

# MF401 Datasheet

MEDIUM-FLOW PRESSURE REGULATOR



Gas  
  Liquid  
  Diaphragm  
  Piston  
  Self-Venting  
  Non-Venting  
 Max Inlet: 400 bar (5,800 psi)  
 Max Outlet: 400 bar (5,800 psi)  
 Cv 2.0



## INTRODUCING THE MF401...

The MF401 is a versatile piston-sensed non-venting regulator for liquid and gas applications. The liquid version includes a PEEK™ seat, whilst the gas option features PCTFE seating.

The MF401 offers a **balanced main valve** as standard for up to 400 bar (5,800 psi) inlet pressure. An unbalanced option can be offered alternatively for applications with maximum inlet pressures of up to 50 bar (725 psi).

The regulator housing and 'wetted' components are precision machined from 316 Stainless Steel, unless otherwise specified.

## STANDARD MATERIALS OF CONSTRUCTION

| PART            | MATERIALS   |
|-----------------|---|
| Body and Bonnet | AISI 316 / 316L Stainless Steel (UNS S31600 / S31603) |
| Main Valve Pin  | AISI 316 / 316L Stainless Steel (UNS S31600 / S31603) |
| Soft Seat       | PCTFE / PEEK™   |
| Valve Spring    | Inconel® X750   |
| Piston          | AISI 316 / 316L Stainless Steel (UNS S31600 / S31603) |
| Handwheel       | Nylon   |
| 'O'-Ring Seals  | FKM / FPM   |
| Loading Spring  | Alloy Spring Steel                                    |

## SPECIFICATION

| Max. Inlet Pressure | Balanced            | Unbalanced       |
|---------------------|---------------------|------------------|
| PEEK™               | 400 bar (5,800 psi) | 50 bar (725 psi) |
| PCTFE               | 400 bar (5,800 psi) | 50 bar (725 psi) |

|                       |                                  |
|-----------------------|----------------------------------|
| Outlet Ranges         | Up to 400 bar (5,800 psi)        |
| Design Proof Pressure | 150% max. working pressure       |
| Seat Leakage          | In accordance with ANSI/FCI 70-3 |
| Weight                | 5.8kg (12.8lbs)                  |

## FEATURES AND BENEFITS

|  |  |   |  |
|--|--|---|--|
| <b>1</b> OPTIONAL CONNECTION TYPES<br>Threaded or flanged connection type options. | <b>2</b> BALANCED MAIN VALVE DESIGN<br>Improved control across the pressure range. | <b>3</b> PISTON SENSING ELEMENT<br>Perfect for use in challenging conditions. | <b>4</b> HIGH FLOW COEFFICIENT<br>Cv 2.0 for higher flow capabilities. |
|--|--|---|--|

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

### PRESSURE TECH LTD

Unit 24, Graphite Way, Hadfield, Glossop, Derbyshire, UK, SK13 1QH  
 T +44 (0)1457 899 307  
 E info@pressure-tech.com  
 W www.pressure-tech.com

