- R
Series	**Body Ports**	**Seat Material**	**Inlet Pressure**	**Outlet Pressure**	**Gauge**	**Inlet Connections**	**Outlet Connections**	**Options**
R30B (Brass) **R30SL** (316L)	M Q	T: PTFE	D: 3000 psi (206 bar)	H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C180: CGA180 C170: CGA170 C165: CGA165 C330: CGA330 C350: CGA350 C580: CGA580 C660: CGA660 C590: CGA590 52: G5/8"-RH (F) 63: W21.8-14RH (F) 64: W21.8-14LH (F) Other connections available*	20: 1/8" NPT(F) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 74: 1M8 x 1RH(M) Other connections available*	P: Panel Mount R: Relief Valve

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.

GENTEC® R31 Series Regulator is a diaphragm-sensed dual-stage high purity regulator designed for applications where a consistent outlet pressure and flow are desired.



R31SLMK-DIK-C350-11-D

Product Features

- Dual-Stage Configuration
- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 1/4" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel, Nickel-Plated Brass
- **Bonnet:** Stainless Steel
- **Seat:** PCTFE, PTFE, Vespel®
- **Diaphragm:** 316L Stainless Steel, C-22
- **Adjusting Knob:** ABS Plastic

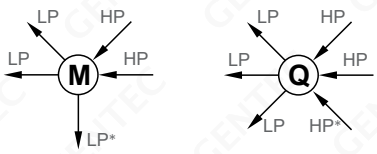
Applications

- Research Laboratories
- Gas Chromatography
- Process Analyzers
- Petrochemical Industry
- Power Plants

Specifications

- **Maximum Inlet Pressure:** 4500 psi (310 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.08
- **Weight:** 4.0 lb (1.8 kg)

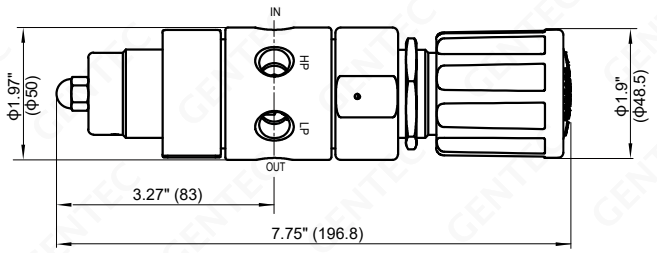
Body Port

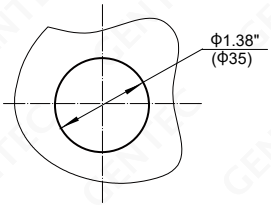


* For R31 Series, the "Aux." port is plugged. This port can be used for purging purpose only.

* For the "Aux." port of R31 Series, this port is plugged and cannot be used for relief valve installation.

Dimensions

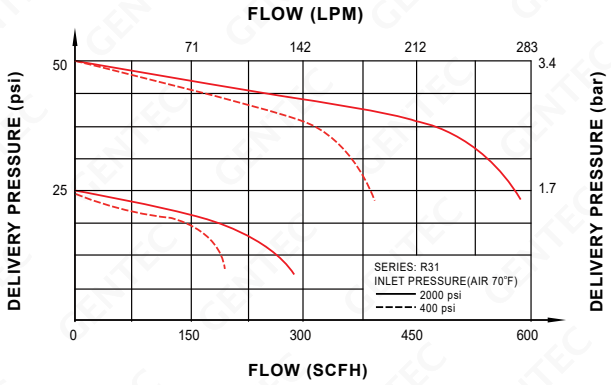


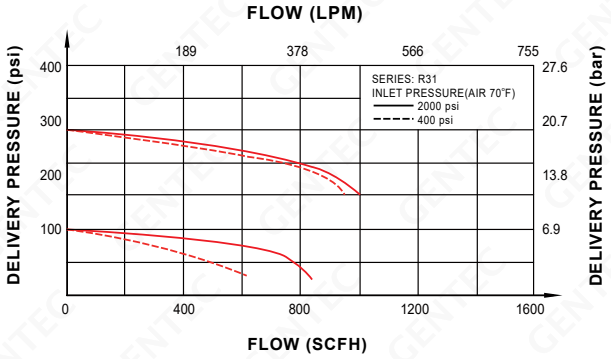


Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data





Ordering Information

EX: R31SL	Q	K	- D	I	K	- C350	- 11	- D
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R31B (Brass) **R31SL** (316L)	M Q	K: PCTFE T: PTFE V: Vespel®	C: 4500 psi (310 bar) D: 3000 psi (206 bar) F: 500 psi (34 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar) Q: 30" Hg Vac-30 psi (2 bar) S: 30" Hg Vac-100 psi (7 bar) T: 30" Hg Vac-200 psi (14 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C330: CGA330 C350: CGA350 C580: CGA580 C660: CGA660 C590: CGA590 DN05: DIN477 No.5 BS02: BS341 No.2 Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 14B: 1/4" Hose Barb Other connections available*	P: Panel Mount R: Relief Valve N: Needle Valve D: Diaphragm Valve H: C-22 Diaphragm

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.



R34SLQK-DHW-04-04

GENTEC® R34SL Series Regulator is a diaphragm-sensed dual-stage high purity regulator designed for applications where a consistent outlet pressure and flow are desired.

Product Features

- Dual-Stage Configuration
- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 1/2" NPT(F)

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PCTFE, Vespel®
- **Diaphragm:** 316L Stainless Steel, C-22
- **Bonnet:** 316L Stainless Steel
- **Adjusting Knob:** ABS Plastic

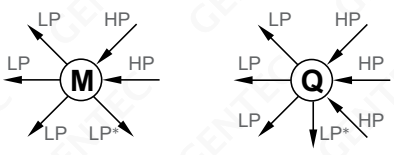
Applications

- Cylinder Gas
- Laboratory
- Gas Phase Analysis
- Test Instrument
- Petrochemical Industry
- Power Plant Equipment

Specifications

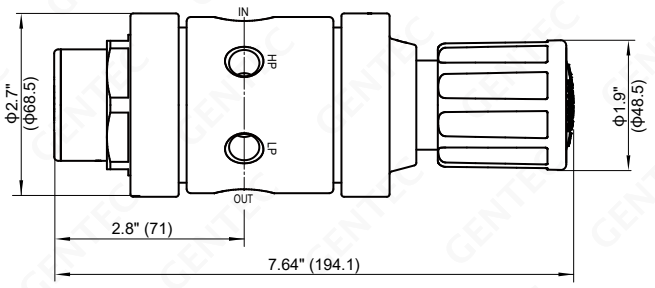
- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 1.0
- **Weight:** 5.98 lb (2.71 kg)

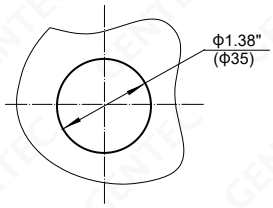
Body Port



* : The "Aux." port is plugged, it can be used for testing only.

Dimensions

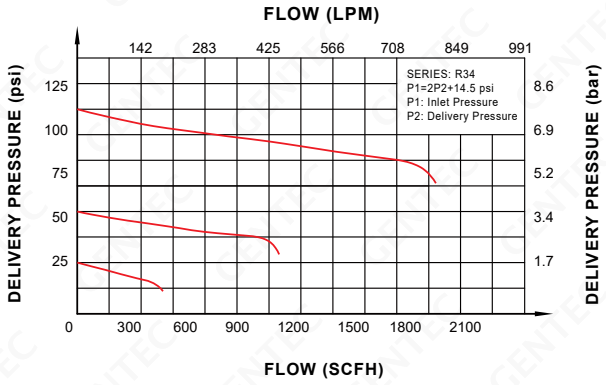


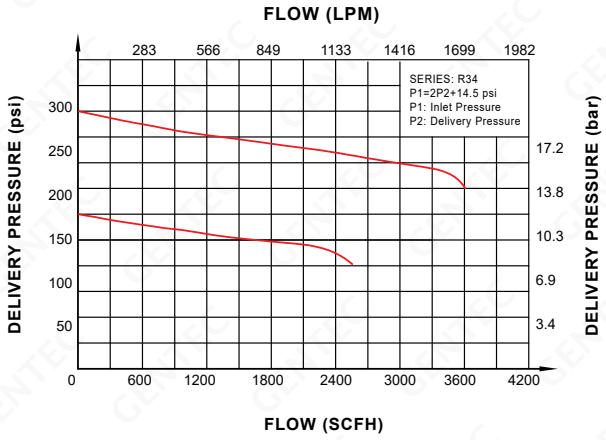


Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data





Ordering Information

EX: R34SL	M	K	- D	G	W	- 04	- 04	- P
Series	**Body Ports**	**Seat Material**	**Inlet Pressure**	**Outlet Pressure**	**Gauge**	**Inlet Connections**	**Outlet Connections**	**Options**
R34SL (316L)	M Q	K: PCTFE V: Vespel®	D: 3000 psi (206 bar) F: 500 psi (34 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) J: 0-75 psi (5.2 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar)	P: psi / bar K: psi / kPa W: No Gauge	04: 1/2" NPT(F) Other connections available*	04: 1/2" NPT(F) Other connections available*	P: Panel Mount R: Relief Valve N: Needle Valve D: Diaphragm Valve H: C-22 Diaphragm

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.



R42SLBK-BDP-04-04

GENTEC® R42 Series High Pressure Regulator is a piston-sensed single-stage high purity regulator designed for applications where high pressure and high flow control are desired.

Product Features

- Piston-Sensed Configuration
- Inlet & Outlet Port Size: 1/2" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PCTFE
- **Piston:** 316L Stainless Steel
- **O-ring:** Viton®
- **Bonnet:** 316L Stainless Steel
- **Adjusting Knob:** Aluminium Alloy

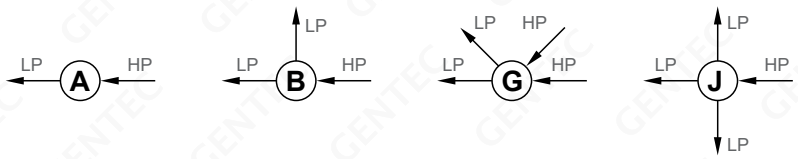
Applications

- Gas Chromatography
- Research Laboratories
- Petrochemical Industry
- Power Plants

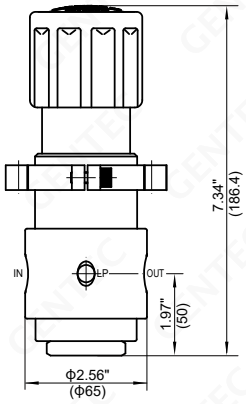
Specifications

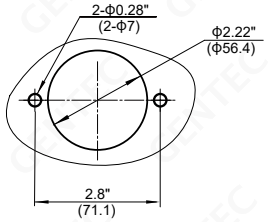
- **Maximum Inlet Pressure:** 6000 psi (412 bar)
- **Maximum Outlet Pressure:** 3000 psi (206 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 1.2
- **Weight:** 5.5 lb (2.5 kg)

Body Port



Dimensions

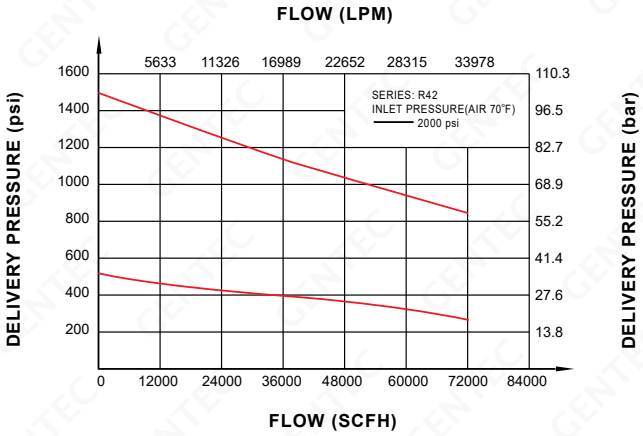




Front Panel Mount

Dimensions: in (mm)

Flow Data



Ordering Information

EX: R42SL	A	K	- B	D	W	- 04	- 04	- V
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R42SL (316L)	A B G J	K: PCTFE	B: 6000 psi (414 bar) C: 4500 psi (310 bar)	D: 0-3000 psi (206 bar) E: 0-1500 psi (103 bar) F: 0-500 psi (34 bar)	P: psi / bar K: psi / kPa W: No Gauge	04: 1/2" NPT(F) Other connections available*	04: 1/2" NPT(F) Other connections available*	Blank: None V: Self Relieving (Venting)

*: For more connection options contact Gentec.



R43SLBK-BDP-06-06

GENTEC® R43 Series High Pressure Stainless Steel Regulator is a piston-sensed single-stage high purity regulator designed for applications where high pressure and high flow control are desired.

Product Features

- Piston-Sensed Configuration
- Inlet & Outlet Port Size: 3/4" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PCTFE
- **Piston:** 316L Stainless Steel
- **O-ring:** Viton®
- **Bonnet:** 316L Stainless Steel
- **Adjusting Knob:** Aluminium Alloy

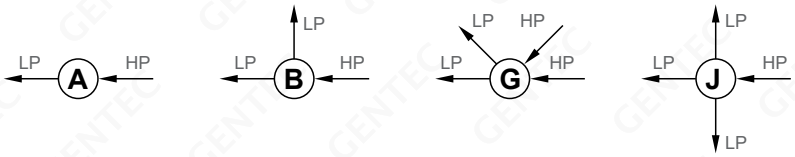
Applications

- Gas Chromatography
- Research Laboratories
- Petrochemical Industry
- Power Plants

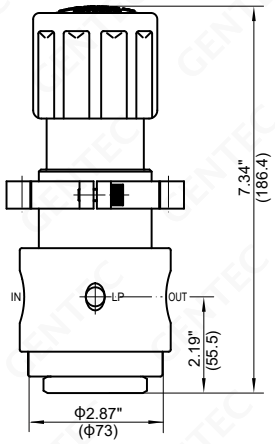
Specifications

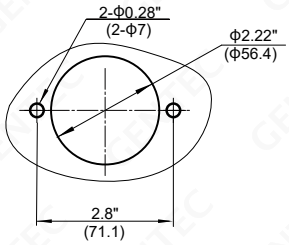
- **Maximum Inlet Pressure:** 6000 psi (412 bar)
- **Maximum Outlet Pressure:** 3000 psi (206 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 2.0
- **Weight:** 6.7 lb (3 kg)

Body Port



Dimensions

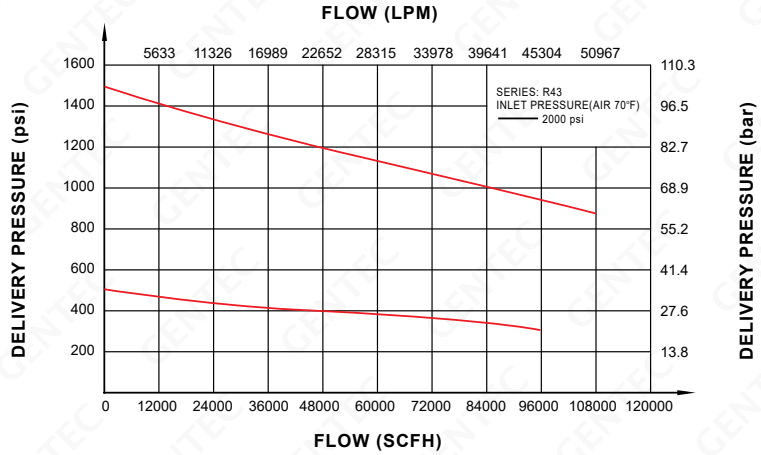




Front Panel Mount

Dimensions: in (mm)

Flow Data



Ordering Information

EX: R43SL	A	K	- B	D	W	- 06	- 06	- V
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R43SL (316L)	A B G J	K: PCTFE	B: 6000 psi (414 bar) C: 4500 psi (310 bar)	D: 0-3000 psi (206 bar) E: 0-1500 psi (103 bar) F: 0-500 psi (34 bar)	P: psi / bar K: psi / kPa W: No Gauge	06: 3/4" NPT(F) Other connections available*	06: 3/4" NPT(F) Other connections available*	Blank: None V: Self Relieving (Venting)

*: For more connection options contact Gentec.



