

# 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

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

**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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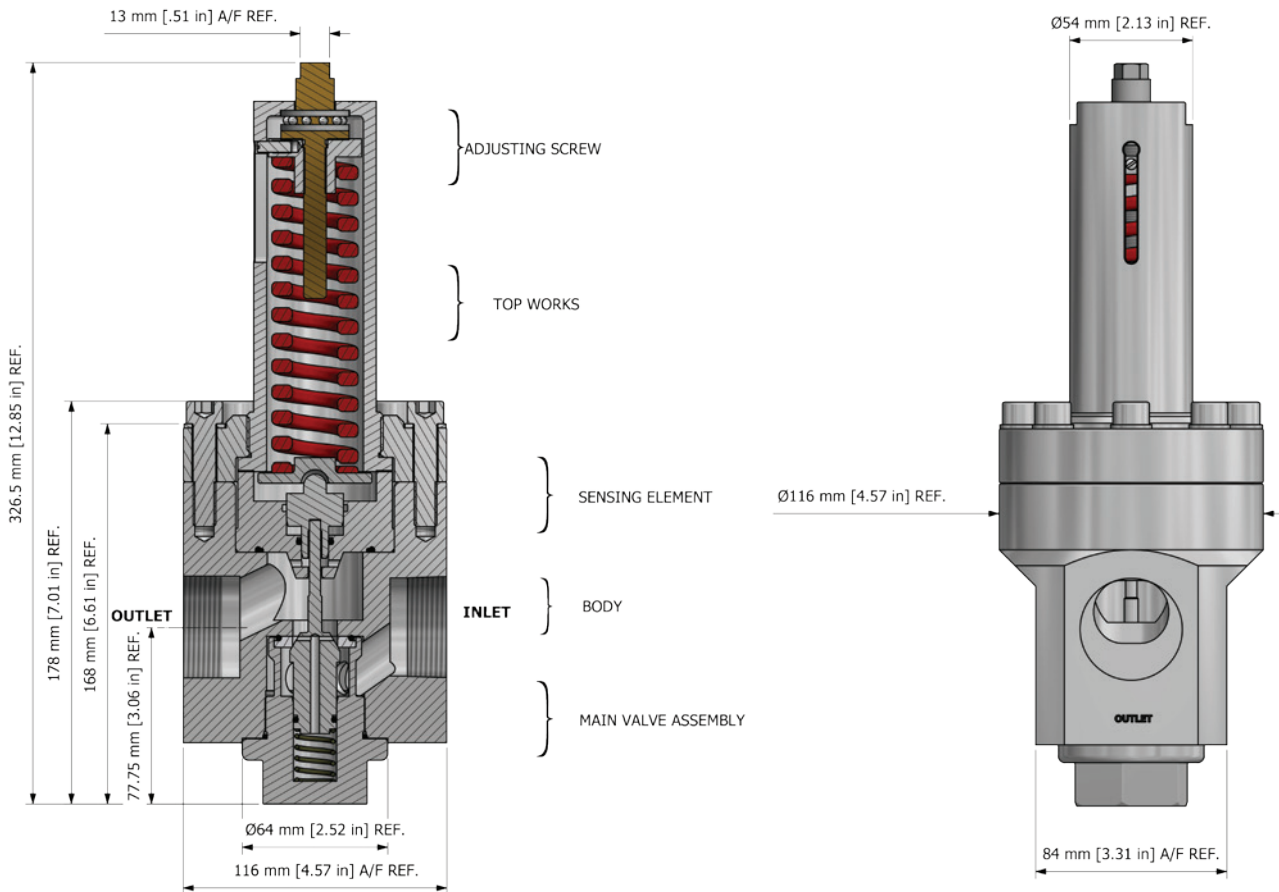
## HIGH-FLOW PRESSURE REGULATOR



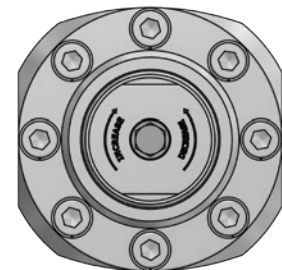
● Gas ● Liquid | 
 ● Diaphragm ● Piston | 
 ● Self-Venting ● Non-Venting | 
 Max Inlet: 250 bar (3,625 psi) | 
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 Cv 7.0