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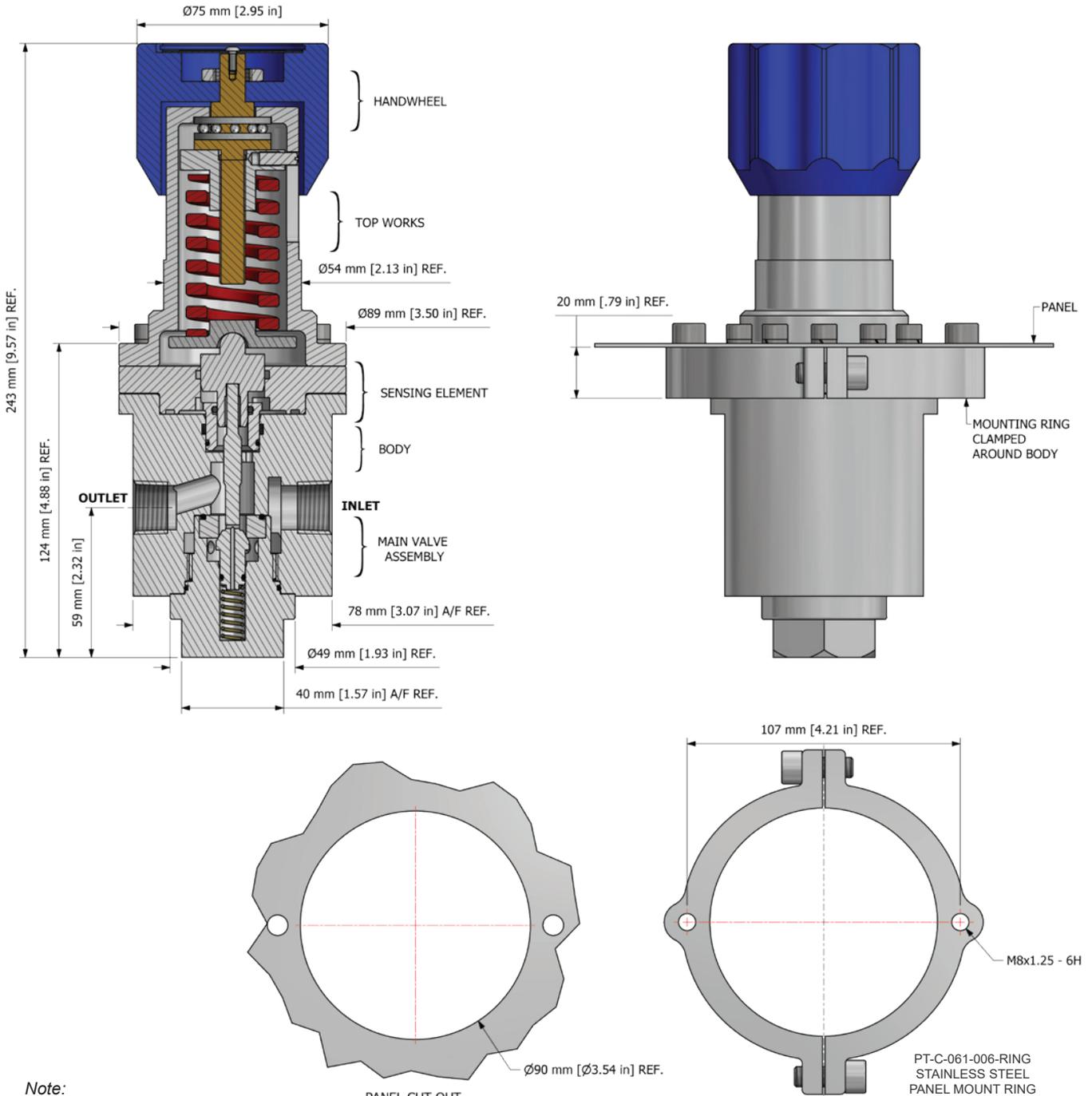
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## DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 1/2" NPT option - please contact the office for additional connections options.



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

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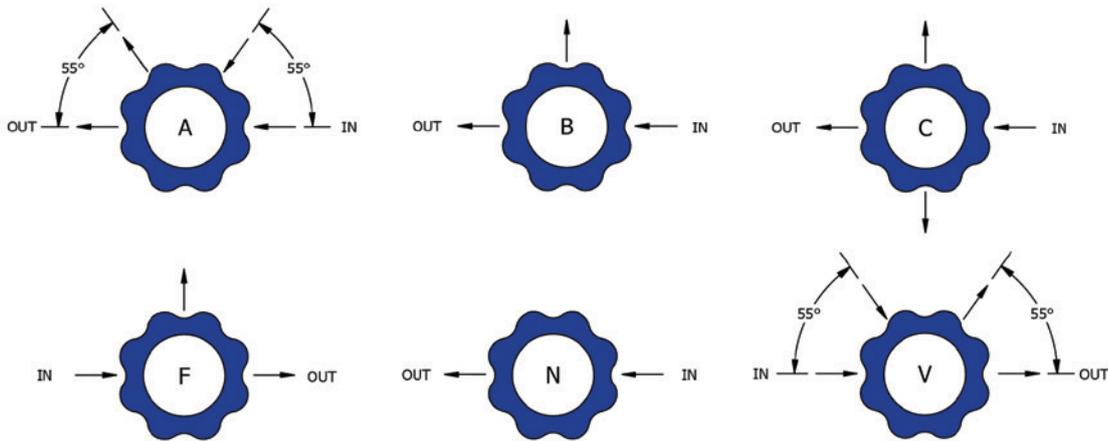
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## FLOW CURVE

Please contact the office for further information.

## PORTING CONFIGURATIONS



**Note:**

Additional porting configurations are available - please contact the office for further information.

