GO_{REGULATOR}, INC.

HPR-2 Series

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:

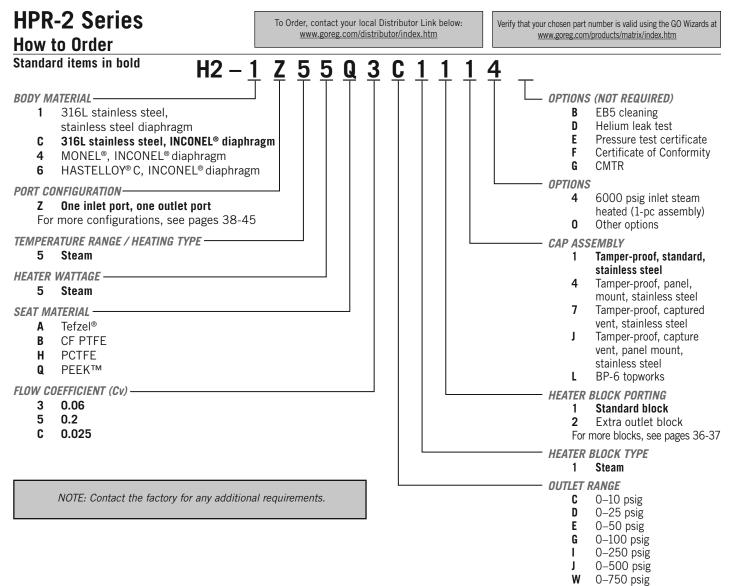
- Petrochemical refineries
- Chemical production facilities
- Pilot plants (chemical & petrochemical)
- LNG loading and off-loading points
- Natural gas pipeline sampling

Technical Data

CONSTRUCTION	316L stainless steel			
OUTLET PRESSURES	0–10, 0–25, 0–50, 0–100, 0–250, 0-500, 0-750 and 0–1000 psig			
INLET PRESSURE	up to 6000 psig at 380° F (193° C)			
OPERATING Temperature	up to 500° F (260° C)			
C _V COEFFICIENTS	0.06, 0.025, 0.2			
INLET CONNECTIONS	½ ″ 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.
- INCONEL[®] diaphragm standard.



Maximum Temperature & Operating Inlet Pressures

HPR-2 Steam 2-piece Assembly

(Heater block and regulator body separate)

SEAT MATERIAL	MAXIMUM TEMPERATURE @	MAXIMUM OPERATING INLET Pressure
Tefzel ^{®,} CF PTFE & PCTFE	Up to 380° F (193° C) @	400 psig (2.76 MPa)
PEEK™	Up to 500° F (260° C) @	3600 psig (24.82 MPa)

HPR-2 Steam 1-piece Assembly

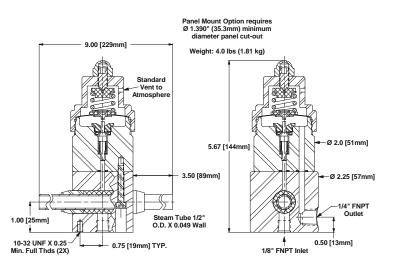
(Integral heater block and regulator)

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET Pressure
Tefzel ^{®,} CF PTFE & PCTFE	Up to 380° F (193° C)	@	400 psig (2.76 MPa)
PEEK™	Up to 380° F (193° C)	@	6000 psig (41.37 MPa)

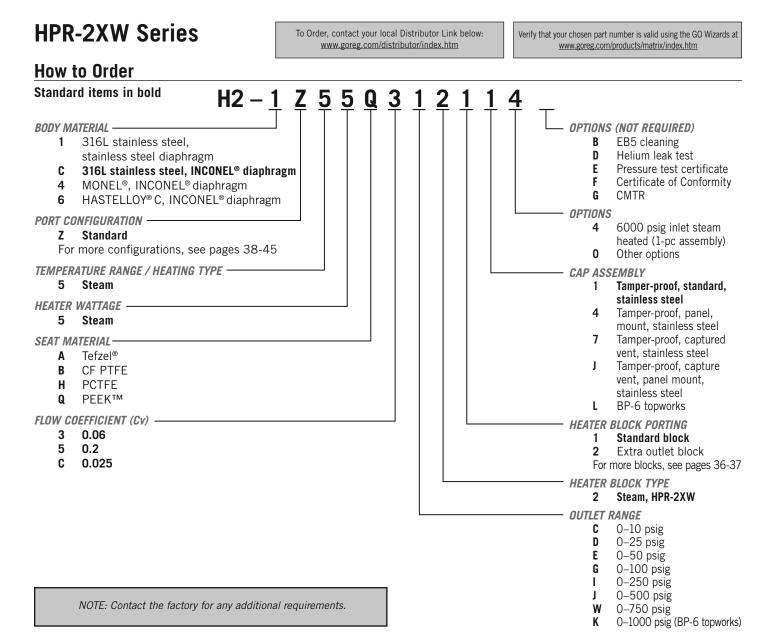
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0-1000 psig (BP-6 topworks)

Outline & Mounting Dimensions



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Maximum Temperature & Operating Inlet Pressures

HPR-2XW Steam 2-piece Assembly

(Heater block and regulator body separate)						
MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE				
Up to 380° F (193° C)	@	400 psig (2.76 MPa)				
Up to 500° F (260° C)	@	3600 psig (24.82 MPa)				
HPR-2XW Steam 1-piece Assembly (Integral heater block and regulator)						
MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE				
Up to 380° F (193° C)	@	400 psig (2.76 MPa)				
Up to 380° F (193° C)	@	6000 psig (41.37 MPa)				
	MAXIMUM TEMPERATURE Up to 380° F (193° C) Up to 500° F (260° C) CCE Assembly and regulator) MAXIMUM TEMPERATURE Up to 380° F (193° C)	MAXIMUM TEMPERATURE @ Up to 380° F (193° C) @ Up to 500° F (260° C) @ cce Assembly and regulator) MAXIMUM TEMPERATURE @ Up to 380° F (193° C) @				

HPR-2XW Series

Outline & Mounting Dimensions