R44SLGK-BDP-00-00

GENTEC® R44 Series High Pressure Stainless Steel Regulator is a piston-sensed single-stage high purity regulator designed for applications where high pressure and low flow control are desired.

Product Features

- Piston-Sensed Configuration
- Inlet & Outlet Port Size: 1/4" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PCTFE, Vespel®
- **Piston:** 316L Stainless Steel
- **O-ring:** Viton®
- **Bonnet:** 316L Stainless Steel
- **Adjusting Knob:** ABS Plastic

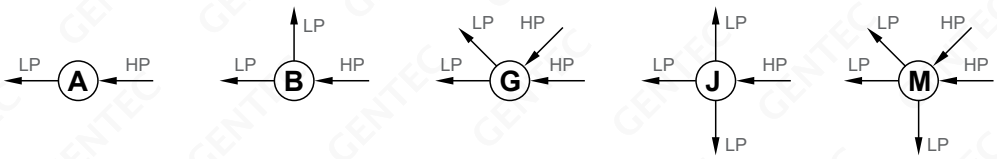
Applications

- Gas Chromatography
- Research Laboratories
- Petrochemical Industry
- Power Plants

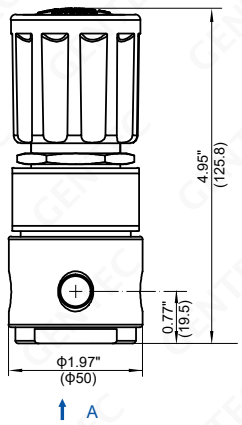
Specifications

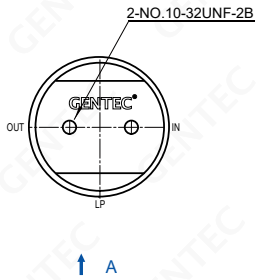
- **Maximum Inlet Pressure:** 6000 psi (412 bar)
- **Maximum Outlet Pressure:** 3000 psi (206 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.06
- **Weight:** 2.45 lb (1.11 kg)

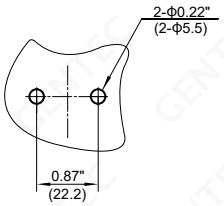
Body Port



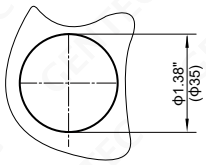
Dimensions







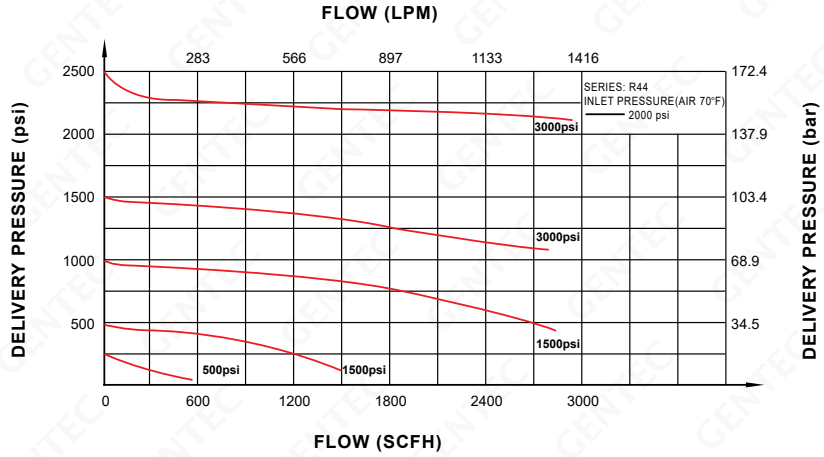
Rear Bracket Mount



Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data



Ordering Information

EX:	R44SL	M	K	- B	D	K	- C590	- 11	- P
	Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
	R44SL (316L)	A B G J M	K: PCTFE V: Vespel®	B: 6000 psi (414 bar) C: 4500 psi (310 bar) D: 3000 psi (206 bar)	D: 0-3000 psi (206 bar) E: 0-1500 psi (103 bar) F: 0-500 psi (34 bar) G: 0-250 psi (17 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C350: CGA350 C540: CGA540 C580: CGA580 C590: CGA590 C677: CGA677 C680: CGA680 C695: CGA695 DN05: DIN477 No.5 BS02: BS341 No.2 Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 14B: 1/4" Hose Barb Other connections available*	Blank: None P: Panel Mount D: Diaphragm Valve N: Needle Valve Some valves not available depending on delivery pressures

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.



R45SLGV-BEP-00-00

GENTEC® R45 Series Ultra High Pressure Single-Stage Regulator is a piston-sensed regulator applicable for highest pressure applications.

Product Features

- Single-Stage Configuration
- Inlet & Outlet Port Size: 1/4" NPT(F)
- 2" Pressure Gauge

Materials

- **Body:** 316L Stainless Steel
- **Seat:** Vespel®
- **Piston:** 316L Stainless Steel
- **O-ring:** Viton®
- **Adjusting Knob:** Aluminium Alloy

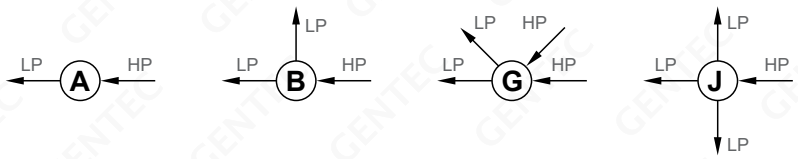
Applications

- Semiconductor Industry
- Research Laboratories
- Process Analyzer
- Gas Chromatography
- Petrochemical Industry
- Power Plants

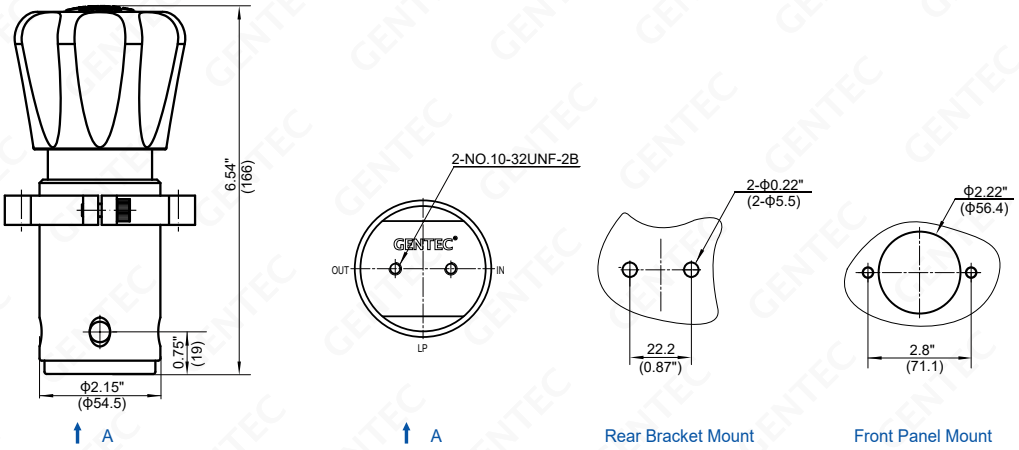
Specifications

- **Maximum Inlet Pressure:** 10000 psi (690 bar)
- **Maximum Outlet Pressure:** 6000 psi (414 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.06
- **Weight:** 4.85 lb (2.2 kg)

Body Port

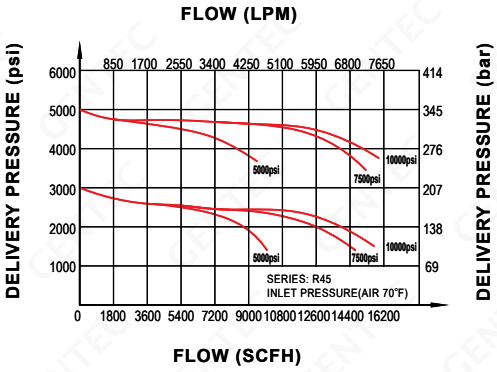


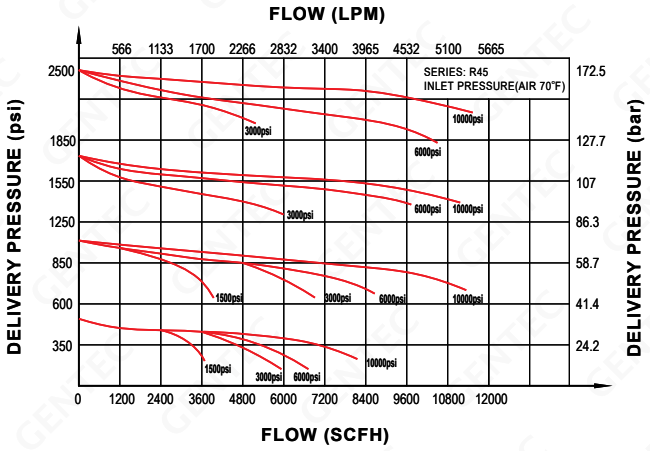
Dimensions



Dimensions: in (mm)

Flow Data





Ordering Information

EX:	R45SL	G	V	- B	E	K	- 00	- 00	- V
	Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
	R45SL (316L)	A B G J	V: Vespel®	A: 10000 psi (690 bar) B: 6000 psi (414 bar)	B: 0-6000 psi (414 bar) C: 0-4500 psi (310 bar) D: 0-3000 psi (206 bar) E: 0-1500 psi (103 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT(F) C347: CGA347 C677: CGA677 C680: CGA680 DN05: DIN477 No.5 BS02: BS341 No.2 Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT(M) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 14B: 1/4" Hose Barb Other connections available*	Blank: None V: Self Relieving (Venting)

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.



R51SLGK-DIP-90-90

GENTEC® R51 Series Corrosion-Resistant Single-Stage Regulator is diaphragm-sensed and especially designed for applications where corrosive and toxic gases are used.

Product Features

- Single-Stage Configuration
- Metal-to-Metal diaphragm to body seal & dual layer sealing ring
- Integrated waste gas disposal connection for additional safety
- Inlet & Outlet Port Size: 1/4" FSR(F)

Materials

- **Body:** 316L Stainless Steel (EP), C-22
- **Bonnet:** 316L Stainless Steel
- **Seat:** PCTFE
- **Stem:** C-22
- **Diaphragm:** C-22

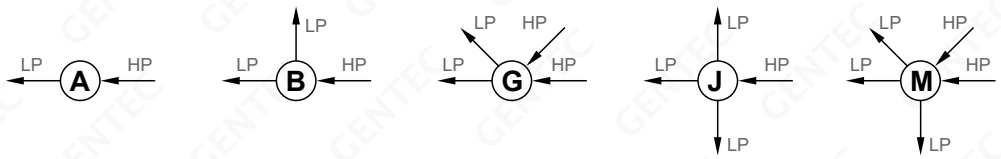
Applications

- Semiconductor Industry
- Solar Energy Industry
- Vacuum Plating Equipment
- Spec Gas Equipment

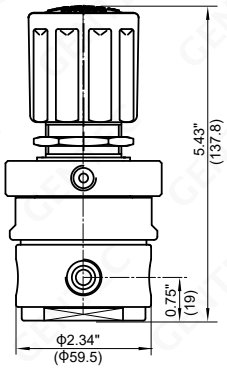
Specifications

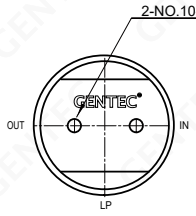
- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 500 psi (34 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.16
- **Weight:** 3.42 lb (1.54 kg)

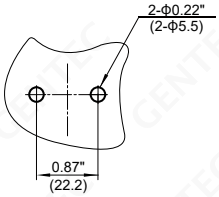
Body Port



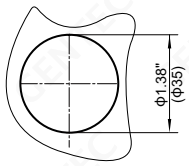
Dimensions







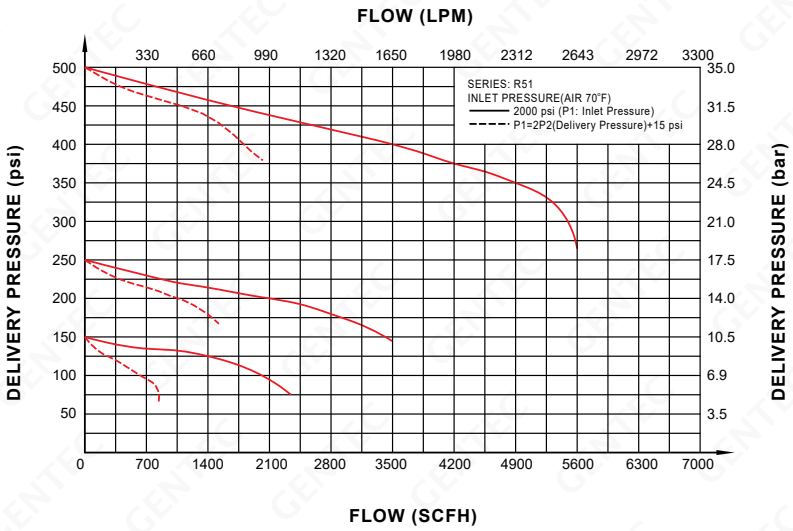
Rear Bracket Mount



Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data



Ordering Information

EX:	R51SL	G	K	- D	I	K	- 90	- 90	- P
	Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
	R51SL (316L) **R51H** (C-22)	A B G J M	K: PCTFE	D: 3000 psi (206 bar) F: 500 psi (34 bar)	F: 0-500 psi (34 bar) G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar)	P: psi / bar K: psi / kPa W: No Gauge	90: Internal 1/4" FSR(F) Other connections available*	90: Internal 1/4" FSR(F) Other connections available*	Blank: None P: Panel Mount

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.

R53 SERIES

Tied Diaphragm Regulator

GENTEC® R53 Series Single Stage Tied Diaphragm Regulator consists of a specially designed link between the diaphragm and main valve. It is designed to prevent "creep" if contaminants should form on the valve seat. This feature improves regulator performance and extends the life of the diaphragm. Additionally, a high flow mesh filter is installed before gas enters the seat. It is attached onto the seat. The entire unit can be swapped out during maintenance of the regulator (seat / filter / nozzle).

Debris prior to the seat will be caught by the filter, preventing debris from entering the regulator.



