

Steam Heated Regulators

Introduction

The HPR-2 Series 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.

The modular design of the HPR-2 consists of heat exchanger and pressure control sections. The pressure control section is 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 heat exchange element. The heat exchange element uses GO Regulator's unique spiral-wrapped screen as the heat exchanger surface. This screen has up to 100 square inches of heat transfer area and precise design forces all sample flow to pass through the element.



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
INLET PRESSURE	up to 6000 psig at 380° F (193° C)
OPERATINGTEMPERATURE	up to 550° F (285° C)
C _V COEFFICIENTS	0.06, 0.025, 0.2
INLET CONNECTIONS	%″ FNPT
OUTLET CONNECTIONS	1⁄4″ FNPT

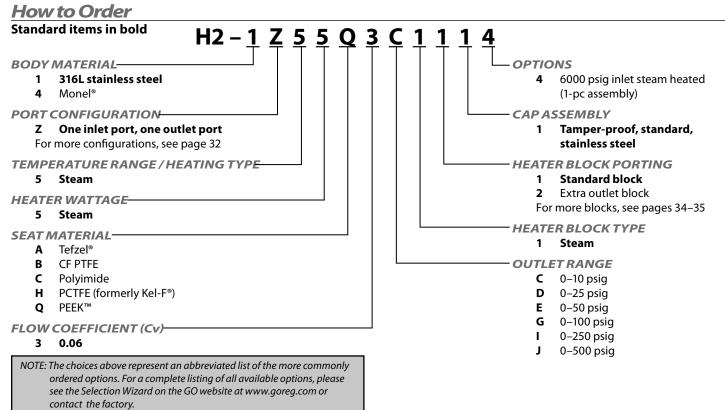
Features & Benefits

- Optional Hastelloy[®] C and Monel[®]
- Electropolished body with better than 25 Ra finish in diaphragm cavity for an optimal sealing surface
- Bubble-tight shutoff
- Modular pressure control and heat exchanger assemblies allow for easy maintenance.
- Unique spiral-wrapped heat exchange element provides up to 100 square inches of heat transfer area.

GO Regulator

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HPR-2 Series



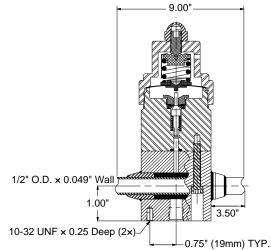
Maximum Temperature & Operating Inlet Pressures

HPR-2 Steam 2-piece Assembly

(Heater block and regulator body separate)

SEAT MATERIAL	MAXIMUM PRESSURE	@	MAXIMUM OPERATING INLET PRESSURE
Tefzel®	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)
High density 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 (formerly Kel-F®)	Up to 380° F (193° C)	@	3600 psig (24.82 MPa)
Polyimide	Up to 380° F (193° C)	@	3600 psig (24.82 MPa)
PEEK™	Up to 380° F (193° C)	@	3600 psig (24.82 MPa)
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Outline & Mounting Dimensions





HPR-2 Steam 1-piece Assembly

(Integral heater block and regulator)

(integral nearer break and regulater)					
SEAT MATERIAL	MAXIMUM PRESSURE	@	MAXIMUM OPERATING INLET PRESSURE		
Tefzel®	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)		
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PCTFE (formerly Kel-F®)	Up to 380° F (193° C)	@	3600 psig (24.82 MPa)		
Polyimide	Up to 380° F (193° C)	@	6000 psig (24.82 MPa)		
PEEK™	Up to 380° F (193° C)	@	6000 psig (24.82 MPa)		