### DRAWINGS AND INSTALLATION DIMENSIONS

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



TOP VIEW



**Note:**

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

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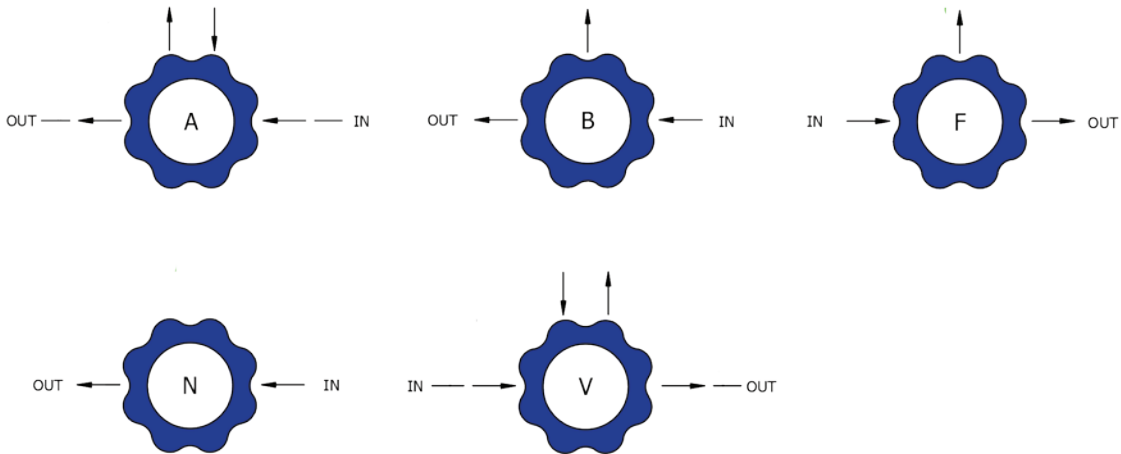


Gas  Liquid |  Diaphragm  Piston |  Self-Venting  Non-Venting | Max Inlet: 250 bar (3,625 psi) | Max Outlet: 200 bar (2,900 psi) | Cv 7.0

## 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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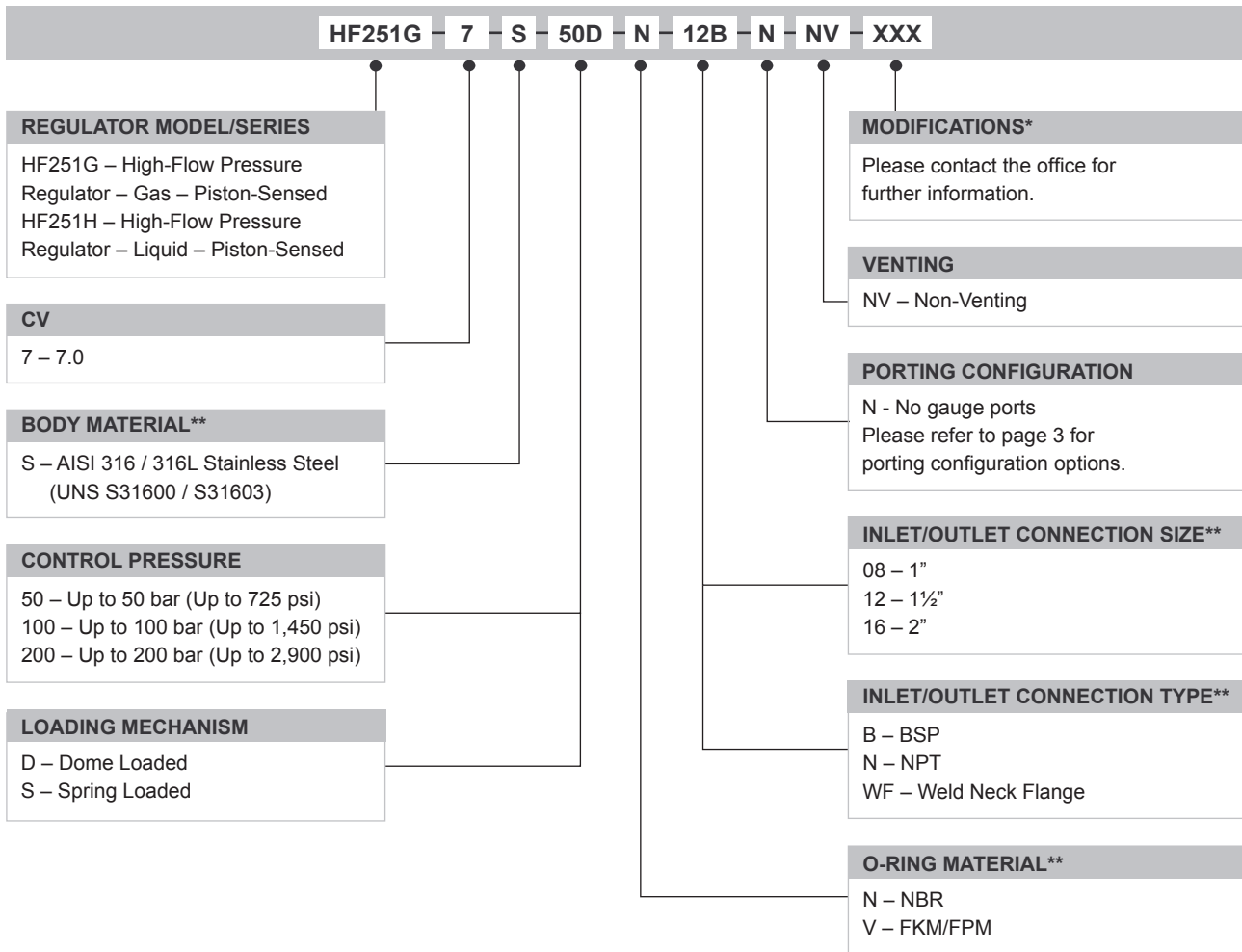
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### ORDERING INFORMATION

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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