

DH2 Series

Electrically Heated Dual Pressure Regulators

Introduction

The Dual Heated Pressure Regulator is designed to supply heat to samples entering instrumentation systems. It can be used to preheat liquids, to prevent condensation of gases or to vaporize liquids prior to gas analysis. Significant space savings can be realized due to the utilization of two discrete regulators that are heated by a common source.

The modular design of the Dual Heated Regulator consists of a heating element and pressure control sections. The pressure control sections are patterned after the time proven design of the PR-1 pressure reducing regulator and provides the same excellent outlet pressure stability. The heat exchanger section is made up of a body and a heating element.

The Dual Heated Pressure Regulators are ATEX approved. The electrical components of this unit are securely housed in a Class A, B, C, D conduit assuring that there is always an adequate flame path between the environment and the controller. Safety considerations can be further enhanced by using the optional TCO (Thermal Cut Out) heater cartridge. This feature enables the unit to boast a T3 rating with up to 250 watts of power. (CSA T2D rating)



pressure regulators

Typical Applications

Analytical process sample conditioning systems:

- Petrochemical refineries
- Chemical production facilities
- Pilot plants (chemical & petrochemical)
- LNG loading and off-loading points
- Natural gas pipeline sampling

Technical Data

CONSTRUCTION	316L stainless steel
OUTLET PRESSURES	0–10, 0–25, 0–50, 0–100, 0–250, and 0–500 psig
OPERATING TEMPERATURE	up to 380° F (193° C)
HEATING CAPACITY RANGES (IN WATTS)	40, 50, 100, and 150
C _v COEFFICIENTS	0.06, 0.025, 0.2
CERTIFICATIONS	CSA certification # LR-82566-5 ATEX Directive 2014/34/EU Certification # TRL03ATEX11001X

Features & Benefits

- Optional HASTELLOY® C-276 and MONEL®
- Electropolished body with better than 25 Ra finish in diaphragm cavity for an optimal sealing surface
- Bubble-tight shutoff
- Available in 120VAC or 230VAC
- Optional TCO heating cartridge for T3 rating
- INCONEL® diaphragm standard

DH2 Series

To Order, contact your local Distributor Link below:
www.goreg.com/distributor/index.htm

Verify that your chosen part number is valid using the GO Wizards at
www.goreg.com/products/matrix/index.htm

How to Order

Standard items in bold

DH2 – 1 A 1 C 3 I 1 C 3 G 1 4 1 1 1 1

Regulator A Regulator B

BODY MATERIAL

- 1 316L stainless steel, stainless steel diaphragm
- 4 MONEL®, INCONEL® diaphragm
- 6 HASTELLOY® C, INCONEL® diaphragm
- C 316L stainless steel INCONEL® diaphragm**

PORT CONFIGURATION

- A Standard Body "A" (One inlet port and one outlet port on each side.**

For more configurations, see pages 49-51

PROCESS PORT TYPE

- O 1/8" FNPT (ALL PORTS)**
- 1 1/4" FNPT (ALL PORTS)**

SEAT MATERIAL (REGULATOR A)

- A Tefzel®**
- B CF PTFE**
- H PCTFE**
- Q PEEK™**

FLOW COEFFICIENT (REGULATOR A)

- C 0.025**
- 3 0.06**
- 5 0.2**

OUTLET RANGE (REGULATOR A)

- C 0–10 psig**
- D 0–25 psig**
- E 0–50 psig**
- G 0–100 psig**
- I 0–250 psig**
- J 0–500 psig**
- K 0–1000 psig, BP-6 Top Works Only**
- W 0–750 psig**

CAP ASSEMBLY (REGULATOR A)

- 1 Tamper-proof, stainless steel**
- 4 Tamper-proof, panel mount, stainless steel**
- 7 Tamper-proof, captured vent, stainless steel**
- L T-handle, stainless steel, BP-6 Top Works**

SEAT MATERIAL (REGULATOR B)

- A Tefzel®**
- B CF PTFE**
- H PCTFE (formerly Kel-F® 81)**
- Q PEEK™**

FLOW COEFFICIENT (REGULATOR B)

- C 0.025**
- 3 0.06**
- 5 0.2**

OPTIONS

- B EB-5 Cleaning**
- D Helium Leak Test**
- E Pressure Test Certificate**
- F Certificate of Conformity**
- G CMTR**

VOLTAGE

- 1 120 VAC**
- 2 230 VAC**
- 2 No electronics**

THERMISTOR TYPE

- 1 Thermally protected (TCO)**
- 2 Non-thermally protected**
- 6 No electronics**

CONTROLLER TYPE

- 1 Standard**
- 2 Standard**
- 6 No electronics**

HEATER WATTAGE

- 1 40W**
- 2 50W**
- 3 100W**
- 4 150W**
- 6 No electronics**
- 8 200W**
- 9 250W**

TEMPERATURE RANGE

- 1 55°-85°F (13-29°C)**
- 2 75°-175°F (24-80°C)**
- 3 130°-300°F (54-149°C)**
- 4 260°-380°F (126-194°C)**
- 6 No electronics**

CAP ASSEMBLY (REGULATOR B)

