

# HF251 Datasheet

## HIGH-FLOW PRESSURE REGULATOR



Gas  
  Liquid  
  Diaphragm  
  Piston  
  Self-Venting  
  Non-Venting  
 Max Inlet: 250 bar (3,625 psi)  
 Max Outlet: 200 bar (2,900 psi)  
 Cv 7.0



### INTRODUCING THE HF251...

The HF251 is a piston-sensed high-flow pressure regulator for gas or liquid applications. The liquid version includes a PEEK™ seat, whilst the gas version features PCTFE seating.

It features a **balanced main valve** as standard for up to 250 bar (3,625 psi) inlet pressure. An unbalanced option can be offered alternatively for applications with maximum inlet pressures of up to 50 bar (725 psi).

With a Cv of 7.0, the HF251 is perfect for high-flow applications.

### STANDARD MATERIALS OF CONSTRUCTION

| PART            | MATERIALS  |
|-----------------|--|
| Body and Bonnet | AISI 316 / 316L Stainless Steel<br>(UNS S31600 / S31603) |
| Main Valve Pin  | AISI 316 / 316L Stainless Steel<br>(UNS S31600 / S31603) |
| Soft Seat       | PEEK™ or PCTFE   |
| Valve Spring    | AISI 316 S42 Stainless Steel                             |
| Piston          | AISI 316 / 316L Stainless Steel<br>(UNS S31600 / S31603) |
| 'O'-Ring Seals  | NBR  |
| Loading Spring  | Alloy Spring Steel                                       |

### SPECIFICATION

| Max. Inlet Pressure: | Balanced            | Unbalanced       |
|----------------------|---------------------|------------------|
| PEEK™                | 250 bar (3,625 psi) | 50 bar (725 psi) |
| PCTFE                | 250 bar (3,625 psi) | 50 bar (725 psi) |

|                       |                                  |
|-----------------------|----------------------------------|
| Outlet Ranges         | Up to 200 bar (2,900 psi)        |
| Design Proof Pressure | 150% max. working pressure       |
| Seat Leakage          | In accordance with ANSI/FCI 70-3 |
| Weight                | 8kg (17.6lbs)                    |

### FEATURES AND BENEFITS

|  |   |  |  |
|--|---|--|--|
| <b>1</b> BALANCED MAIN VALVE DESIGN<br><br>Improved control across the pressure range. | <b>2</b> PISTON SENSING ELEMENT<br><br>Perfect for use in challenging conditions. | <b>3</b> HIGH FLOW COEFFICIENT<br><br>CV 7.0 for high-flow capabilities. | <b>4</b> SUITABLE FOR GAS OR LIQUID APPLICATIONS<br><br>Versatile usage across a range of media-types. |
|--|---|--|--|