R53SLGK-DKP-00-00

Product Features

- Single-Stage Configuration
- Metal-to-Metal diaphragm to body seal & dual layer sealing ring
- Integrated waste gas disposal connection for additional safety
- Inlet & Outlet Port Size: 1/4" NPT(F)
- Internal Hastelloy valve trim providing an extra measure of resistance against corrosion (optional)

Materials

- **Body:** 316L Stainless Steel
- **Bonnet:** 316L Stainless Steel
- **Seat:** PCTFE
- **Stem:** 316L Stainless Steel
- **Diaphragm:** 316L Stainless Steel

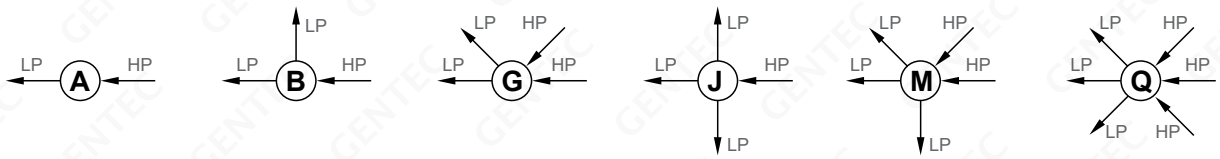
Applications

- Semiconductor Industry
- Research Laboratories
- Regulation of Specialty Gases
- Gas Chromatography
- Oil & Gas
- Device Manufacturers

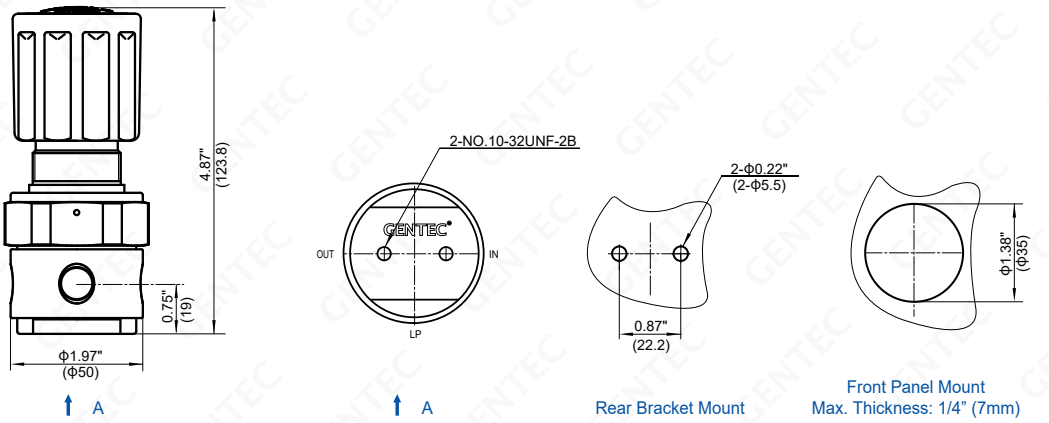
Specifications

- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 250 psi (17 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.14
- **Weight:** 2.0 lb (0.9 kg)

Body Port



Dimensions

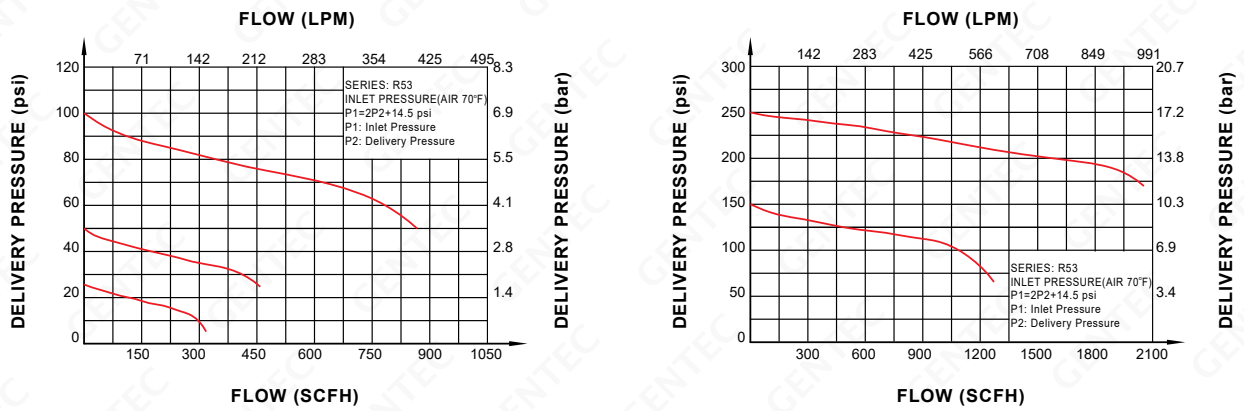


Rear Bracket Mount

Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data



Ordering Information

EX:	R53SL	Q	K	- D	K	K	- 00	- 00	- R
	Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
	R53SL (316L)	A B G J M Q	K: PCTFE	D: 3000 psi (206 bar) E: 1500 psi (103 bar) F: 500 psi (34 bar)	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT (F) C330: CGA330 C350: CGA350 C580: CGA580 C660: CGA660 C590: CGA590 52: G5/8"-RH (F) 63: W21.8-14RH (F) 64: W21.8-14LH (F) Other connections available*	00: 1/4" NPT (F) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 16: 8 mm GENLOK 74: M8 x 1RH (M) Other connections available*	Blank: None R: Relief Valve N: Needle Valve D: Diaphragm Valve

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.

R54 SERIES

Tied Diaphragm Regulator

GENTEC® R54 Series Single Stage Tied Diaphragm Regulator consists of a specially designed link between the diaphragm and main valve. It is designed to prevent "creep" if contaminants should form on the valve seat. This feature improves regulator performance and extends the life of the diaphragm. Additionally, a high flow mesh filter is installed before gas enters the seat. It is attached onto the seat. The entire unit can be swapped out during maintenance of the regulator (seat / filter / nozzle).

Debris prior to the seat will be caught by the filter, preventing debris from entering the regulator.



R54SLGK-DKP-00-00

Product Features

- Single-Stage Configuration
- Metal-to-Metal diaphragm to body seal
- Integrated waste gas disposal connection for additional safety
- Inlet & Outlet Port Size: 1/4" NPT(F)
- Bonnet port: 1/8" NPT(F)
- Internal Hastelloy valve trim providing an extra measure of resistance against corrosion (optional)

Materials

- **Body:** 316L Stainless Steel
- **Bonnet:** 316L Stainless Steel
- **Seat:** PCTFE
- **Stem:** 316L Stainless Steel
- **Diaphragm:** 316L Stainless Steel, C-22

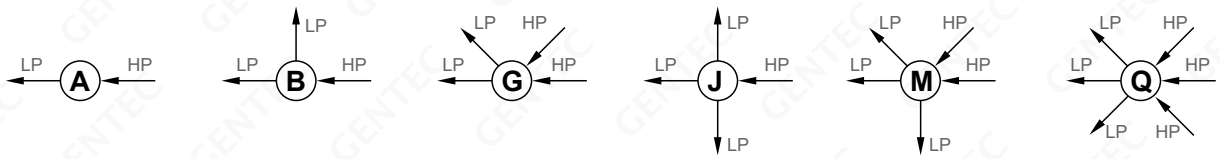
Applications

- Semiconductor Industry
- Research Laboratories
- Regulation of Specialty Gases
- Gas Chromatography
- Oil & Gas
- Device Manufacturers

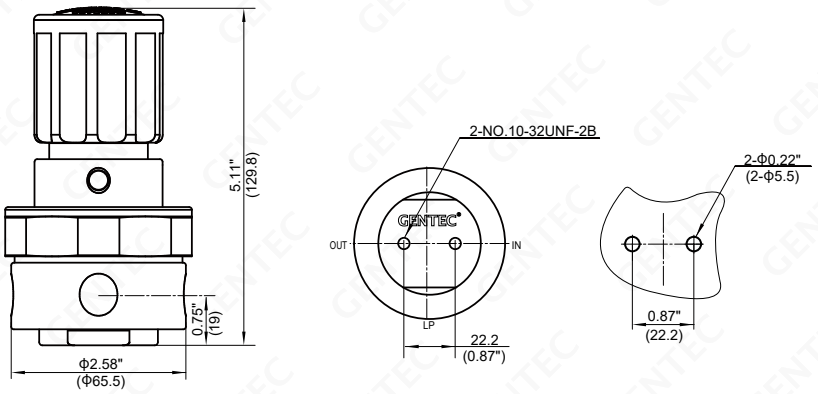
Specifications

- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 150 psi (10 bar)
- **Delivery Pressure Rise:** 0.25 psi per 100 psi source pressure drop
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.1
- **Weight:** 3.53 lb (1.6 kg)

Body Port

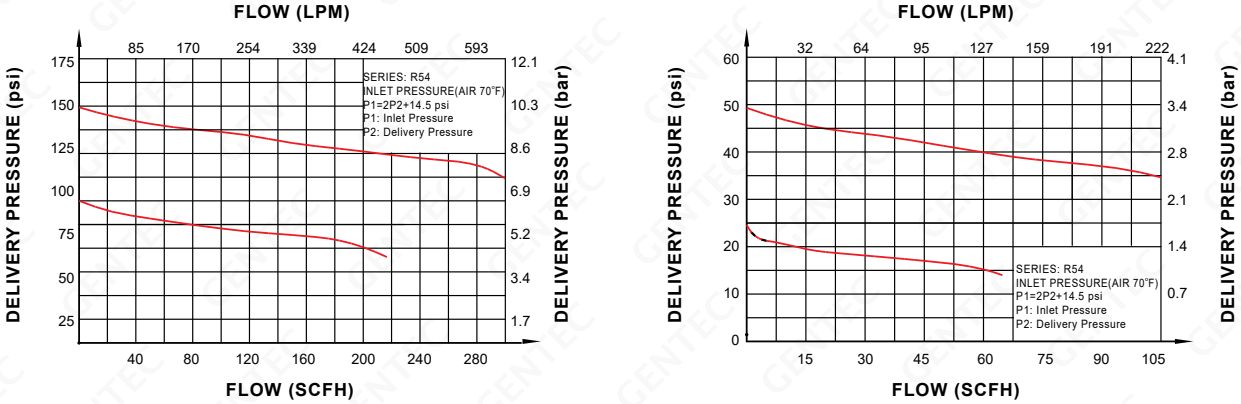


Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX:	R54SL	Q	K	- D	K	P	- 00	- 00	- D
	Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
	R54SL (316L) **R54SH** (C-22 Diaphragm and Valve Stem)	A B G J M Q	K: PCTFE	D: 3000 psi (206 bar) E: 1500 psi (103 bar) F: 500 psi (34 bar)	H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar) Q: 30" Hg Vac-30 psi (2 bar) S: 30" Hg Vac-100 psi (7 bar)	P: psi / bar K: psi / kPa W: No Gauge	00: 1/4" NPT (F) C330: CGA330 C350: CGA350 C580: CGA580 C660: CGA660 C590: CGA590 Other connections available* VF4: 1/4"FSR(F)	00: 1/4" NPT (F) 10: 1/8" GENLOK 11: 1/4" GENLOK Other connections available* VF4: 1/4"FSR(F)	Blank: None R: Relief Valve N: Needle Valve D: Diaphragm Valve

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.



R63SLGK-DEG-08-08-R44



R63SLBK-DFW-08-08

GENTEC® R63 Series Dome Loaded Regulator uses external pressure source to control the outlet pressure.
The R63 regulator is suitable for applications demanding high flowrates while maintaining a stable outlet pressure.

Product Features

- Dome Loaded Regulator minimizes droop
- Dynamic pressure control
- High Pressure, High Flow
- 1" NPT connections

Materials

- **Body:** 316L Stainless Steel
- **Bonnet:** 316L Stainless Steel
- **Seat:** PCTFE
- **Stem:** 316L Stainless Steel
- **Diaphragm:** Neoprene

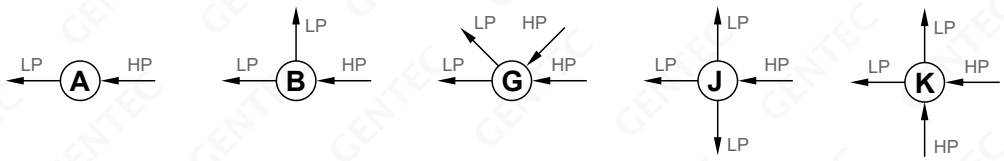
Specifications

- **Maximum Inlet Pressure:** 3000 psi (206 bar)
- **Maximum Outlet Pressure:** 1500 psi (103 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 2.67
- **Weight:** 8.6 lb (3.9 kg)

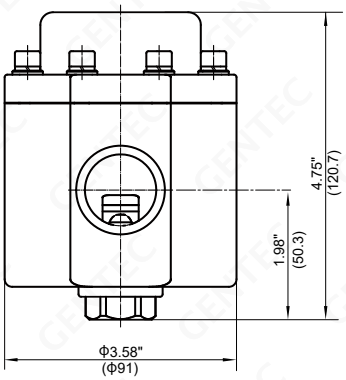
Applications

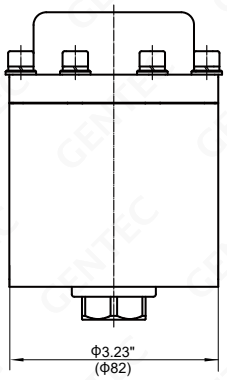
- Petrochemical Industry
- Biochemical Pharmaceutical

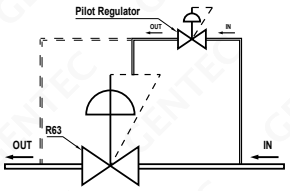
Body Port



Dimensions



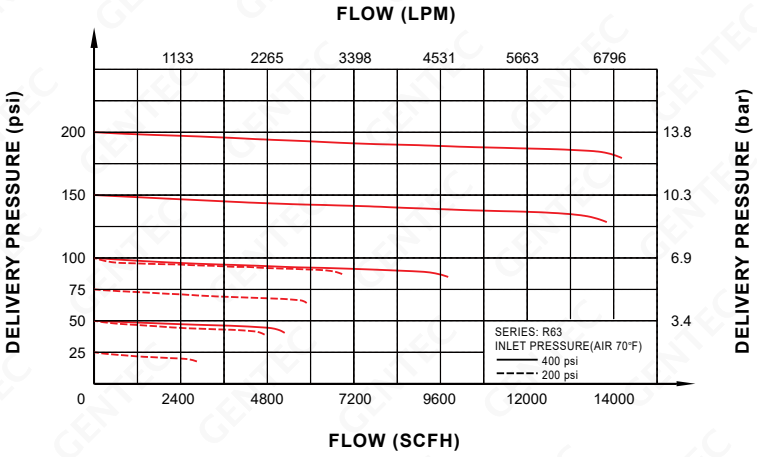




R63 with pilot regulator
The working principle of figure

Dimensions: in (mm)

Flow Data



Ordering Information

EX: R63SL	A	K	- F	K	P	- 08	- 08	- R44
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R63SL (316L)	A B G J K	K: PCTFE	D: 3000 psi (206 bar) F: 500 psi (34 bar)	E: 0-1500 psi (103 bar) F: 0-500 psi (34 bar) G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar)	P: psi / bar K: psi / kPa W: No Gauge	08: 1" NPT (F) Other connections available*	08: 1" NPT (F) Other connections available*	None: Without Regulator R44: With Control Regulator (500 ~ 1500 psi) R21: With Control Regulator (< 500 psi)

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.



R64SLQK-CEW-FNT24-FNT24-R44



R64SLQK-CEW-FNT24-FNT24

GENTEC® R64 Series Dome-loaded regulator provides high performance with superb pressure stability. Suitable for high flow and pressure sensitive applications.

