

# XHS310 Datasheet

SINGLE-HEATED PRESSURE REGULATOR



Gas    Liquid    Diaphragm    Piston    Self-Venting    Non-Venting   
 Max Inlet: 414 bar (6,000 psi)   Max Outlet: 35 bar (510 psi)   Cv 0.06



## INTRODUCING THE XHS310...

The XHS310 is an economical single heated regulator, available in side-entry (SE) or in-line (IL) heat transfer options to maintain sample gases in their vapour state.

The side-entry design can be used in applications where heat transfer is less critical, and where installations have height restrictions. The in-line design maximises the heat transfer area via a unique spiral machined heater sheath, which mixes the gas and ensures efficient heat transfer.

In addition, its electrical enclosure meets the requirements of IP66 and NEMA 4 specifications.

## ATEX MARKING

The marking on the equipment includes the following information:

Ex II 2 G

Ex d IIC Gb T3 Ta = -40°C to +55°C

## FEATURES AND BENEFITS

### 1 SIDE-ENTRY OR IN-LINE

Choice of heater cartridge position caters for various application requirements.

### 2 100W HEATER CARTRIDGE

Efficient heater to maintain sample gases in their vapour state.

### 3 ATEX / IECEx CERTIFIED

Certified for use in category 2 zone 1 hazardous areas.

### 4 INCONEL® X750 DIAPHRAGM

For ultimate strength and reliability on clean or corrosive applications.

## STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603) <i>Approx. Temperatures: -196°C to 538°C</i>
Main Valve Pin	ASTM A479 316/316L Stainless Steel
Soft Seat	PEEK™ (450G) <i>Approx. Temperatures: -50°C to 204°C</i>
	PCTFE (Kel-F) <i>Approx. Temperatures: -196°C to 180°C</i>
Valve Spring	Inconel® X750 (UNS N07750) <i>Approx. Temperatures: -196°C to 700°C</i>
Diaphragm	Inconel® X750
O-Rings	FKM/FPM (Viton) <i>Approx. Temperatures: -20°C to 200°C</i>
Electric Enclosure	Feraloy Iron Alloy

For the full list of material temperature ranges, please visit [www.pressure-tech.com](http://www.pressure-tech.com).

*Note:* Temperature details are provided as nominal values for guidance purposes only. No warranty is made, expressed or implied. Contact the office for specific temperature requirements.

## SPECIFICATION

Max. Rated Inlet Pressure	414 bar (6,000 psi)
Outlet Ranges	Up to 35 bar (510 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	4.8kg (10.6lbs)

*Note:* Pressure regulator rating may be limited by connection type, Cv and/or seat material. Contact the office for specific pressure requirements.

**NOTE:** Product availability and specifications contained herein are subject to change without notice. Consult local distributor or factory for potential revisions and/or service related issues. Pressure Tech Ltd support with product selection recommendations only - it is the users responsibility to ensure the product is suitable for their specific application requirements.



DESIGNED AND BUILT IN THE UK

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 ● Diaphragm ● Piston | 
 ● Self-Venting ● Non-Venting | 
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 Cv 0.06