**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.



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PAGE:  
1 OF 4

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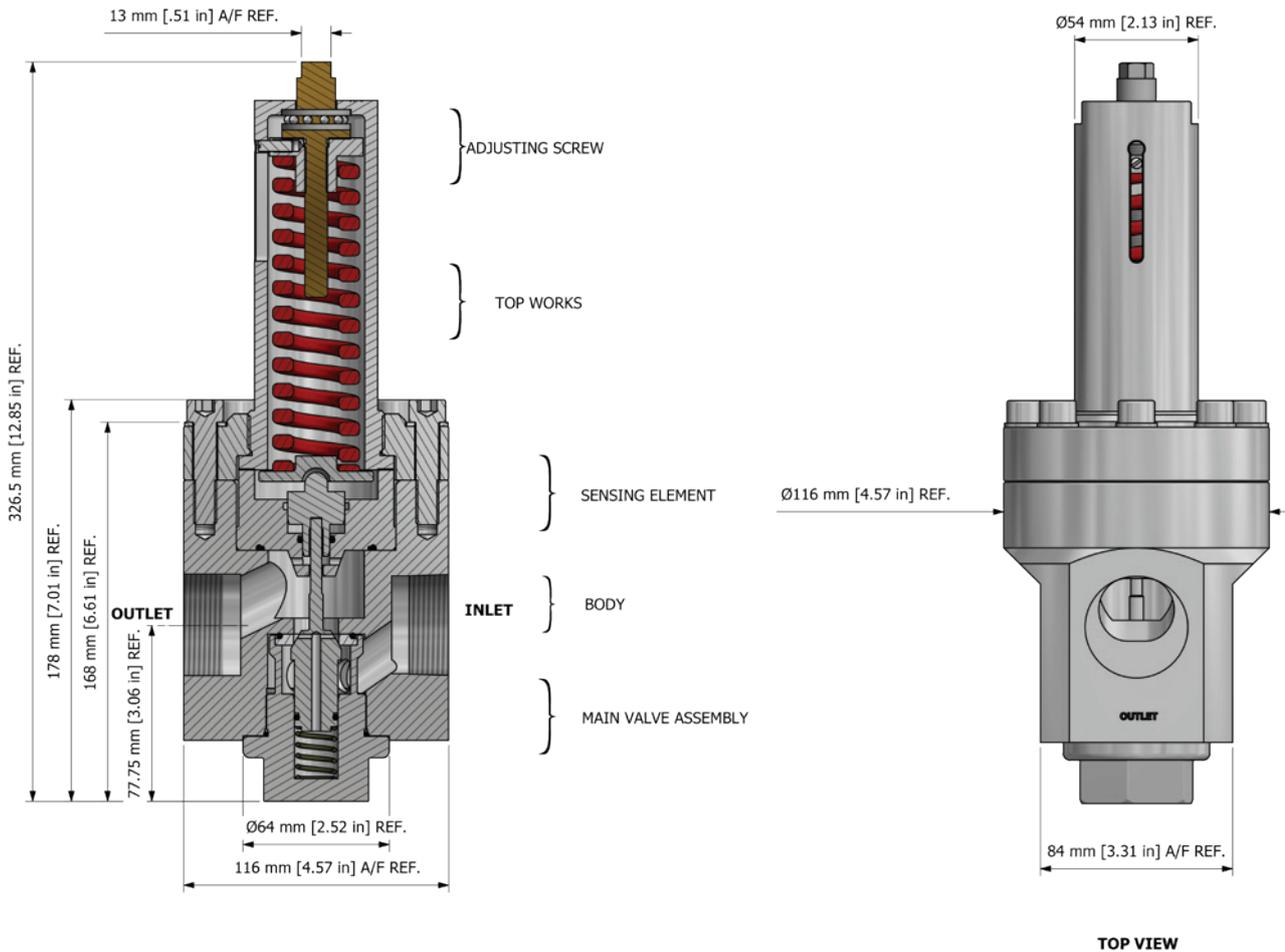
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### DRAWINGS AND INSTALLATION DIMENSIONS

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



**Note:**  
All gauge ports are 1/4" NPT as standard.

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PAGE:  
2 OF 4

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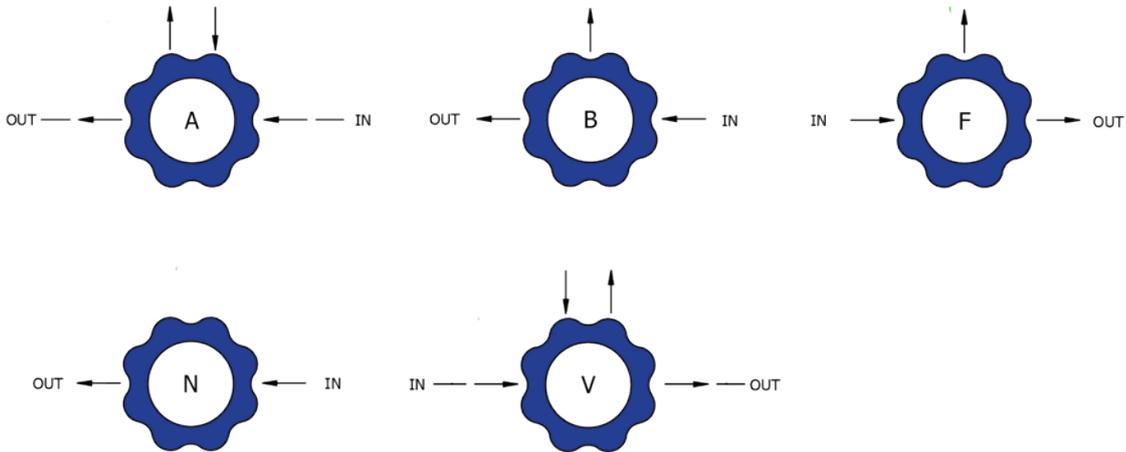


Gas  Liquid |  Diaphragm  Piston |  Self-Venting  Non-Venting | Max Inlet: 250 bar (3,625 psi) | Max Outlet: 200 bar (2,900 psi) | Cv 7.0

## FLOW CURVE

Please contact the office for further information.