Product Features

- Dome-Loaded Regulator
- Soft Sealing between Body and Diaphragm
- Body Inlet Connection: 1.5" NPT (F)
- 2" Pressure Gauge
- Pressure Gauge Connection: 1/4" NPT (F)
- External Pressure Source Connection: 1/4" NPT (F)

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PCTFE (Inlet Pressure 500 ~ 4500 psi), EPDM (Inlet Pressure < 500 psi)
- **Diaphragm:** Neoprene

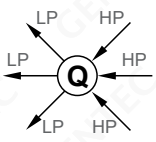
Specifications

- **Maximum Inlet Pressure:** 4500 psi (310 bar)
- **Maximum Outlet Pressure:** 1500 psi (103 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -4 to 165˚F (-20 to 74˚C)
- **Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 7.3
- **Weight:** 20.1 lb (9.1 kg)

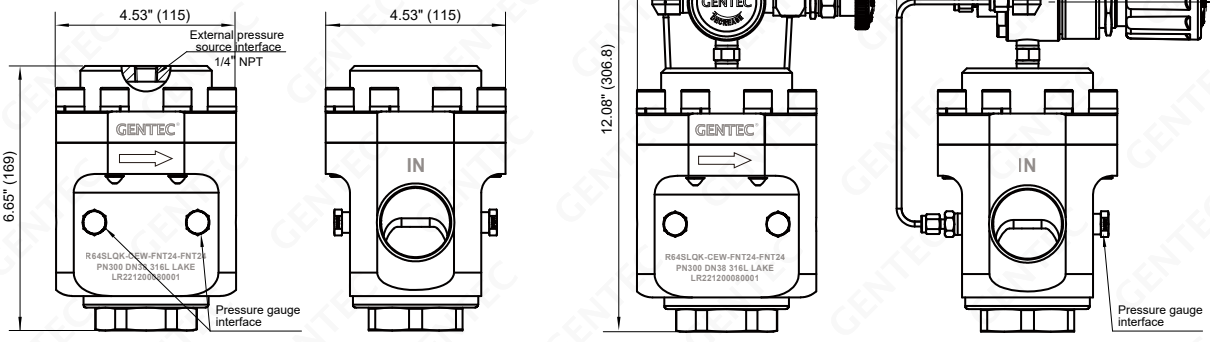
Applications

- Petrochemical Industry
- Biochemical Pharmaceutical
- Hydrogen Energy
- Applications for High Flow

Body Port



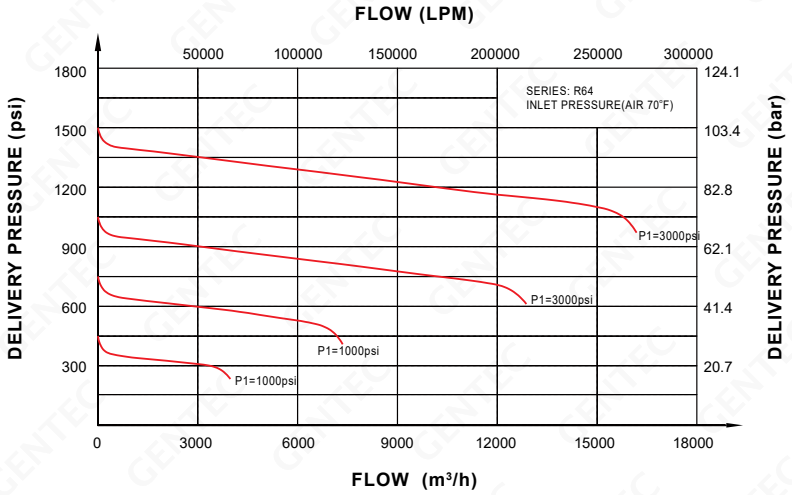
Dimensions



R64SLQK-CEW-FNT24-FNT24 R64SLQK-CEW-FNT24-FNT24-R44

Dimensions: in (mm)

Flow Data



Ordering Information

EX: R64SL	Q	K	- C	E	W	- FNT24	- FNT24	- R21
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R64SL (316L)	Q	K: PCTFE Y: EPDM	C: 4500 psi (310 bar) D: 3000 psi (206 bar) E: 1500 psi (103 bar) F: 500 psi (34 bar)	E: 0-1500 psi (103 bar) F: 0-500 psi (34 bar) G: 0-250 psi (17 bar) H: 0-150 psi (10 bar)	P: psi / bar K: psi / kPa W: No Gauge	FNT24: 1.5" NPT (F) Other connections available*	FNT24: 1.5" NPT (F) Other connections available*	None: Without Regulator R44: With R44 Pilot Regulator (Outlet Pressure 500~1500 psi) R21: With R21 Pilot Regulator (Outlet Pressure < 500 psi)

*: Please see page 87 for more inlet connection options such as DIN, BSP, CGA, and JIS.



R81SLAV-DFW-00-00

GENTEC® R81 Series Steam Heated Vaporizing Regulator is a diaphragm sensed single-stage regulator designed to heat and/or vaporize a gas or liquid sample before entering an analyzer system.

Product Features

- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 1/4" NPT(F)
- Steam heating connection

  Inlet Port Size: 1/4" NPT(F)

  Outlet Port Size: 1/2" NPT(F)

Materials

- **Body:** 316L Stainless Steel
- **Bonnet:** 316L Stainless Steel
- **Seat:** Vespel®
- **Diaphragm:** 316L Stainless Steel
- **Adjusting Knob:** Stainless Steel

Applications

- Liquid Petroleum Analyzer
- Petrochemical / Refinery / Analyzer
- Sampling Systems

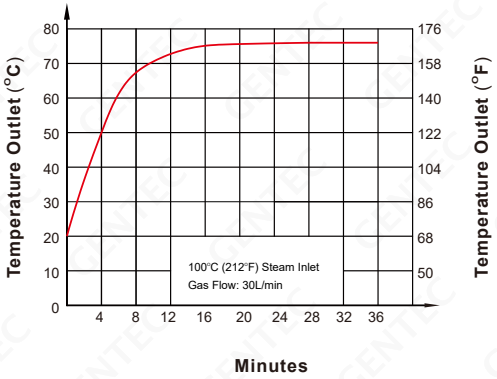
Specifications

- **Maximum Inlet Pressure:** 6000 psi (414 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 500˚F (-40 to 260˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.06
- **Weight:** 2.9 lb (1.32 kg)

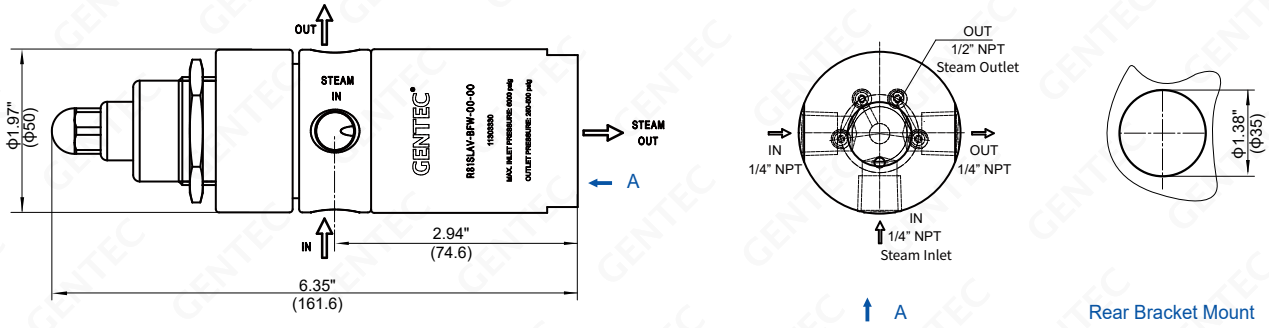
Body Port



Heating Flow Data

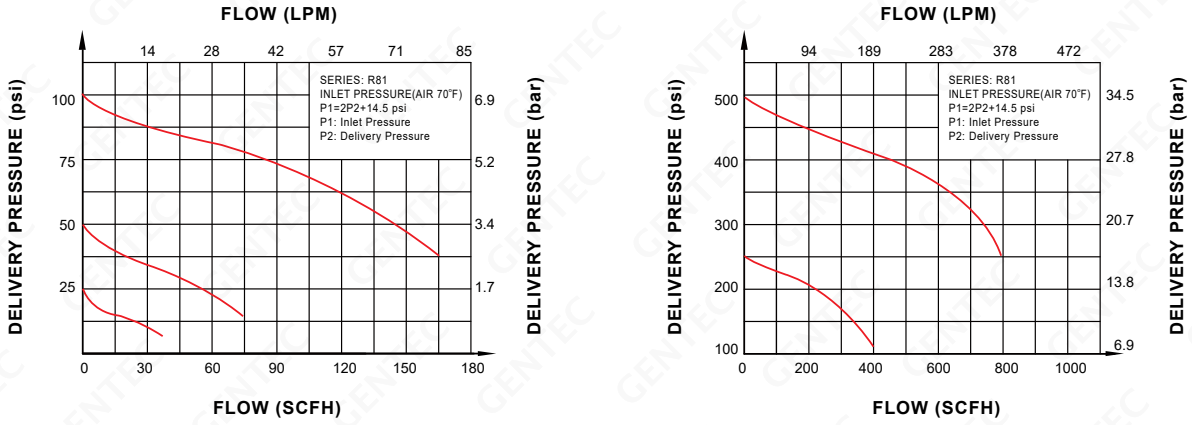


Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX: R81SL	A	V	- D	F	W	- 00	- 00
Series	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge	Inlet Connections	Outlet Connections
R81SL (316L)	A	V: Vespel®	B: 6000 psi (414 bar) D: 3000 psi (206 bar) E: 1500 psi (104 bar)	F: 0-500 psi (34 bar) G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (2 bar)	W: No Gauge	00: 1/4" NPT (F) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 19: 3 mm GENLOK Other connections available*	00: 1/4" NPT (F) 10: 1/8" GENLOK 11: 1/4" GENLOK 15: 6 mm GENLOK 19: 3 mm GENLOK Other connections available*

*: For more connection options contact Gentec.

Compact, fixed flow, pistion sensed, regulator for calibration gases and industrial hygiene.



H229S-C10-0.5

Product Features

- **Compact Size:** (1-1/8" W x 3-3/8" H)
- **Factory Preset Flowmeters:** 0.25 - 6.0 slpm
- **Hose Barb Outlet:** 3/16"
- **Control Knob:** On/Off
- **Maximum Inlet Pressure:** 1000 psi (70 bar)
- **Preset Delivery Pressure:** 50 psi (3 bar)
- **Weight:** 0.66 lb (0.3 kg)

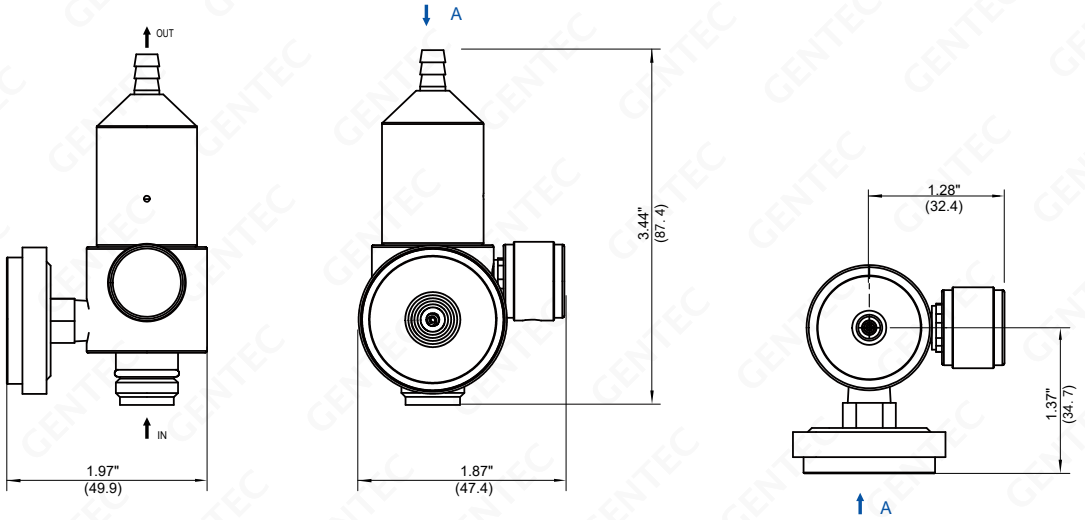
Materials

- **Body:** Chrome-Plated Brass, 316L Stainless Steel
- **Seat:** PTFE
- **Piston:** 316L Stainless Steel, Brass
- **Gauge:** Chrome-Plated Brass, 316L Stainless Steel

Applications

- Gas Chromatography
- Research Laboratories
- Gas Detection Equipment
- Emission Monitoring Systems

Dimensions



Dimensions: in (mm)

Ordering Information

Model Number	Inlet Connection	Outlet Connection	Inlet Pressure	Material	Flow
H229B-C600-0.25	CGA600	3/16” Hose Barb	500 psi (34 bar)	Chrome-Plated Brass	0.25 slpm Air
H229B-C600-0.5					0.5 slpm Air
H229B-C600-1.0					1.0 slpm Air
H229B-C600-1.5					1.5 slpm Air
H229B-C10-0.25	5/8”-18UNF (C-10)	3/16” Hose Barb	1000 psi	Chrome-Plated Brass	0.25 slpm Air
H229B-C10-0.5					0.5 slpm Air
H229B-C10-1.0					1.0 slpm Air
H229B-C10-1.5					1.5 slpm Air
H229B-C10-2.5					2.5 slpm Air
H229B-C10-6.0					6.0 slpm Air
H229S-C10-0.25	5/8”-18UNF (C-10) 3	3/16” Hose Barb	1000 psi	Stainless Steel	0.25 slpm Air
H229S-C10-0.5					0.5 slpm Air
H229S-C10-1.0					1.0 slpm Air
H229S-C10-1.5					1.5 slpm Air
H229S-C10-2.5					2.5 slpm Air
H229S-C10-6.0					6.0 slpm Air



R72SLAK-EW-00-00

GENTEC® R72 Series Back Pressure Regulator is a piston-sensed high purity back regulator designed for analytical applications where a constant back pressure is desired.

Product Features

- Piston Type Configuration
- Inlet & Outlet Port Size: 1/4" NPT(F)

Materials

- **Body:** 316L Stainless Steel, Nickel-Plated Brass
- **Seat:** PCTFE
- **Piston:** 316L Stainless Steel
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

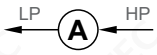
Applications

- Process Control
- Petrochemical Industry
- Gas Chromatography
- Research Laboratories

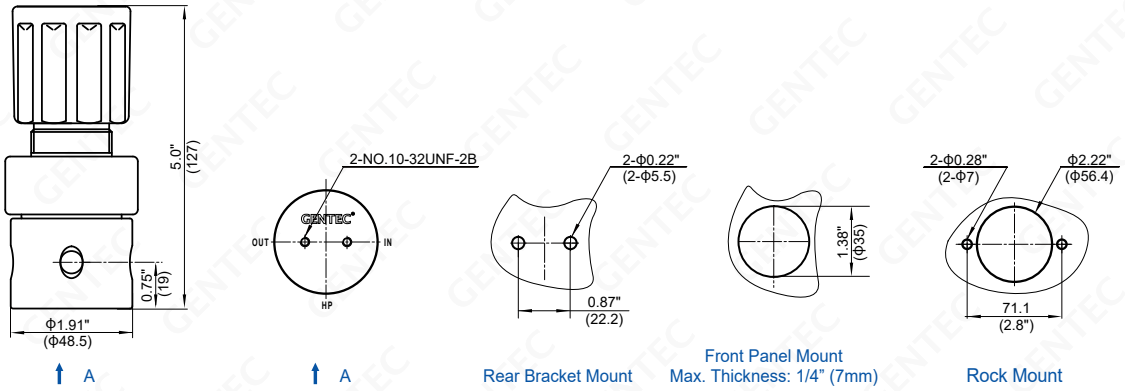
Specifications

- **Maximum Back Pressure:** 1500 psi (103 bar)
- **Maximum Working Pressure:** 2300 psi (158 bar)
- **Safety Test Pressure:** 1.5 x Maximum pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.14
- **Weight:** 2.65 lb (1.2 kg)

Body Port

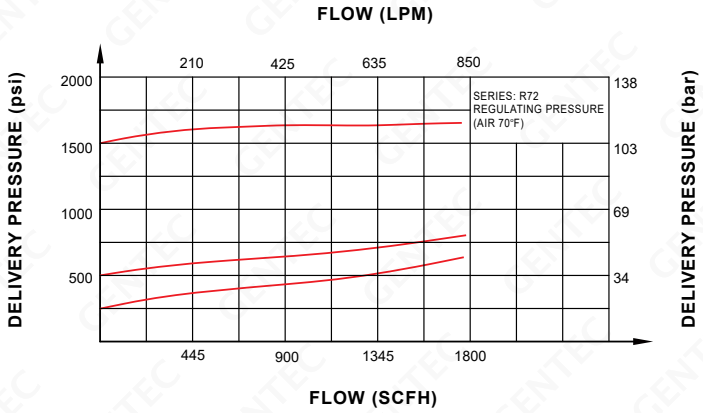


Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX: R72SL	A	K	- E	W	- 00	- 00	- P
Series	Body Ports	Seat Material	Inlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R72B (Brass) **R72SL** (316L)	A	K: PCTFE	E: 0-1500 psi (103 bar) F: 0-500 psi (34 bar) G: 0-250 psi (17 bar)	W: No Gauge	00: 1/4" NPT(F) Other connections available*	00: 1/4" NPT(F) Other connections available*	Blank: None P: Panel Mount J: Rock Mount

*: For more connection options contact Gentec.