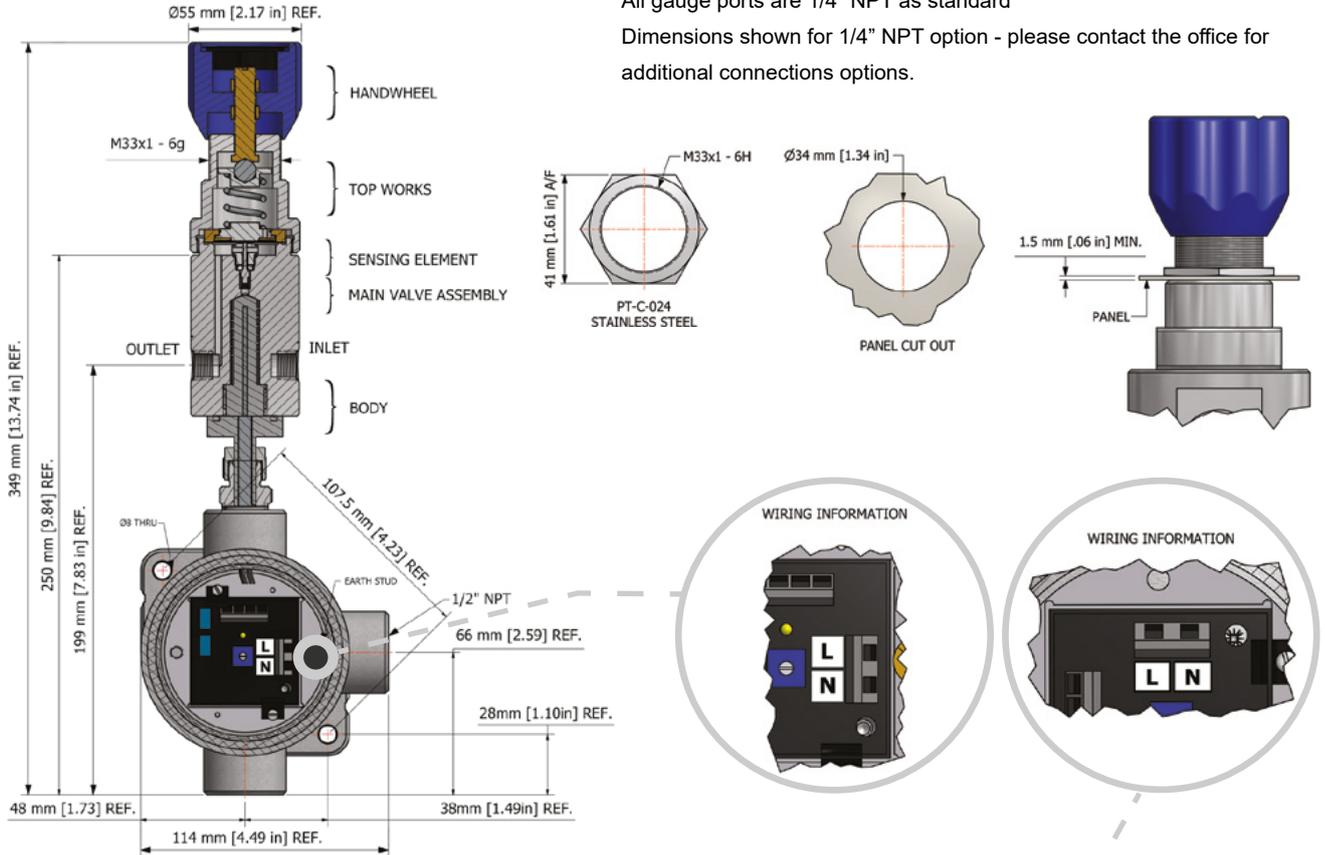
## DRAWINGS AND INSTALLATION DIMENSIONS

Note:

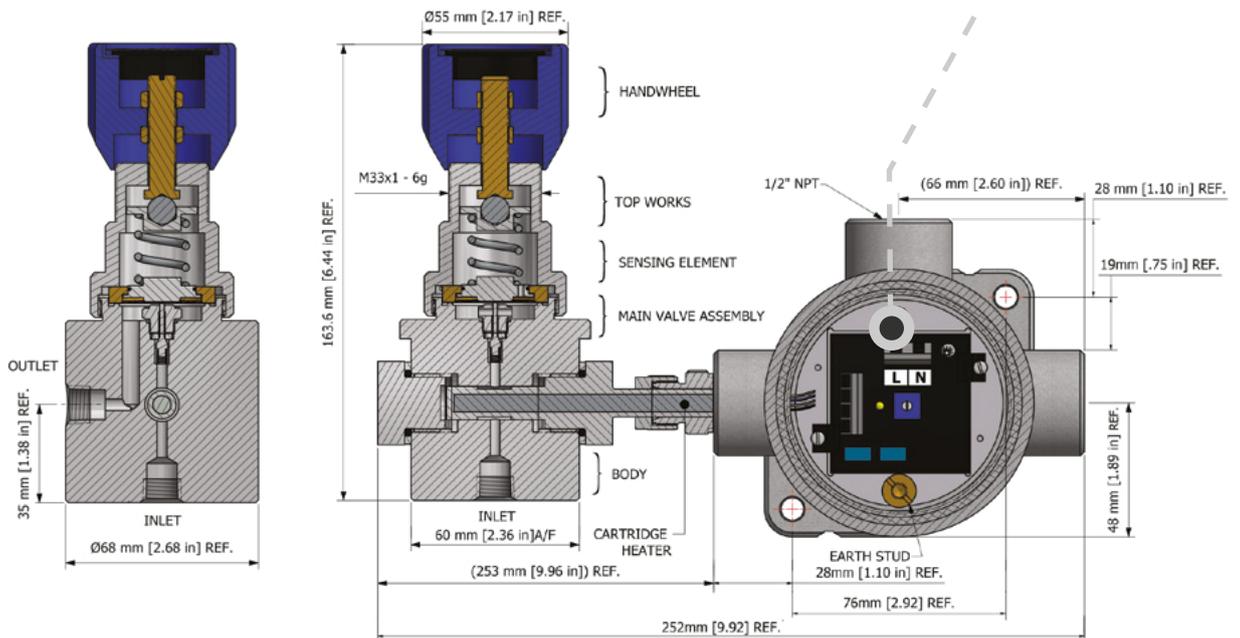
All gauge ports are 1/4" NPT as standard

Dimensions shown for 1/4" NPT option - please contact the office for additional connections options.