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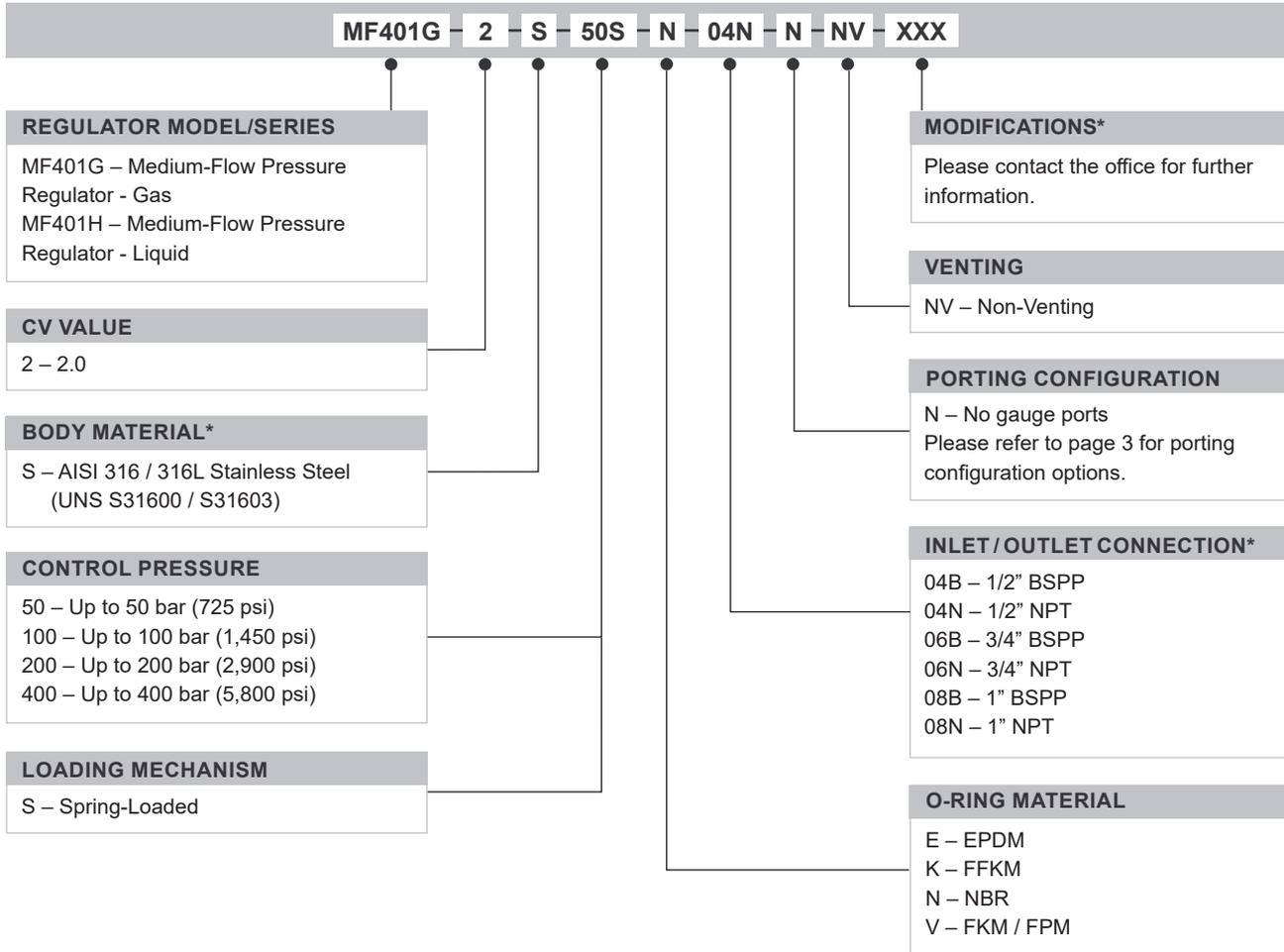
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### ORDERING INFORMATION

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



| OPTIONAL EXTRAS  |                   |  |
|------------------|-------------------|--|
|                  | PART NUMBER       | DESCRIPTION                            |
| Service Kit      | SRK-MF401-2-B...  | Various 'Balanced' options available   |
| Service Kit      | SRK-MF401-2-U...  | Various 'Unbalanced' options available |
| Panel Mount Ring | PT-C-061-006-RING | -                                      |

*Note:*  
Ancillary equipment also available

TRADEMARKS: Inconel® is a registered trademark of Inco Alloys International

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

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