

## HPR-2XW Series

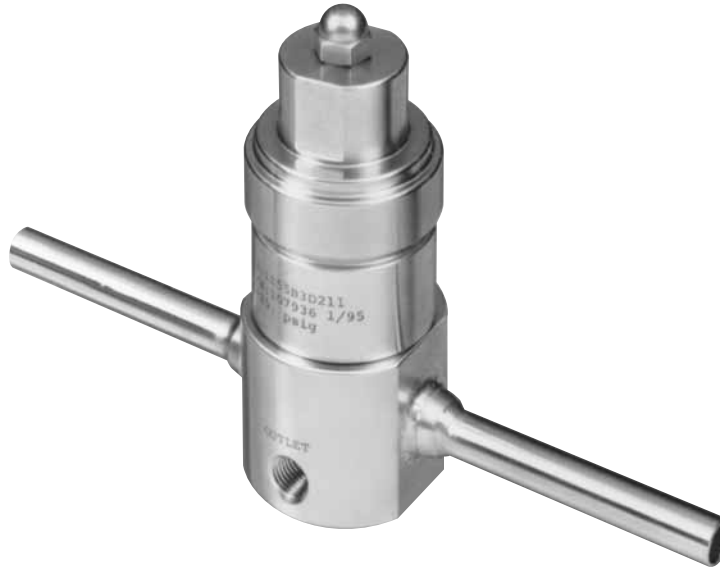
Steam Heated Pressure Regulator

### Introduction

The HPR-2XW 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-2XW 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 exchange 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.

Completing this modular design is the incorporation of a removable heat exchange unit. This allows the user to remove and clean or replace the exchanger. This is especially useful when heating dirty liquids or liquids that polymerize and clog the heat exchange screen.



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 |
| INLET PRESSURE              | up to 6000 psig at 380° F (193° C)             |
| OPERATING TEMPERATURE       | up to 550° F (285° C)                          |
| C <sub>v</sub> COEFFICIENTS | 0.06, 0.025, 0.2                               |
| INLET CONNECTIONS           | 1/8" 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 for easy maintenance
- Unique spiral wrapped heat exchange element provides up to 100 square inches of heat transfer area.

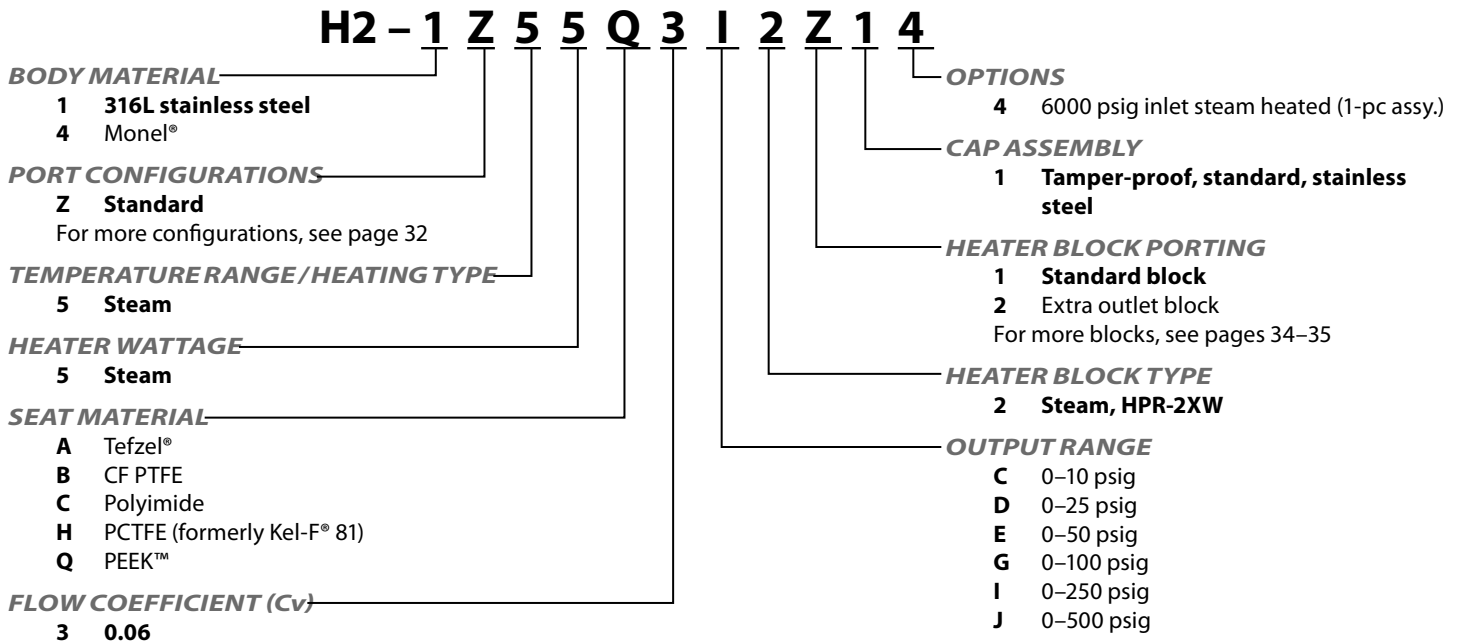
### GO Regulator

405 Centura Court • PO Box 4866 (29305) • Spartanburg, SC 29303  
Phone (864) 574-7966 Fax (864) 574-5608  
www.goreg.com • sales@goreg.com

# HPR-2XW Series

## How to Order

Standard items in bold



*NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at [www.goreg.com](http://www.goreg.com) or contact the factory.*

## Maximum Temperature & Operating Inlet Pressures

### HPR-2XW 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<br>(80° C to 148° C)  | @ | 1000 psig (6.90 MPa)             |
|                            | 301° F to 380° F<br>(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<br>(80° C to 148° C)  | @ | 1000 psig (6.90 MPa)             |
|                            | 301° F to 380° F<br>(148° C to 193° C) | @ | 400 psig (2.76 MPa)              |
| PCTFE<br>(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)            |

### HPR-2XW Steam 1-piece Assembly (Integral heater block and regulator)

| 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<br>(80° C to 148° C)  | @ | 1000 psig (6.90 MPa)             |
|                            | 301° F to 380° F<br>(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<br>(80° C to 148° C)  | @ | 1000 psig (6.90 MPa)             |
|                            | 301° F to 380° F<br>(148° C to 193° C) | @ | 400 psig (2.76 MPa)              |
| PCTFE<br>(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)            |

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## Outline & Mounting Dimensions