IN-LINE



SIDE-ENTRY



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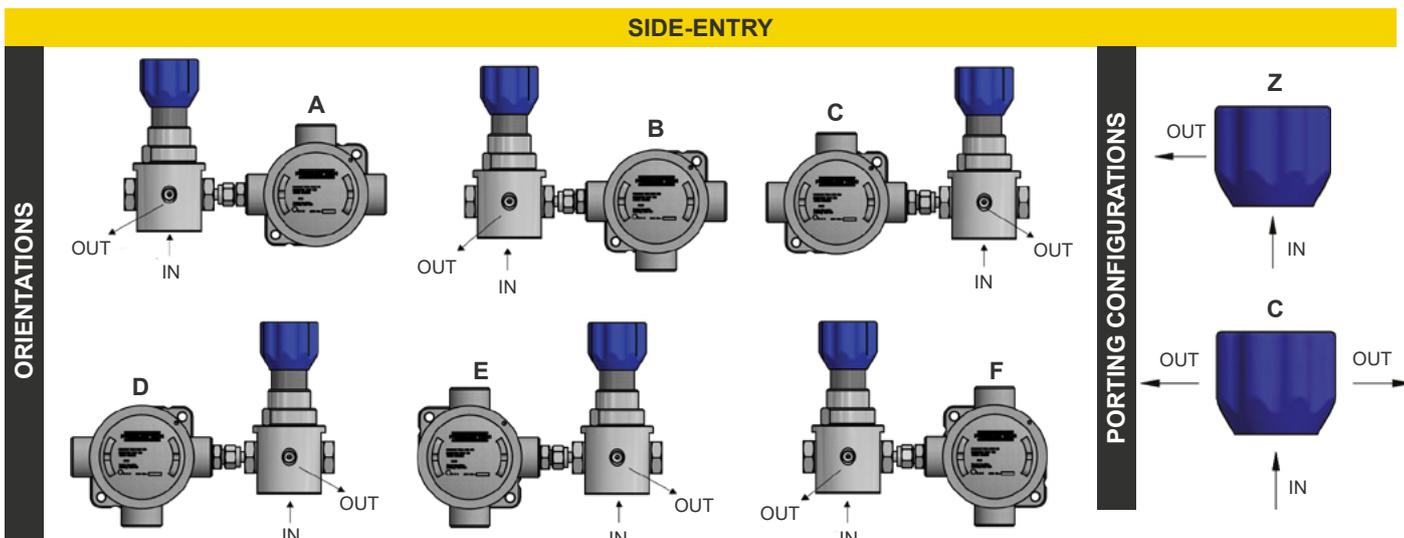
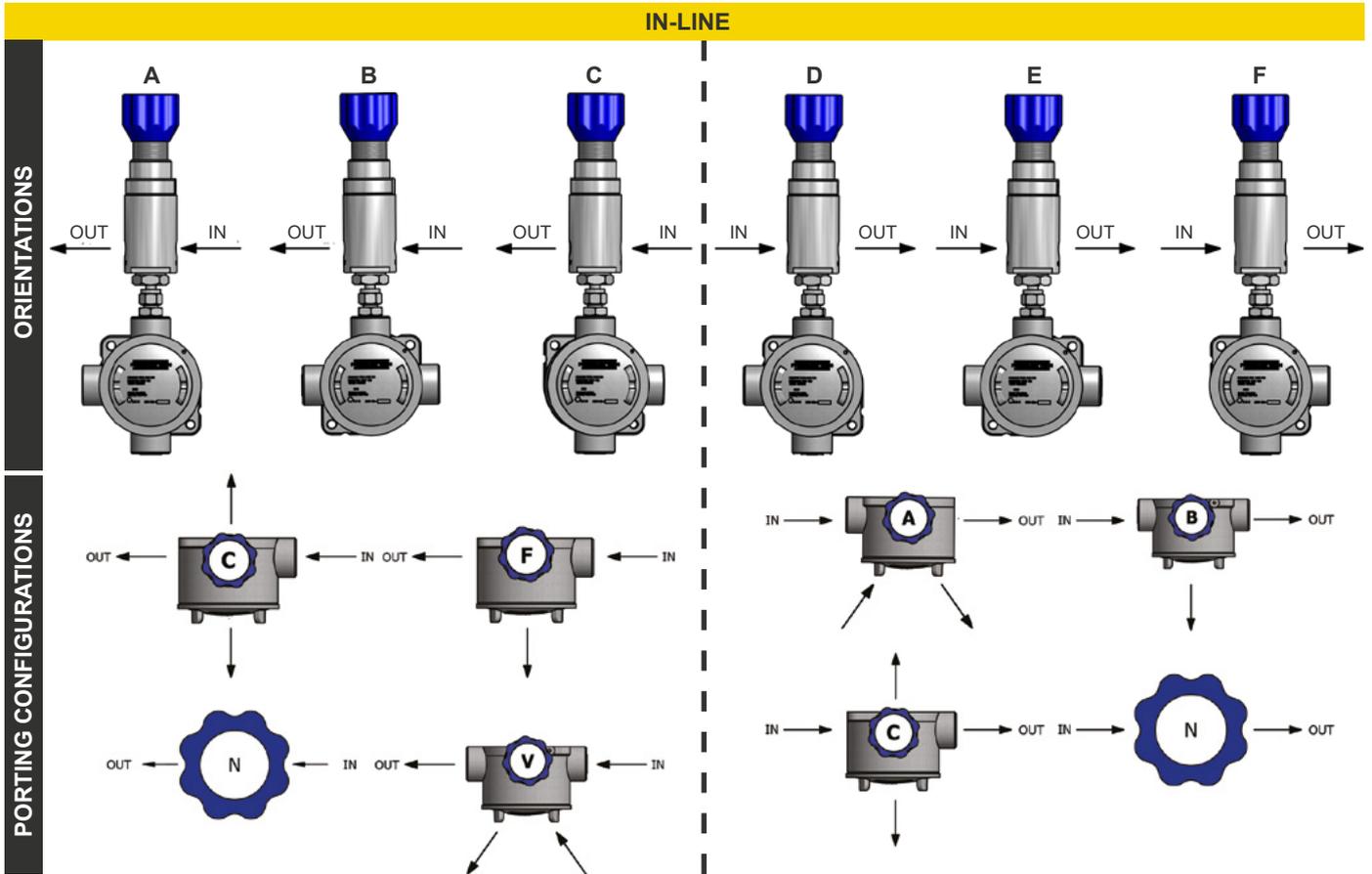
## SINGLE-HEATED PRESSURE REGULATOR