R73SLAE-BW-00-00

GENTEC® R73 Series Back Pressure Regulator is a piston-sensed high purity regulator designed for analytical applications where a constant back pressure is desired.

Product Features

- Piston Type Configuration
- Inlet & Outlet Port Size: 1/4" NPT(F)

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PEEK
- **Piston:** 316L Stainless Steel
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

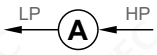
Applications

- Process Control
- Petrochemical Industry
- Gas Chromatography
- Research Laboratories

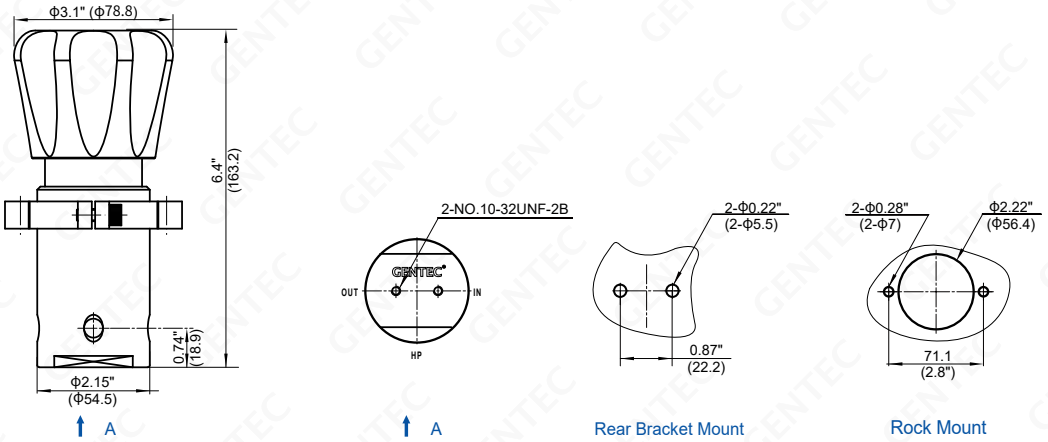
Specifications

- **Maximum Back Pressure:** 10000 psi (690 bar)
- **Maximum Working Pressure:** 13000 psi (900 bar)
- **Safety Test Pressure:** 1.5 x Maximum pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.1
- **Weight:** 4.85 lb (2.2 kg)

Body Port

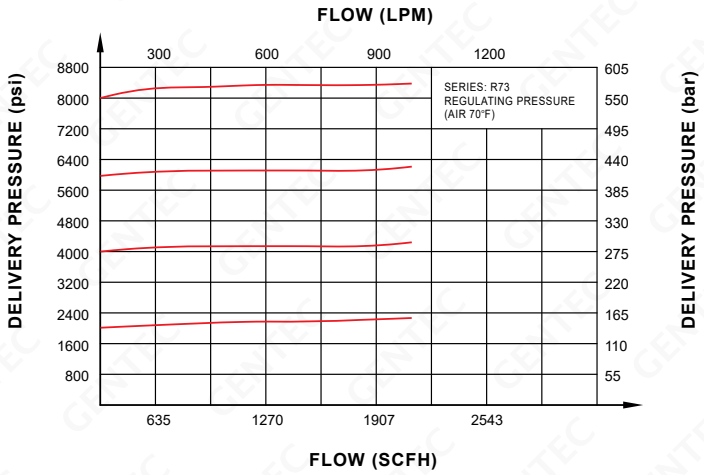


Dimensions



Dimensions: in (mm)

Flow Data



Ordering Information

EX: R73SL	A	E	- B	W	- 00	- 00
Series	Body Ports	Seat Material	Inlet Pressure	Gauge	Inlet Connections	Outlet Connections
R73SL (316L)	A	E: PEEK	A: 0-10000 psi (690 bar) B: 0-6000 psi (414 bar) C: 0-4500 psi (310 bar) D: 0-3000 psi (206 bar) E: 0-1500 psi (103 bar)	W: No Gauge	00: 1/4" NPT(F) 01: 1/4" NPT (M) Other connections available*	00: 1/4" NPT(F) 01: 1/4" NPT (M) Other connections available*

*: For more connection options contact Gentec.



R74SLAK-GW-04-04

GENTEC® R74 Series Back Pressure Regulator is a diaphragm-sensed high purity regulator designed for analytical applications where a constant back pressure is desired.

Product Features

- Diaphragm Type Configuration
- Inlet & Outlet Port Size: 1/2" NPT(F)

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PCTFE
- **Diaphragm:** 316L Stainless Steel
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

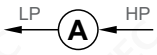
Applications

- Process Control
- Laboratory
- Petrochemical Industry
- Gas Analysis

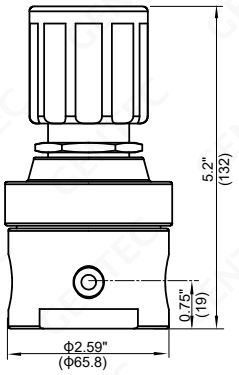
Specifications

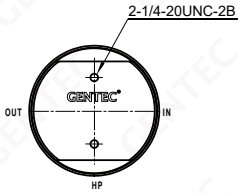
- **Maximum Back Pressure:** 250 psi (17 bar)
- **Maximum Working Pressure:** 500 psi (34 bar)
- **Safety Test Pressure:** 1.5 x Maximum pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.6
- **Weight:** 3.53 lb (1.6 kg)

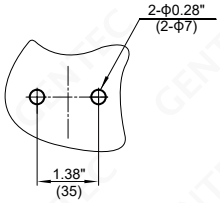
Body Port



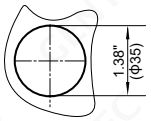
Dimensions







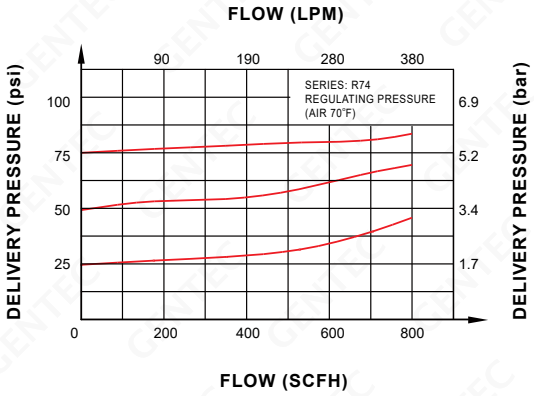
Rear Bracket Mount

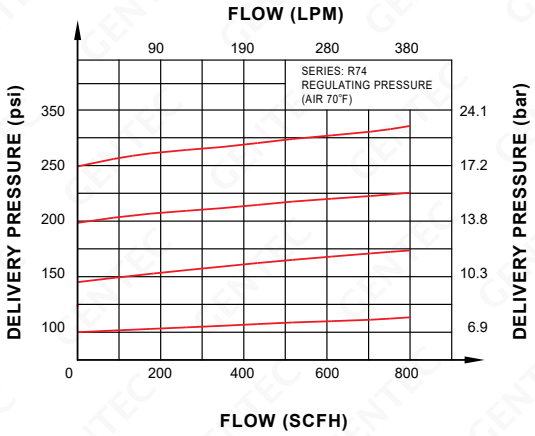


Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data





Ordering Information

EX: R74SL	A	K	- K	W	- 04	- 04	- P
Series	Body Ports	Seat Material	Inlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R74SL (316L)	A	K: PCTFE	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (2 bar)	W: No Gauge	04: 1/2" NPT(F) Other connections available*	04: 1/2" NPT(F) Other connections available*	Blank: None P: Panel Mount

*: For more connection options contact Gentec.



R75SLAK-GW-06-06

GENTEC® R75 Series Back Pressure Regulator is a diaphragm-sensed high purity regulator designed for analytical applications where a constant back pressure is desired.

Product Features

- Diaphragm Type Configuration
- Inlet & Outlet Port Size: 3/4" NPT(F)

Materials

- **Body:** 316L Stainless Steel
- **Seat:** PCTFE
- **Diaphragm:** 316L Stainless Steel
- **Stem:** 316L Stainless Steel
- **Spring:** 316L Stainless Steel

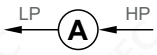
Applications

- Process Control
- Laboratory
- Petrochemical Industry
- Gas Analysis

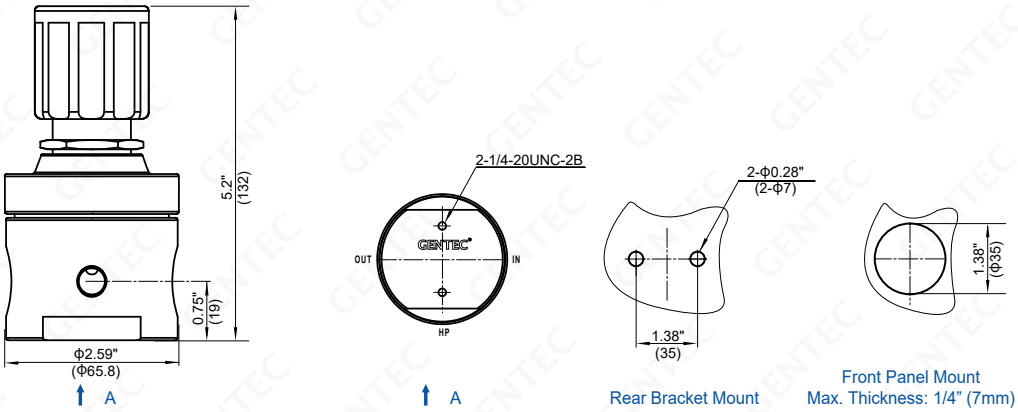
Specifications

- **Maximum Back Pressure:** 250 psi (17 bar)
- **Maximum Working Pressure:** 500 psi (34 bar)
- **Safety Test Pressure:** 1.5 x Maximum pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:**1.2
- **Weight:** 4.63 lb (2.1 kg)

Body Port

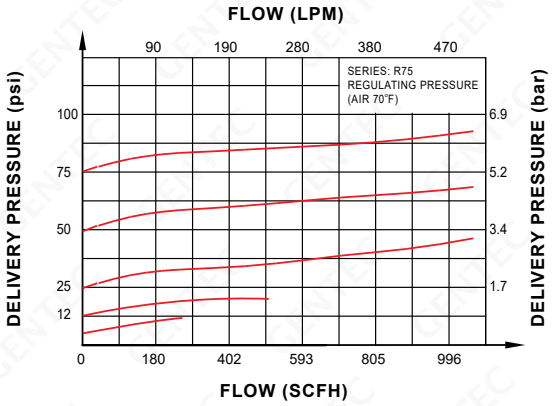


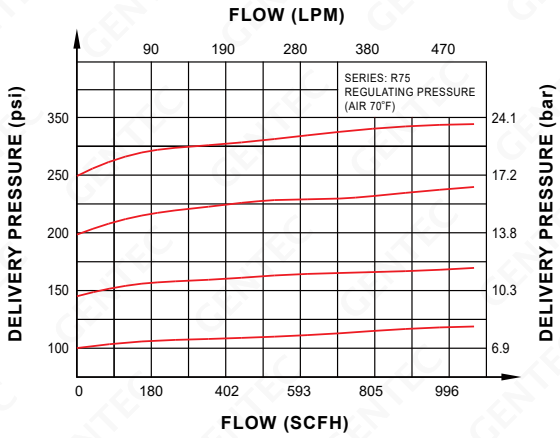
Dimensions



Dimensions: in (mm)

Flow Data





Ordering Information

EX: R75SL	A	K	- K	W	- 06	- 06	- P
Series	Body Ports	Seat Material	Inlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R75SL (316L)	A	K: PCTFE	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (2 bar) M: 0~15 psi (1 bar) N: 0~6 psi (0.4 bar)	W: No Gauge	06: 3/4" NPT(F) Other connections available*	06: 3/4" NPT(F) Other connections available*	Blank: None P: Panel Mount

*: For more connection options contact Gentec.



R77SLAK-GW-00-00

GENTEC® R77 Series Back Pressure Regulator is a diaphragm-sensed single-stage high purity regulator designed for applications where a constant back pressure is desired.

Product Features

- Single-Stage Configuration
- Inlet & Outlet Port Size: 1/4" NPT(F)

Materials

- **Body:** 316L Stainless Steel, Nickel-Plated Brass
- **Bonnet:** 316L Stainless Steel
- **Seat:** PCTFE, PTFE
- **Diaphragm:** 316L Stainless Steel
- **Adjusting Knob:** ABS Plastic

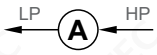
Applications

- Process Control
- Petrochemical Industry
- Gas Chromatography
- Research Laboratories

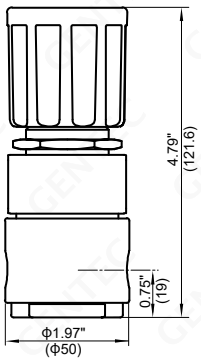
Specifications

- **Maximum Back Pressure:** 250 psi (17 bar)
- **Maximum Working Ppressure:** 500 psi (34 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.08
- **Weight:** 2.0 lb (0.9 kg)

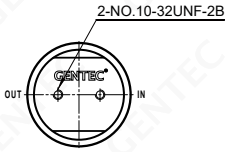
Body Port



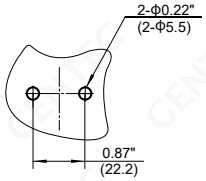
Dimensions



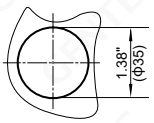
A



A



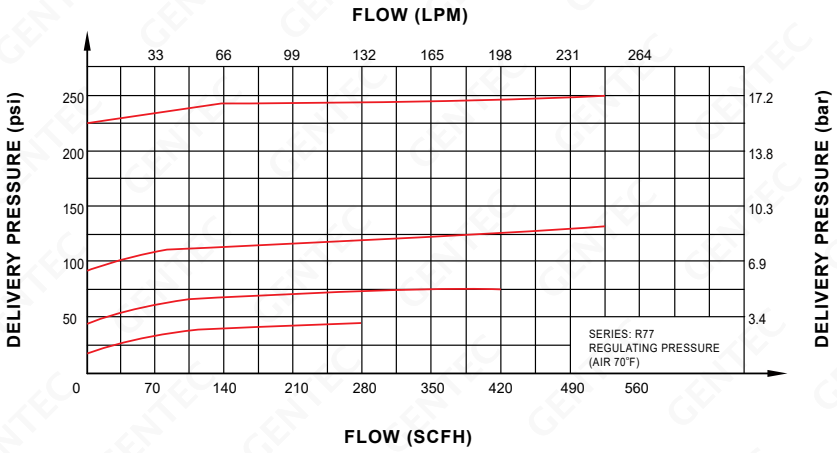
Rear Bracket Mount



Front Panel Mount
Max. Thickness: 1/4" (7mm)

Dimensions: in (mm)

Flow Data



Ordering Information

EX: R77SL	A	K	- G	W	- 00	- 00	- P
Series	**Body Ports**	**Seat Material**	**Inlet Pressure**	**Gauge**	**Inlet Connections**	**Outlet Connections**	**Options**
R77B (Brass) **R77SL** (316L)	A	K: PCTFE T: PTFE	G: 0-250 psi (17 bar) H: 0-150 psi (10 bar) I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) L: 0-25 psi (1.5 bar)	W: No Gauge	00: 1/4" NPT(F)	00: 1/4" NPT(F)	Blank: None P: Panel Mount



R78SLAE-MW-00-00

GENTEC® R78 Series Back Pressure Rugulator is a diaphragm-sensed high purity regulator. The large sensing seat provides a low crack to reseat pressure differential and excellent repeatability.