## PORTING CONFIGURATIONS



### Notes:

- \* Additional porting configurations are available - please contact the office for further information.
- \* One gauge to be used with extension bar if mounted directly.

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PAGE:  
3 OF 4

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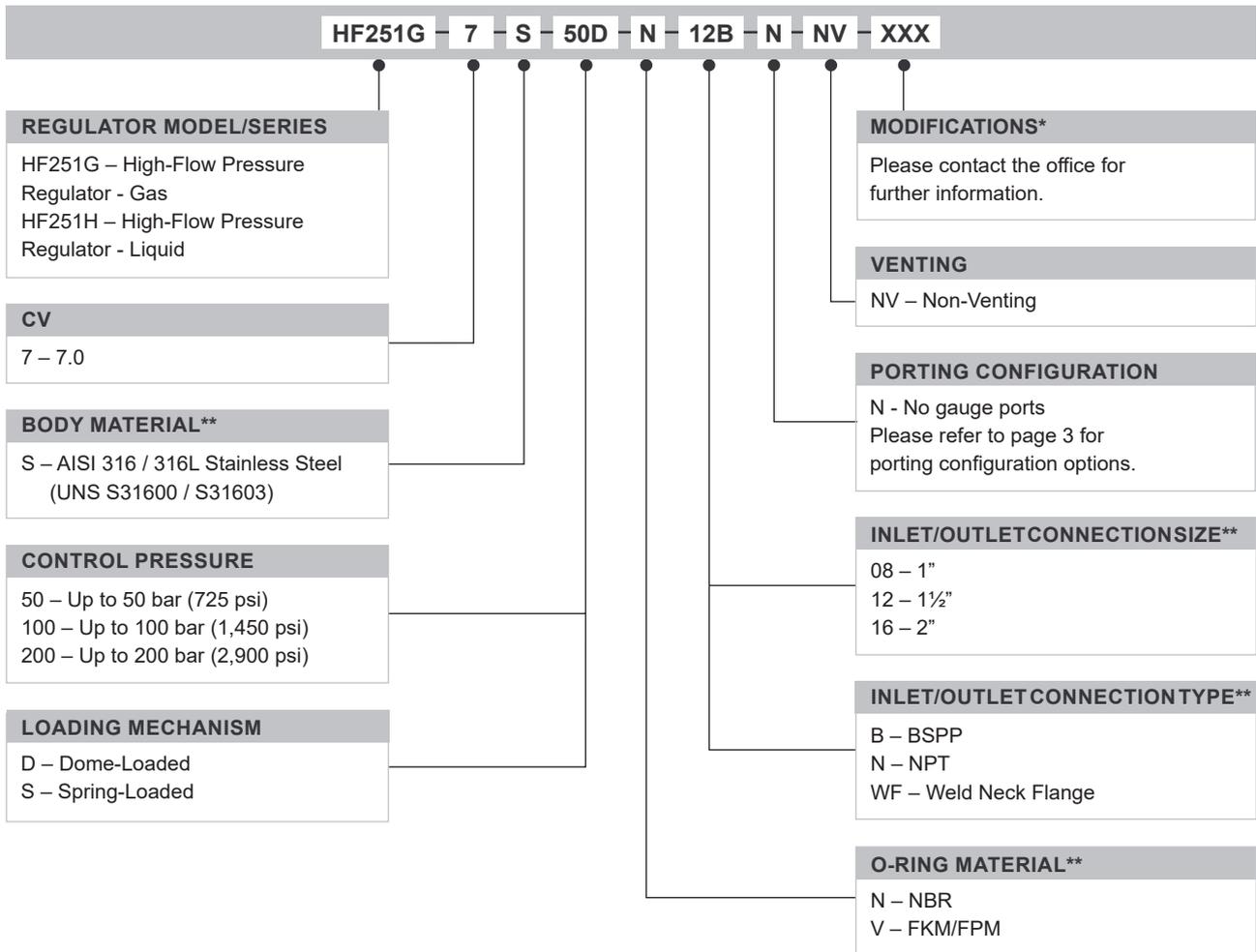
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### ORDERING INFORMATION

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



| OPTIONAL EXTRAS |              |                           |
|-----------------|--------------|---------------------------|
|                 | PART NUMBER  | DESCRIPTION               |
| Service Kit     | SRK-HF251... | Various options available |

*Note:*  
Ancillary Equipment and additional Service Kit options also available.

TRADEMARKS: PEEK™ is a trademark of Victrex PLC

\* Where applicable

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

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