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### ASSEMBLY ORIENTATIONS

To select a valid assembly, choose your required orientation and then combine with a compatible porting configuration. Please note - gauge ports must be in a forward-facing position.



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## FLOW CURVE

Please contact the office for further information.

## ORDERING INFORMATION

To build a Pressure Tech part number, simply combine the characters identified below in sequence:

XHS310 - IL - S - 10 - K - 2 - B - N - XXX	
<b>REGULATOR MODEL/SERIES</b> XHS310 – Single-Heated Pressure Regulator - Diaphragm-Sensed	<b>MODIFICATIONS*</b> Please contact the office for further information.
<b>HEATER CARTRIDGE POSITION</b> IL – In-Line SE – Side-Entry	<b>PORTING CONFIGURATION</b> N - No gauge ports Please refer to table on page 3 for porting configuration options.
<b>BODY MATERIAL**</b> S – AISI 316/316L Stainless Steel (UNS S31600/S31603)	<b>ORIENTATION</b> Please refer to table on page 3 for orientation options.
<b>CONTROL PRESSURE</b> 04 – Up to 4 bar (58 psi) 10 – Up to 10 bar (145 psi) 20 – Up to 20 bar (290 psi) 35 – Up to 35 bar (510 psi)	<b>POWER SUPPLY</b> 1 – 115V 2 – 230V
<b>SEAT MATERIAL**</b> K – PCTFE (max. inlet 300 bar/4,350 psi) P – PEEK™ (max. inlet 414 bar/6,000 psi)	

OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-LF310...	Various options available
Panel Mounting Ring	PT-C-024	-

*Note:*  
Ancillary Equipment also available

**TRADEMARKS:** PEEK™ is a trademark of Victrex PLC  
 Inconel® is a registered trademark of Inco Alloys International

\* Where applicable  
 \*\* Other materials may be available - please contact the office

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