Product Features

- Metal-to-Metal Seal
- Inlet & Outlet Port Size: 1/4" NPT(F)

Materials

- **Body:** 316L Stainless Steel
- **Bonnet:** 316L Stainless Steel
- **Seat:** PEEK
- **Diaphragm:** 316L Stainless Steel
- **Adjusting Knob:** ABS Plastic

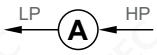
Applications

- Process Control
- Petrochemical Industry
- Gas Chromatography
- Research Laboratories

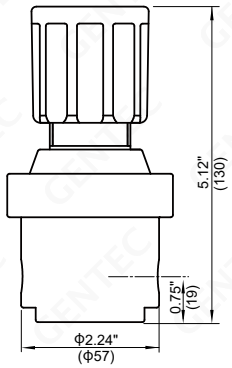
Specifications

- **Maximum Back Pressure:** 100 psi (7 bar)
- **Maximum Working Pressure:** 150 psi (10 bar)
- **Safety Test Pressure:** 1.5 x Maximum inlet pressure
- **Temperature Range:** -40 to 165˚F (-40 to 74˚C)
- **Inboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Outboard Leakage:** 2 x 10^{-8} atm.cc/sec He
- **Maximum Cv:** 0.04
- **Weight:** 2.65 lb (1.2 kg)

Body Port

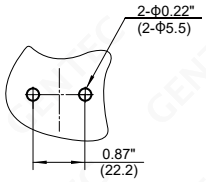


Dimensions

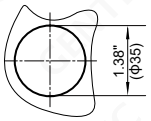




Rear Bracket Mount

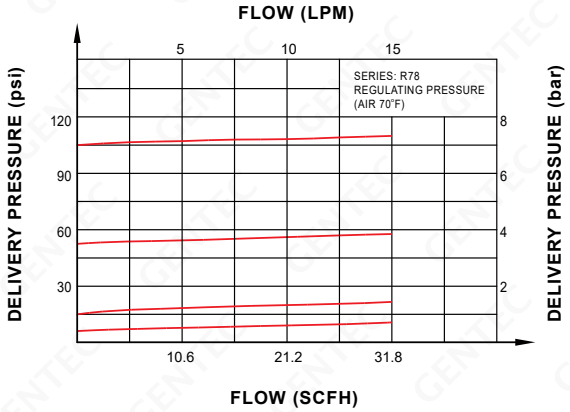


Front Panel Mount
Max. Thickness: 1/4" (7mm)



Dimensions: in (mm)

Flow Data



Ordering Information

EX: R78SL	A	E	- K	W	- 00	- 00	- P
Series	Body Ports	Seat Material	Inlet Pressure	Gauge	Inlet Connections	Outlet Connections	Options
R78SL (316L)	A	E: PEEK	I: 0-100 psi (7 bar) K: 0-50 psi (3 bar) M: 0~15 psi (1 bar) N: 0~6 psi (0.4 bar)	W: No Gauge	00: 1/4" NPT(F) Other connections available*	00: 1/4" NPT(F) Other connections available*	Blank: None P: Panel Mount

*: For more connection options contact Gentec.

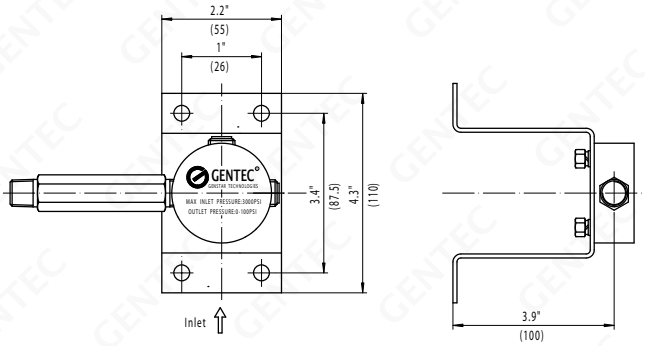
Regulator Protocol Station

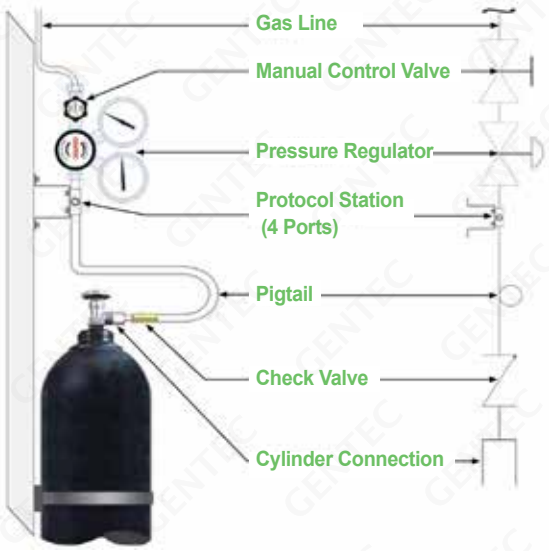


- Designed to provide easy, safe, and fast cylinder changes by eliminating the direct connection between the gas regulator and cylinder
- Bracket Mount fits both Single and Dual-Stage Regulators
- Station Blocks are available in Chrome-Plated Brass and 316L Stainless Steel
- Pigtails are equipped with Anti-Whip/Anti-Kink Stainless Steel arm or casing
- Additional ports for purging or sensor(s)

Note: Gas Regulators not included with Protocol Station*.

Panel Mount





Series	Bracket Style	Inlet Pressure Range	Inlet Connections (on pigtail)	Outlet Connection (to regulator)	Check Valve	Pigtails (36")
PSSL: 316L PSB: Brass	W: Wall-Mount	D: 3000 psi	01: 1/4"NPT(M) 22: CGA320 23: CGA330 24: CGA350 Other Connections are available	01: 1/4"NPT(M)	CV: With Check Valve Leave blank for no check valves	S: 316L T: Teflon

Gauges



G20SL
Low Mount (LM)



GR20SL
Back Mount (BM)

Specs. / Series	Wetted	Casing	Connection
G20P (LM)	Brass	Nickel-Plated Brass	1/4" NPT
G20SL (LM)	316L	316L	1/4" NPT
GR20SL (BM)	316L	316L	1/4" NPT

2", Dual Scale, Lower Mount

Model Number		Maxium Scale		Entry
Chrome Plated Brass	Stainless Steel	psi/kPa	psi/bar	
G20P-V30	G20SL-V30	-30in.Hg ~ 30 / 200	-30in.Hg ~ 30 / 2	LM
G20P-V60	G20SL-V60	-30in.Hg ~ 60 / 400	-30in.Hg ~ 60 / 4	LM
G20P-V100	G20SL-V100	-30in.Hg ~ 100 / 700	-30in.Hg ~ 100 / 7	LM
G20P-V150	G20SL-V150	-30in.Hg ~ 100 / 1000	-30in.Hg ~ 100 / 10	LM
G20P-V200	G20SL-V200	-30in.Hg ~ 200 / 1400	-30in.Hg ~ 200 / 14	LM
G20P-V300	G20SL-V300	-30in.Hg ~ 300 / 2000	-30in.Hg ~ 300 / 20	LM
G20P-30	G20SL-30	30 / 200	30 / 2	LM
G20P-60	G20SL-60	60 / 400	60 / 4	LM
G20P-100	G20SL-100	100 / 700	100 / 7	LM
G20P-160	G20SL-160	160 / 1100	160 / 11	LM
G20P-200	G20SL-200	200 / 1400	200 / 14	LM
G20P-300	G20SL-300	300 / 2000	300 / 20	LM
G20P-600	G20SL-600	600 / 4000	600 / 40	LM
G20P-1000	G20SL-1000	1000 / 7000	1000 / 70	LM
G20P-1500	G20SL-1500	1500 / 10000	1500 / 100	LM
G20P-2000	G20SL-2000	2000 / 14000	2000 / 140	LM
G20P-3000	G20SL-3000	3000 / 20000	3000 / 200	LM
G20P-4000	G20SL-4000	4000 / 28000	4000 / 280	LM
G20P-6000	G20SL-6000	6000 / 40000	6000 / 400	LM

2", Dual Scale, Back Mount

Model Number	Maxium Scale		Entry
Stainless Steel	psi/kPa	psi/bar	
GR20SL-V30	-30in.Hg ~ 30 / 200	-30in.Hg ~ 30 / 2	BM
GR20SL-V60	-30in.Hg ~ 60 / 400	-30in.Hg ~ 60 / 4	BM
GR20SL-V100	-30in.Hg ~ 100 / 700	-30in.Hg ~ 100 / 7	BM
GR20SL-V150	-30in.Hg ~ 100 / 1000	-30in.Hg ~ 100 / 10	BM
GR20SL-V200	-30in.Hg ~ 200 / 1400	-30in.Hg ~ 200 / 14	BM
GR20SL-V300	-30in.Hg ~ 300 / 2000	-30in.Hg ~ 300 / 20	BM
GR20SL-30	30 / 200	30 / 2	BM
GR20SL-60	60 / 400	60 / 4	BM
GR20SL-100	100 / 700	100 / 7	BM
GR20SL-160	160 / 1100	160 / 11	BM
GR20SL-200	200 / 1400	200 / 14	BM
GR20SL-300	300 / 2000	300 / 20	BM
GR20SL-600	600 / 4000	600 / 40	BM
GR20SL-1000	1000 / 7000	1000 / 70	BM
GR20SL-1500	1500 / 10000	1500 / 100	BM
GR20SL-2000	2000 / 14000	2000 / 140	BM
GR20SL-3000	3000 / 20000	3000 / 200	BM
GR20SL-4000	4000 / 28000	4000 / 280	BM
GR20SL-6000	6000 / 40000	6000 / 400	BM

Electronic Contact Gauges



GA20SL
Lower Mount (LM)



GRA20SL
Back Mount (BM)



GE20SL
Lower Mount (LM)



GRE20SL
Back Mount (BM)

- Contact: normally closed (no pressure)
- Adjustable between 5 and 80% of the scale range
- Maximum power: 10 watts DC, 12 VA AC
- Maximum switch voltage: 28 V AC/DC
- Wetted area and casing: 316L
- Temperature: -40 to 158°F (-40 to 70°C)
- Connection: 1/4" NPT
- Accuracy: 3-2-3 (2%)
- Potential-free relay

2", Stainless Steel Contact Gauge, PSI/kPa Dual Scale

Model Number				Maxium Scale	
Twist Cap		Fixed Cap			
Lower Mount	Back Mount	Lower Mount	Back Mount	psi/kPa	psi/bar
GA20SL-100	GRA20SL-100	GE20SL-100	GRE20SL-100	100 / 700	100 / 7
GA20SL-200	GRA20SL-200	GE20SL-200	GRE20SL-200	200 / 1400	200 / 14
GA20SL-300	GRA20SL-300	GE20SL-300	GRE20SL-300	300 / 2000	300 / 20
GA20SL-400	GRA20SL-400	GE20SL-400	GRE20SL-400	400 / 2800	400 / 28
GA20SL-600	GRA20SL-600	GE20SL-600	GRE20SL-600	600 / 4000	600 / 40
GA20SL-1500	GRA20SL-1500	GE20SL-1500	GRE20SL-1500	1500 / 10000	1500 / 100
GA20SL-3000	GRA20SL-3000	GE20SL-3000	GRE20SL-3000	3000 / 20000	3000 / 200
GA20SL-4000	GRA20SL-4000	GE20SL-4000	GRE20SL-4000	4000 / 28000	4000 / 280

Note: Please consult factory on VCR/FSR gauges or psi/bar and psi/kPa dual scale ranges not listed.

Needle Valves



207CP SS-NV12-NT4-TF4

- Designed for use with regulator
- Easy control of outlet flow

Series	Material	Max Working Pressure	Inlet / Outlet Connection
207CP	Nickel-Plated Brass	500 psi	1/4" NPT(M) x 1/4" NPT(M)
SS-NV12-NT4	316	5000 psi	1/4" NPT(M) x 1/4" NPT(M)
SS-NV12-NT4-TF4	316	5000 psi	1/4" NPT(M) x 1/4" GENLOK

Relief Valves



SS-RV11-100

- Designed for use with regulator
- Relief pressure adjustable

Series	Material	Pressure Range	Inlet / Outlet Connection
RV11	SS: 316 B: Nickel-Plated Brass	20: 10-20 psi 100: 20-100 psi 250: 100-250 psi 500: 250-500 psi 750: 500-750 psi	1/4" NPT(M) x 1/4" NPT(F) 1/4" NPT(M) x 1/4" NPT(F) 1/4" NPT(M) x 1/4" NPT(F) 1/4" NPT(M) x 1/4" NPT(F) 1/4" NPT(M) x 1/4" NPT(F)

Diaphragm Valves



SL-DV51-NT4-FNT4

- Designed for regulator outlet port

Series	Cv	Max Working Pressure	Inlet / Outlet Connection
SL-DV51-NT4-FNT4	0.17	300 psi	1/4" NPT(F) x 1/4" NPT(M)
BP-DV51-NT4-FNT4	0.17	3500 psi	1/4" NPT(F) x 1/4" NPT(M)

Please see "Valves" catalog for more information

Check Valves



Please contact GENTEC® for additional sizes or cracking pressure available

Model	Inlet Connection	Outlet Connection
SS-CV11-TF2-VI-1	1/8" GENLOK	1/8" GENLOK
SS-CV11-NT2-VI-1	1/8" NPT(M)	1/8" NPT(M)
SS-CV11-FNT2-VI-1	1/8" NPT(F)	1/8" NPT(F)
SS-CV11-TF4-VI-1	1/4" GENLOK	1/4" GENLOK
SS-CV11-NT4-TF4-VI-1	1/4" NPT(M)	1/4" GENLOK
SS-CV11-NT4-VI-1	1/4" NPT(M)	1/4" NPT(M)
SS-CV12-FNT4-VI-1	1/4" NPT(F)	1/4" NPT(F)

Material: 316L | **Pressure Rating:** 3000 psi | **Cracking Pressure:** 1 psi | Viton® O-rings standard

Filters



INLINE FILTER



T-TYPE FILTER

Please see "F Series Filters" catalog for more information

Type	Model	Inlet Connection	Outlet Connection
Inline Type	SS-F4-FNT2	1/8" NPT(F)	1/8" NPT(F)
	SS-F4-TF4	1/4" GENLOK	1/4" GENLOK
	SS-F4-NT4	1/4" NPT(M)	1/4" NPT(M)
T-Type	SS-F4T-FNT2	1/8" NPT(F)	1/8" NPT(F)
	SS-F4T-TF4	1/4" GENLOK	1/4" GENLOK
	SS-F4T-NT4	1/4" NPT(M)	1/4" NPT(M)

Material: 316 | **Max. Working Pressure:** 3000 psi for inline type, 6000 psi for T-type | **Washer:** 316L | **Nominal Pore Size:** 0.5-2 microns

Flashback Arrestors



FA33SP



FA34P

- Designed for use with low pressure manifold piping
- Preventing flashbacks from low to high pressure piping

Model No.	Material	Gas Service	Working Pressure	Delivery Flow	Inlet Connection	Outlet Connection
FA33SP	Stainless Steel	Flammable, Oxygen	50 psi	1250 SCFH	1/4"NPT(F)	1/4"NPT(M)
FA34P	Brass	Flammable	50 psi	1050 SCFH	1/4"NPT(F)	1/4"NPT(F)

Purge Tools

- Purge assembly is highly recommended when a toxic, corrosive, flammable or ultra high purity gas is used in a system.
- Purge assembly enables users to purge systems of contamination.