- 1 Tamper-proof, stainless steel**
- 4 Tamper-proof, panel mount, stainless steel**
- 7 Tamper-proof, captured vent, stainless steel**
- L T-handle, stainless steel, BP-6 Top Works**

OUTPUT RANGE (REGULATOR B)

- C 0–10 psig**
- D 0–25 psig**
- E 0–50 psig**
- G 0–100 psig**
- I 0–250 psig**
- J 0–500 psig**
- K 0–1000 psig, BP-6 Top Works Only**
- W 0–750 psig**

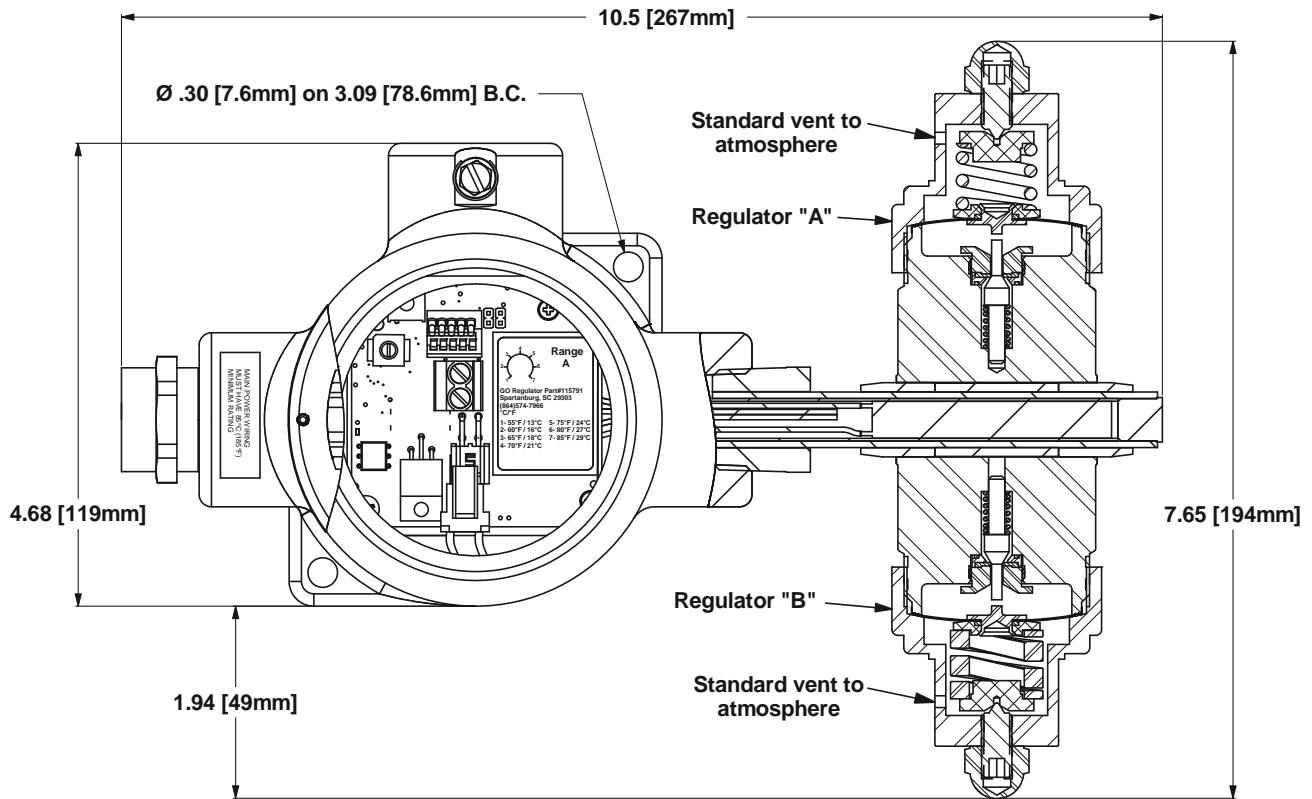
*NOTE: 1. Contact the factory for any additional requirements.
 2. Units that will be used for flammable liquid or gas with fire point at 200°C or below require the TCO Thermistor. It is also recommended to use the 1-PC body option. In addition, Tefzel and PCTFE seats in these units are recommended to use the captured vent cap option which provides for venting to a safe location.*

Maximum Temperature & Operating Inlet Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE
Tefzel® & CF PTFE	Up to 175° F (80° C)	@	3600 psig (24.82 MPa)
	176° F to 300° F (80° C to 148° C)	@	1000 psig (6.90 MPa)
	301° F to 380° F (148° C to 193° C)	@	400 psig (2.76 MPa)
PCTFE	Up to 175° F (80° C)	@	6000 psig (41.37 MPa)
	176° F to 300° F (80° C to 148° C)	@	1000 psig (6.90 MPa)
	301° F to 380° F (148° C to 193° C)	@	400 psig (2.76 MPa)
PEEK™	Up to 380° F (193° C)	@	6000 psig (41.37 MPa)

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Outline and Mounting Dimensions



Panel mount option requires
 1.390" (35.3mm) minimum
 diameter panel cut out

Weight = 9.3 lbs (4.2 kg)