SL-P101

- Straight purge connection
- For connection to regulator's high pressure inlet
- For regulators and downstream devices
- Purge gases delivered from regulator's downstream
- Suitable for circular purging



SL-P102

- "T"-design purge connection
- For connection betweem regulator and cylinder
- Purge of whole gas system
- Purge gases delivered from regulator's downstream
- Suitable for circular purging



SL-P103

- Cross design purge connection
- For connection between regulator and cylinder
- Purge of whole gas system, diaphragm valve controls purging for cylinder valve
- Purge gases relieved from purged port of regulator's downstream

Series	Inlet Connections	Outlet Connections
SL-P101 SL-P102 SL-P103	00: 1/4" NPT(F) 01: 1/4" NPT(M) C330: CGA330 C350: CGA350 C580: CGA580 C660: CGA660 C590: CGA590 Other connections are available	00: 1/4" NPT(F) 01: 1/4" NPT(M)

Tube Fittings



SS-FC-TF4-FNT4



R952-5503



SS-MC-TF4-NT4



SS-UE-TF4

Series	Material	Inlet/Outlet Connection
R195-51P	Nickel-Plated Brass	1/4" NPT(M) x 1/4" NPT(M), Connection
R952-5503	316 Stainless Steel	1/4" NPT(M) x 1/4" NPT(M), Connection
SS-MC-TF4-NT4	316 Stainless Steel	1/4" NPT(M) x 1/4" Genlok, Connection
SS-MC-TF6-NT4	316 Stainless Steel	3/8" NPT(M) x 1/4" Genlok, Connection
SS-MC-TF8-NT4	316 Stainless Steel	1/2" NPT(M) x 1/4" Genlok, Connection
SS-MC-TF8-NT8	316 Stainless Steel	1/2" NPT(M) x 1/2" Genlok, Connection
SS-MC-TF12-NT12	316 Stainless Steel	1/2" NPT(M) x 3/4" Genlok, Connection
SS-FC-TF2-FNT4	316 Stainless Steel	1/4" NPT(F) x 1/8" Genlok, Connection
SS-FC-TF4-FNT4	316 Stainless Steel	1/4" NPT(F) x 1/4" Genlok, Connection
SS-FC-TF6-FNT4	316 Stainless Steel	1/4" NPT(F) x 3/8" Genlok, Connection
SS-FC-TF8-FNT4	316 Stainless Steel	1/4" NPT(F) x 1/2" Genlok, Connection
R155-64JP	Nickel-Plated Brass	1/2" NPT(M) x 3/8" NPT(F), Straight
R155-64KP	Nickel-Plated Brass	1/2" NPT(M) x 3/8" NPT(M), Straight
R155-64EP	Nickel-Plated Brass	1/2" NPT(M) x 1/2" NPT(M), Straight
R982-5502	316 Stainless Steel	1/2" NPT(M) x 3/8" NPT(F), Straight
R982-5507	316 Stainless Steel	1/2" NPT(M) x 3/8" NPT(M), Straight
R982-5506	316 Stainless Steel	1/2" NPT(M) x 1/2" NPT(M), Straight
SS-UE-TF4	316 Stainless Steel	1/4" Genlok x 1/4" Genlok, Elbow
SS-UE-TF8	316 Stainless Steel	1/2" Genlok x 1/2" Genlok, Elbow

Please see "Tube Fittings" catalog for more information

Wall-Mount Brackets



GMB-R1



GMB-R6

Model Number	Inlet / Outlet Connection
GMB-R1	R21, R22 Bracket
GMB-R2	R31 Bracket
GMB-R6	R11, R12, R14, R15, R21, R22, R44 Bracket

Pigtails



GRPS



GFPT / GFPS

- Designed for use between cylinder and piping system
- Max. Pressure: GFPT and GFPS Series: 3000 psi (206 bar)
  GRPS Series: 4500 psi (310 bar)
- Temp. Range: GFPS and GRPS Series: -325 to 850°F (-200 to 454°F)
  GFPT: -65 to 450°F (-53 to 230°C)
- Oxygen Service: Meets CGA G4.1 Specifications for cleanliness

GRPS - Series	C330 - Inlet Connections	CV - Options	00 - Outlet Connections
GRPS: Stainless Steel Rigid Pigtail	00: 1/4" NPT(F) C330: CGA330 C350: CGA350 C510: CGA510 C540: CGA540 C580: CGA580 C660: CGA660	Blank: None CV: with Check Valve FA: with Flashback Arrestor	00: 1/4" NPT(F) VF: 1/4" Female FSR OD: 1/4" Tube

GFPT Series	24 - Length	C330 - Inlet Connections	CV - Options	00 Outlet Connections
GFPT: Stainless Steel Flexible Pigtail with Teflon Insert **GFPS:** Stainless Steel Flexible Pigtail with Stainless Steel Insert	24: 24" 36: 36"	00: 1/4" NPT(F) C330: CGA330 C350: CGA350 C510: CGA510 C540: CGA540 C580: CGA580 C660: CGA660	Blank: None CV: with Check Valve FA: with Flashback Arrestor	00: 1/4" NPT(F)

Cylinder Connection Table



- Nuts and nipples are designed for regulator inlet connections.

Standard	No.	Model No.	Material	Length	Nut Screw	Washer	Gas
BS341	03	SS-BS03-3	SS 316	3”	G5/8-14-RH	Null	Air, Ar, He, Kr, Ne, N_2, O_2,
		BP-BS03-3	Brass / w Plated	3”	G5/8-14-RH	Null	Xe, etc.
	04	SS-BS04-3	SS 316	3”	G5/8-14-LH	Null	CO_2, Propene, Phosphine,
		BP-BS04-3	Brass / w Plated	3”	G5/8-14-LH	Null	Propylene oxide, etc.
Standard	**No.**	**Model No.**	**Material**	**Length**	**Nut Screw**	**Washer**	**Gas**
DIN 477	05	SS-DIN05-2.5	SS 316	2.5”	1”-8-LH	Nylon	Hydrogen cyanide, CO,
		BP-DIN05-2.5	Brass / w Plated	2.5”	1”-8-LH	Nylon	cyanogen, HS, etc.
	06	SS-DIN06-2	SS 316	2”	W21.8-14-LH	PTFE	CO_2, Ar, He, Ne, Xe, etc.
		BP-DIN06-2	Brass / w Plated	2”	W21.8-14-LH	PTFE	
	08	SS-DIN08-2	SS 316	2”	1”-8-LH	PTFE	Cl_2, HCl, F_2, N_2O, NF_3, etc.
		BP-DIN08-2	Brass / w Plated	2”	1”-8-LH	PTFE	
Standard	**No.**	**Model No.**	**Material**	**Length**	**Nut Screw**	**Washer**	**Gas**
CGA V1	330	SS-CGA330-2	SS 316	2”	.825-14NGO-LH	PTFE	HCl, HI, HS, PF_5, SiF_4, etc.
		BP-CGA330-2	Brass / w Plated	2”	.825-14NGO-LH	PTFE	
	350	SS-CGA350-2.5	SS 316	2.5”	.825-14NGO-LH	Null	H_2, CO, Natural Gas,
		BP-CGA350-2.5	Brass / w Plated	2.5”	.825-14NGO-LH	Null	Methane, Ethane, etc
	580	SS-CGA580-3	SS 316	3”	.965-14NGO-RH	Null	Ar, N_2, He, Kr, Ne, Xe,
		BP-CGA580-3	Brass / w Plated	3”	.965-14NGO-RH	Null	CF_4, etc.
	590	SS-CGA590-3	SS 316	3”	.965-14NGO-LH	Null	Sulfur Hexafluoride, etc.
		BP-CGA590-3	Brass / w Plated	3”	.965-14NGO-LH	Null	
	660	SS-CGA660-2	SS 316	2”	1.030-14NGO-RH	PTFE	NO, NO_2, N_2O_3, Mustard Gas,
		BP-CGA660-2	Brass / w Plated	2”	1.030-14NGO-RH	PTFE	Phosgene, SO_3, etc.

*** Note: More connections available upon request.**

Cylinder Connection Table



- Nuts and nipples are designed for regulator inlet connections.

Standard	No.	Model No.	Material	Length	Nut Screw	Washer	Gas
BS341	03	SS-BS03-3	SS 316	3”	G5/8-14-RH	Null	Air, Ar, He, Kr, Ne, N_2, O_2,
		BP-BS03-3	Brass / w Plated	3”	G5/8-14-RH	Null	Xe, etc.
	04	SS-BS04-3	SS 316	3”	G5/8-14-LH	Null	CO_2, Propene, Phosphine,
		BP-BS04-3	Brass / w Plated	3”	G5/8-14-LH	Null	Propylene oxide, etc.
Standard	**No.**	**Model No.**	**Material**	**Length**	**Nut Screw**	**Washer**	**Gas**
DIN 477	05	SS-DIN05-2.5	SS 316	2.5”	1”-8-LH	PTFE	Hydrogen cyanide, CO,
		BP-DIN05-2.5	Brass / w Plated	2.5”	1”-8-LH	Nylon	cyanogen, HS, etc.
	06	SS-DIN06-2	SS 316	2”	W21.8-14-LH	PTFE	CO_2, Ar, He, Ne, Xe, etc.
		BP-DIN06-2	Brass / w Plated	2”	W21.8-14-LH	PTFE	
	08	SS-DIN08-2	SS 316	2”	1”-8-LH	PTFE	Cl_2, HCl, F_2, N_2O, NF_3, etc.
		BP-DIN08-2	Brass / w Plated	2”	1”-8-LH	PTFE	
Standard	**No.**	**Model No.**	**Material**	**Length**	**Nut Screw**	**Washer**	**Gas**
CGA V1	330	SS-CGA330-2	SS 316	2”	.825-14NGO-LH	PTFE	HCl, HI, HS, PF_5, SiF_4, etc.
		BP-CGA330-2	Brass / w Plated	2”	.825-14NGO-LH	Nylon	
	350	SS-CGA350-2.5	SS 316	2.5”	.825-14NGO-LH	Null	H_2, CO, Natural Gas,
		BP-CGA350-2.5	Brass / w Plated	2.5”	.825-14NGO-LH	Null	Methane, Ethane, etc
	580	SS-CGA580-3	SS 316	3”	.965-14NGO-RH	Null	Ar, N_2, He, Kr, Ne, Xe,
		BP-CGA580-3	Brass / w Plated	3”	.965-14NGO-RH	Null	CF_4, etc.
	590	SS-CGA590-3	SS 316	3”	.965-14NGO-LH	Null	Sulfur Hexafluoride, etc.
		BP-CGA590-3	Brass / w Plated	3”	.965-14NGO-LH	Null	
	660	SS-CGA660-2	SS 316	2”	1.030-14NGO-RH	PTFE	NO, NO_2, N_2O_3, Mustard Gas,
		BP-CGA660-2	Brass / w Plated	2”	1.030-14NGO-RH	PTFE	Phosgene, SO_3, etc.

SS - Material	BS03 - Standard	3 - Length	Nipple Screw
B: Brass **BP:** Brass with Plated **S3:** 303 or 304 Stainless Steel **SS:** 316 Stainless Steel **SL:** 316L Stainless Steel	BS03: BS341 No.3 DIN05: DIN477 No.5 CGA330: CGA V1 No.330	2: 2 inch 3: 3 inch 4: 4 inch 6: 6 inch	Null: 1/4” NPT NT2: 1/8” NPT

		Material										
		Body			Diaphragm			Type				
Regulator	Application	FBR	BR	SS	N	SS	P	HS	Single Stage	Dual Stage	Line	Other
G152	General Purpose	•			•				•			
G152T	General Purpose	•			•					•		
HP152L	High Purity, Medium Flow	•				•					•	
HP152	High Purity, Medium Flow	•				•			•			
HP152T	High Purity, Medium Flow	•				•				•		
R12	High Purity, Low Flow			•		•			•		•	
R13	High Purity, Low Flow		•	•		•			•			
R15	High Purity, Medium Flow			•		•					•	
R17	High Purity, High Flow			•		•	•		•			
R21	High Purity, Low Flow		•	•		•		•	•		•	
R22	High Purity, Medium Flow		•	•		•		•			•	
R23	High Purity, High Flow			•		•		•	•			
R30	High Purity, Low Flow		•	•		•			•			
R31	High Purity, Low Flow		•	•		•		•		•		
R34	High Purity, Medium Flow			•		•		•		•		
R42	High Pressure, High Flow			•		•			•			
R43	High Pressure, High Flow			•		•			•			
R44	High Pressure, Low Flow			•			•		•			FSR
R45	Ultra High Pressure, Low Flow			•			•					
R51	High Purity, Corrosion			•				•	•			
R53	Tied Diaphragm Regulator			•		•			•			
R54	Tied Diaphragm Regulator			•		•		•	•			
R63	Dome Loaded Regulator			•	•							•
R64	Dome Loaded Regulator			•	•							•
R81	Steam Heated Vaporizing			•		•			•			
R72	High Purity, Back Pressure		•	•			•		•			
R73	High Purity, Back Pressure			•			•					
R74	Medium Flow, Back Pressure			•		•			•			
R75	High Flow, Back Pressure			•		•			•			
R77	Back Pressure, Low Flow		•	•		•			•			
R78	High Accuracy, Back Pressure			•		•			•			

FBR = Forged Brass BR = Brass Barstock SS = Stainless Steel N = Neoprene P = Piston HS = Hastelloy FSR = Face Seal

Pure Gases	Line Regulator	Cylinder Regulators		
	Single Stage	Single Stage	Dual Stage	CGA Inlet
ACETYLENE				
• Atomic absorption 99.6%		G152		510
AIR				
• Dry	HP152L	G152	G152T	
• Hydrocarbon Free	R21B/HP152L	R21B/HP152	R31B/HP152T	590
• Zero	HP152L	HP152	HP152T	
AMMONIA				
• Anhydrous		R21SL	R31SL	705
ARGON				
• Research 99.9995%				
• U.H.P. 99.999%	R21B	R21B	R31B	
• Prepurified 99.998%	R21B/HP152L	R21B/HP152	R31B/HP152T	580
• Zero 99.998%	HP152L	HP152	HP152T	
• High Purity 99.995%	HP152L	G152	G152T	
BORON TRIFLUORIDE				
• Minimum Purity 99.5%		R21SL	R31SL	330
1.3 BUTADIENE				
• Instrument 99.5%		G152	G152T	510
• C.P. 99.0%		G152	G152T	
N-BUTANE				
• Research 99.9%		R21B	R31B	510
• C.P. 99.0%		G152	G152T	
CARBON DIOXIDE				
• Research 99.998%	R21B	R21B	R31B	
• Instrument (Coleman) 99.99%	HP152L	HP152	HP152T	320
• C.P. 99.8%	HP152L	G152	G152T	
CARBON MONOXIDE				
• Ultra High Purity 99.9%				
• C.P. 99.0%		HP152	HP152T	350
• Commerical 98.0%		G152	G152T	
CHLORINE				
• High Purity 99.5%		R21SL	R31SL	660
DEUTERIUM				
• C.P. 99.5%		R21B	R31B	350
DIMETHYL ETHER				
• Purity 99.5%		R21B	R31B	510
ETHANE				
• Research 99.98%		R21B	R31B	
• C.P. 99.0%		G152	G152T	350
• Technical 98.55%		G152	G152T	
ETHYLENE				
• Research 99.98%		R21B	R31B	
• C.P. 99.5%		HP152	HP152T	350
• Technical		G152	G152T	
HELIUM				
• Research 99.9995%		R21SL	R31SL	
• Ultra High 99.999%		R21B	R31B	580
• Zero 99.995%		R21B	R31B	
• High Purity 99.995%		R21B	R31B	

Pure Gases	Line Regulator	Cylinder Regulators		
	Single Stage	Single Stage	Dual Stage	CGA Inlet
HYDROGEN				
• Research 99.9999%				
• Ultra High 99.999%		R21SL	R31SL	350
• Zero 99.99%		R21B	R31B	
• Prepurified 99.99%		R21B	R31B	
• Extra Dry 99.95%		HP152	HP152T	
HYDROGEN CHLORIDE				
• Chemical 99.0%		R21SL/R51SL	R31SL/R51SL	330
KRYPTON				
• Research 99.995%		R21SL	R31SL	580
METHANE				
• Research 99.99%		R21SL	R31SL	350
• U.H.P. 99.97%		R21B	R31B	
• C.P. 99.0%		HP152	HP152T	
• Technical 98.0%		G152	G152T	
• Commerical 93.0%		G152	G152T	
NEON				
• Research 99.999%		R21SL	R31SL	580
• U.H.P. 99.996%		R21SL	R31SL	
• Purified 99.89%		R21SL	R31SL	
NITROGEN				
• Research 99.9995%				
• Ultra High 99.999%	R21SL	R21SL	R31SL	580
• Prepurified 99.998%	R21B	R21B	R31B	
• Zero 99.998%	R21B	R21B	R31B	
• High Purity 99.99%	R21B	R21B	R31B	
• Oxygen Free 99.99%	R21B	R21B	R31B	
• Extra Dry 99.7%	HP152	G152	G152T	
NITROUS OXIDE				
• U.H.P. 99.99%		R21B	R31B	326
• Atomic Absorption 99.0%		G152	G152T	
OXYGEN				
• Research 99.995%		R21SL	R31SL	540
• U.H.P. 99.99%		R21B	R31B	
• Zero 99.6%		R21B	R31B	
• Extra Dry 99.6%		R21B	R31B	
PROPANE				
• Research 99.99%		R21B	R31B	510
• Instrument 99.5%		R21B	R31B	
• C.P. 99.0%		G152	G152T	
• Natural 96.0%		G152	G152T	
PROPYLENE				
• Research		R21B	R31B	510
• C.P. 99.0%		G152	G152T	
SULFUR HEXAFLUORIDE				
• Instrument 99.99%		R21B	R31B	590
• C.P. 99.8%		G152	G152T	
XENON				
• Research 99.995%		R21SL	R31SL	580

Mixed Gases	Line Regulator	Cylinder Regulators		
	Single Stage	Single Stage	Dual Stage	CGA Inlet
AMMONIA				
• in Helium		R21SL	R31SL	
• in Air		R21SL	R31SL	705
• in Nitrogen		R21SL	R31SL	
ARGON				
• in Helium		R21B	R31B	580
• in Hydrogen		R21B	R31B	350
• in Nitrogen		R21B	R31B	580
BUTANE				
• in Air		R21B	R31B	590
• in Helium		R21B	R31B	580
• in Hydrogen		R21B	R31B	350
• in Nitrogen		R21B	R31B	590
CARBON DIOXIDE				
• in Air		R21B	R31B	590
• in Helium		R21B	R31B	580
• in Hydrogen		R21B	R31B	350
• in Nitrogen		R21B	R31B	580
• in Oxygen		R21B	R31B	296
CARBON MONOXIDE				
• in Air		R21B	R31B	590
• in Argon		R21B	R31B	350
• in Helium		R21B	R31B	350
• in Hydrogen		R21B	R31B	350
• in Nitrogen		R21B	R31B	350
CHLORINE				
• in Helium		R21SL	R31SL	660
• in Nitrogen		R21SL	R31SL	
ETHANE				
• in Air		R21B	R31B	590
• in Helium		R21B	R31B	350
• in Nitrogen		R21B	R31B	350
ETHYLENE				
• in Air		R21B	R31B	590
• in Helium		R21B	R31B	350
• in Nitrogen		R21B	R31B	350
HELIUM				
• in Argon		R21B	R31B	580
• in Nitrogen		R21B	R31B	580
HEXANE				
• in Air		R21B	R31B	590
• in Helium		R21B	R31B	350
• in Nitrogen		R21B	R31B	350
HYDROGEN				
• in Argon		R21B	R31B	350
• in Air		R21B	R31B	590
• in Nitrogen		R21B	R31B	350

Mixed Gases	Line Regulator	Cylinder Regulators		
	Single Stage	Single Stage	Dual Stage	CGA Inlet
HYDROGEN CHLORIDE				
• in Nitrogen		R21SL	R31SL	330
HYDROGEN SULFIDE				
• in Air		R21SL	R31SL	660/330
• in Helium		R21SL	R31SL	330
• in Nitrogen		R21SL	R31SL	330
ISOBUTANE				
• in Air		R21B	R31B	590
• in Helium		R21B	R31B	350
• in Nitrogen		R21B	R31B	350
METHANE				
• in Air		R21B	R31B	590
• in Argon		R21B	R31B	350
• in Helium		R21B	R31B	350
• in Hydrogen		R21B	R31B	350
• in Nitrogen		R21B	R31B	350
NITRIC OXIDE				
• in Argon		R21SL	R31SL	660
• in Nitrogen		R21SL	R31SL	
NITROGEN				
• in Argon		R21B	R31B	580
• in Helium		R21B	R31B	580
• in Oxygen		R21B	R31B	296
NITROGEN DIOXIDE				
• in Air		R21SL	R31SL	660
• in Nitrogen		R21SL	R31SL	
OXYGEN				
• in Argon		R21B	R31B	
• in Helium		R21B	R31B	580/590
• in Nitrogen		R21B	R31B	
PROPANE				
• in Air		R21B	R31B	590
• in Hydrogen		R21B	R31B	350
• in Nitrogen		R21B	R31B	350
PROPYLENE				
• in Air		R21B	R31B	590
• in Nitrogen		R21B	R31B	350
SULFUR DIOXIDE				
• in Air		R21SL	R31SL	
• in Argon		R21SL	R31SL	660
• in Helium		R21SL	R31SL	
• in Nitrogen		R21SL	R31SL	

Instrument Mixtures	Line Regulator	Cylinder Regulators		
	Single Stage	Single Stage	Dual Stage	CGA Inlet
CHROMATOGRAPH CARRIER GAS 8.5% Hydrogen 91.5% Helium		R21B	R31B	350
ELECTRON CAPTURE MIXTURE P-5 Gas Mixture 5% Methane in Argon		R21B	R31B	350
FLAME IONIZATION FUEL MIXTURES 40% Hydrogen 60% Nitrogen		R21B	R31B	350
FURNACE ATMOSPHERE MIXTURES 40% Carbon Dioxide 60% Carbon Monoxide		R21B	R31B	350
NUCLEAR COUNTER MIXTURE 0.95% ISO Butane 99.05% Helium		HP152	HP152T	350
LEAK DETECTION MIXTURE 1-10% Helium in Nitrogen		R21B	R31B	580

Nuclear Counter Mixture	Line Regulator	Cylinder Regulators		
	Single Stage	Single Stage	Dual Stage	CGA Inlet
P-10 GAS MIXTURE 10% Methane 90% Argon		R21B	R31B	350
PROPORTIONAL COUNTING MIXTURE 4% ISO Butane 96% Helium		R21B/HP152	R31B	350
1.5% ISO Butane 98.5% Helium		R21B	R31B	350

MATERIAL COMPATIBILITY

A GENTEC® Product Material Compatibility

Gas	Material											
	Aluminum	Brass	Copper	Mone	Stainless Steel	Carbon Steel	Neoprene	PCTFE (Kel-F)	Viton	Polyethyler	PVC	PTFE (Teflon)
Ammonia	•	○	○	•	•	○	•	•	○	○	•	•
Argon	•	•	•	•	•	•	•	•	•	•	•	•
CO_2	•	•	•	•	•	•	•	•	•	•	•	•
Chlorine	○	○	○	•	•	•	○	•	•	•	○	•
Diborane	•	•	•	•	•	•	○	•	•	○	○	•
Helium	•	•	•	•	•	•	•	•	•	•	•	•
Hydrogen	•	•	•	•	•	•	•	•	•	•	•	•
HCl	○	○	○	•	•	○	•	•	•	•	•	•
H_2S	•	○	○	•	•	○	○	•	•	•	•	•
Methane	•	•	•	•	•	•	•	•	•	•	•	•
Nitrogen	•	•	•	•	•	•	•	•	•	•	•	•
N_2O	•	•	•	•	•	•	•	•	•	•	•	•
Oxygen	•	•	•	•	•	•	•	•	•	○	○	•
Phosphine	•	○	○	•	•	•	○	•	•	•	•	•
Silane	•	•	•	•	•	•	•	•	•	•	•	•
SO_2	•	•	•	•	•	•	○	•	○	•	•	•
F_6S	•	•	•	•	•	•	•	•	•	•	•	•
Arsine	○	•	○	•	•	•	•	•	•	•	•	•
Boron Trichloride	○	○	•	•	•	•	○	•	•	○	•	•
Boron Trifluoride	•	○	•	•	•	•	○	•	○	○	•	•
Dichloriosilane	○	○	○	•	•	•	○	•	○	○	○	•
Silicon Tetrachloride	○	○	○	•	•	•	○	•	○	○	○	•
Acetylene	•	•	○	•	•	•	•	•	○	•	○	•
Air	•	•	•	•	•	•	•	•	•	•	•	•
Butane	•	•	•	•	•	•	•	•	•	○	•	•
Carbon Monoxide	•	•	•	•	•	•	○	•	•	•	•	•
Cyclopropane	•	•	•	•	•	•	•	•	•	•	•	•
Ethane	•	•	•	•	•	•	•	•	•	•	•	•
Ethylene	•	•	•	•	•	•	•	•	•	•	○	•
Ethylene Oxide	•	•	•	•	•	•	○	•	○	○	○	•
Isobutane	•	•	•	•	•	•	•	•	•	○	•	•
Krypton	•	•	•	•	•	•	•	•	•	•	•	•
Methyl Chloride	○	○	•	•	•	•	•	•	•	•	○	•
Neon	•	•	•	•	•	•	•	•	•	•	•	•
NO	•	○	○	○	•	•	○	•	•	•	•	•
Propane	•	•	•	•	•	•	•	•	•	•	•	•
Xenon	•	•	•	•	•	•	•	•	•	•	•	•

• Recommended ○ Not Recommended • Recommended only for dry-grades of gas

ALLOCATION TABLE

Cylinder Connections Allocation Table

Gas	BSP	DIN	CGA	UHP CGA	JIS
Acetylene	BS341 No. 2	==	510	==	==
Air	BS341 No. 3	==	346	==	==
Ammonia	BS341 No. 10	DIN6	705	720	22-R
Argon	BS341 No. 3	DIN6	580	718	22-4 or 23-R
Arsine	==	==	350	632	22-L
Boron Trichloride	==	DIN8	660	634	==
Boron Trifluoride	==	DIN8	330	642	22-L
Butane	BS341 No. 4	==	510	==	==
Carbon Dioxide	BS341 No. 8	DIN6	320	716	==
Carbon Monoxide	BS341 No. 4	DIN5	350	724	22-L
Cyclopropane	BS341 No. 4	==	510	==	==
Diborane	==	==	350	632	22-L
Dichloriosilane	==	DIN5	678	636	==
Diethylzinc	==	==	510	726	==
Ethane	==	==	350	==	==
Ethyl Chloride	==	==	510	==	==
Ethylene	==	==	350	==	==
Ethylene Oxide	==	==	510	==	==
Germane	==	==	350 or 660	632	==
R11 (R116) / Halocarbon 11 (116)	==	==	660	716	==
R12 (R13, R23, R115) / Halocarbon 12 (13, 23, 115)	==	DIN6	660	716	==
R14 (Halocarbon 14)	==	DIN6	320 or 580	716	==
Helium	BS341 No. 3	DIN6	580	718	22-R or 23-L
Hydrogen	BS341 No. 2	DIN1	350	724	22-L
Hydrogen Chloride	==	DIN8	330	634	26-R
Hydrogen Fluoride	==	==	660 or 670	638	26-R
Hydrogen Sulfide	==	DIN5	330	722	==
Iso-Butane	==	==	510	==	==
Krypton	==	DIN6	580	718	22-R or 23-R
Methane	BS341 No. 2	==	350	==	==
Methyl Chloride	==	==	660	==	==
Natural Gas	==	==	350	==	==
Neon	==	DIN6	580	718	22-R or 23-R
Nitric Oxide	==	==	660	==	==
Nitrogen	BS341 No. 3	DIN10	580	718	22-R or 23-R
Nitrogen Trifleoride	==	DIN8	330 or 670	640	==
Nitrous Oxide	BS341 No. 13	DIN9	326	712	==
Oxygen	BS341 No. 3	DIN1	540	714	22-R or 23-R
Phosphine	==	==	350	632	==
Propane	BS341 No. 4	==	510	==	==
Silane	==	==	350	632	==
Silicon Tetrachloride	==	==	330	636	==
Silicon Tetrafluoride	==	==	330	642	22-L
Sulfur Hexafluoride	==	DIN6	590	716	26-R
Tungsten Hexafluoride	==	DIN8	670	638	
Xenon	==	DIN6	580	718	22-R

*Chart is for reference only

Any GENTEC® apparatus found to be defective either in material or workmanship during the time set forth below will be replaced by Genstar Technologies Company, Incorporated or its Authorized Distributors, provided that said apparatus was used under normal conditions for the purpose intended.

GENTEC® apparatus damaged or rendered inoperative due to abuse, negligence, misuse, accident or abnormal wear and tear is not covered by this warranty and must be repaired at the sole expense of the equipment owner. GENTEC® apparatus should be serviced facilities only. Service or repair of this apparatus by other than Genstar Technologies Company, Incorporated or designated service facilities may void any warranties and relieve Genstar Technologies Company, Incorporated of any claims for damage and/or liability.

To make a claim under this warranty, Buyer must notify Genstar Technologies Company, Incorporated or its Authorized Distributor of the details of such claim within 30 days of discovering a defect in material or workmansip along with proof of purchase. The Buyer will be responsible for transportation costs and related risks.

Genstar Technologies Company, Incorporated shall not, under any circumstances, be liable for any damages including but not limited to: indirect, incidental, consequential, or special damages, wether such damages result from negligence, breach of warranty or otherwise.

There are no other warranties, expressed or implied, except as stated herein. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Genstar Technologies company, Incorporated reserves the right to dicountinue manufacturing of any product or change product materials, design or specifications without notice.

Warranty from the Date of Original Purchase

1 YEAR

GENTEC® High Purity Regulators

• 90 days in corrosive service

1 YEAR

Pigtails

* GENTEC® Industrial Manifold Systems are not included in this catalog.
• Please refer to GENTEC® MANIFOLD SYSTEM catalog



Gas Control Systems Solutions Overview

- Manifold Systems
- Control Panels
- HP/UHP Regulators
- Pressure Gauges
- Valves & Fittings



Specialty Manifold Systems

- Chrome-plated Brass Specialty Gas Control Panels
- Stainless Steel Specialty Gas Control Panels
- Specialty Gas Manifolds
- Terminal Gas Control Panel
- Other Control Systems
- Accessories



Ultra High Purity

- UHP Regulators
- UHP Valves
- UHP Flow Switches
- UHP Vacuum Generators
- UHP Gas Sticks
- UHP Pressure Gauges
- UHP Fittings



Valves (International Edition)

- Needle Valves
- Ball Valves
- Diaphragm Valves
- Cylinder Valves
- Metering Valves
- Gauge Valves
- Check Valves



Tube Fittings

- Male Connectors
- Male Elbows
- Male Adapters
- Female Connectors
- Female Elbows
- Unions
- Reducing unions



Piipe Fittings

- Hex Nipple
- Hex Reducing Nipple
- Coupling
- Adapter
- Reducing Bushing
- Elbow
- Tee
- Cross
- Union
- Plug
- Hose Connector



Weld Fittings

- Tube Weld Fittings
- Butt Weld Fittings
- Micro Weld Fittings
- Socket Weld Fittings



CRYOGENIC GAS EQUIPMENT

- Cryogenic Relief Valves
- Cryogenic Shut-Off Valves
- Regulators
- Check Valves & Burst-Disc
- LNG Nozzle/Quick Disconnect, Receptacle
- Excess Flow Valves
- Pressure Gauges

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To view our full line of Specialty Gas Products please visit us online at www.gentec.com

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CATA#: SS17V2606-5