

# MF414 Datasheet

## MEDIUM-FLOW PRESSURE REGULATOR



Gas  
  Liquid  
  Diaphragm  
  Piston  
  Self-Venting  
  Non-Venting  
 Max Inlet: 414 bar (6,000 psi)  
 Max Outlet: 414 bar (6,000 psi)  
 Cv 2.0



### INTRODUCING THE MF414...

The MF414 is a medium-flow piston-sensed pressure regulator with a **balanced main valve** design to provide stable control under varying inlet pressures. Its versatility enables use on liquid (with a ceramic seat) or gas (with a PEEK™ seat) applications.

Both designs feature a segregated captured vent to allow pressure reduction of the outlet pressure through a 1/4" NPT port on the side of the regulator's body.

### SPECIFICATION

Max. Rated Inlet Pressure	414 bar (6,000 psi)
Outlet Ranges	Up to 414 bar (6,000 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	6kg (13.2lbs)

\* Pressure regulator rating may be limited by connection type, Cv and/or seat material

### 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	PEEK™ or Ceramic
Valve Spring	AISI 302 S26 Stainless Steel
Piston	AISI 316/316L Stainless Steel (UNS S31600/S31603)
Handwheel	Nylon
O-Rings	NBR
Loading Spring	Alloy Spring Steel

### FEATURES AND BENEFITS

#### 1 PISTON SENSING ELEMENT

Perfect for use in challenging conditions.

#### 2 BALANCED MAIN VALVE DESIGN

Improved control across the pressure range.

#### 3 SEGREGATED CAPTURED VENT

Prevents deterioration to loading mechanism and allows media to be piped off to return tank.

#### 4 HIGH FLOW COEFFICIENT

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

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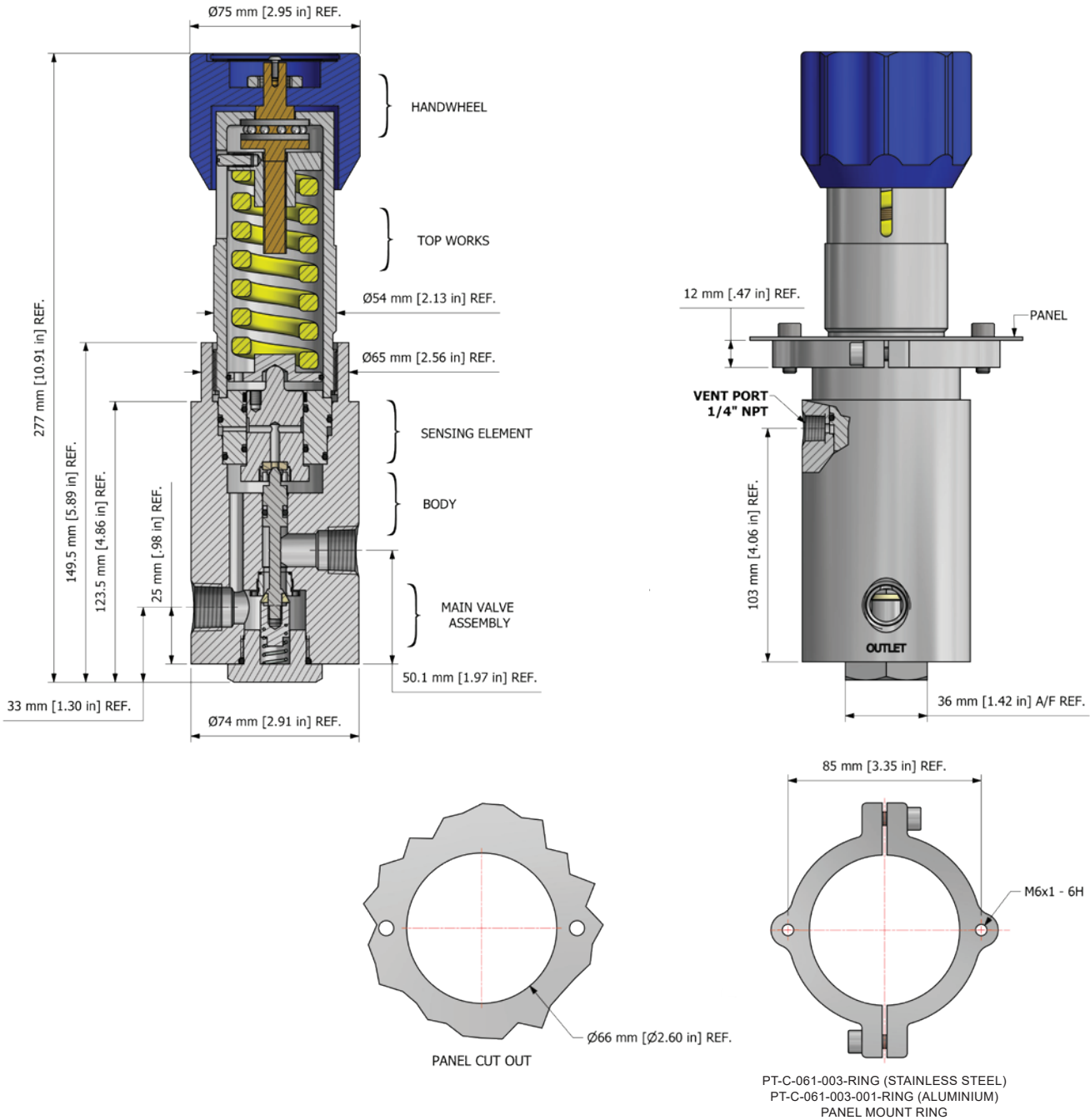
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## DRAWINGS AND INSTALLATION DIMENSIONS

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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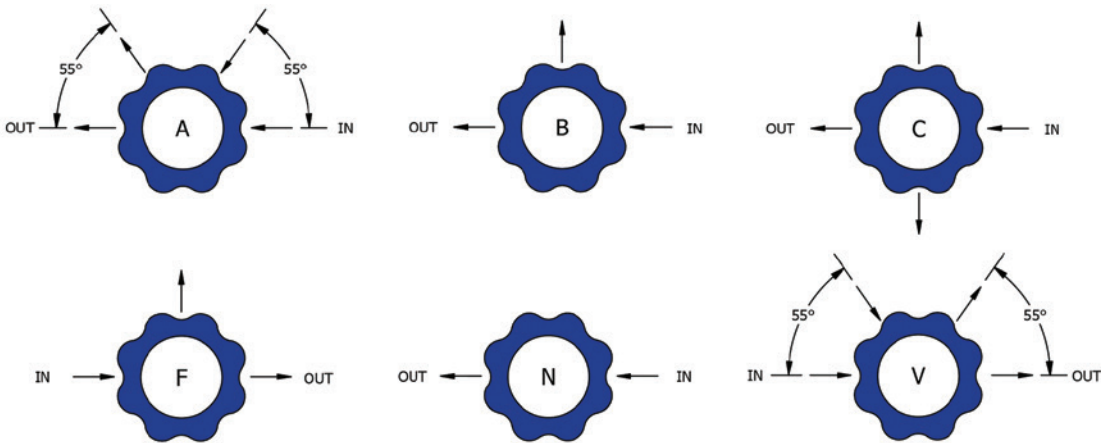


● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 414 bar (6,000 psi) | Max Outlet: 414 bar (6,000 psi) | Cv 2.0

## 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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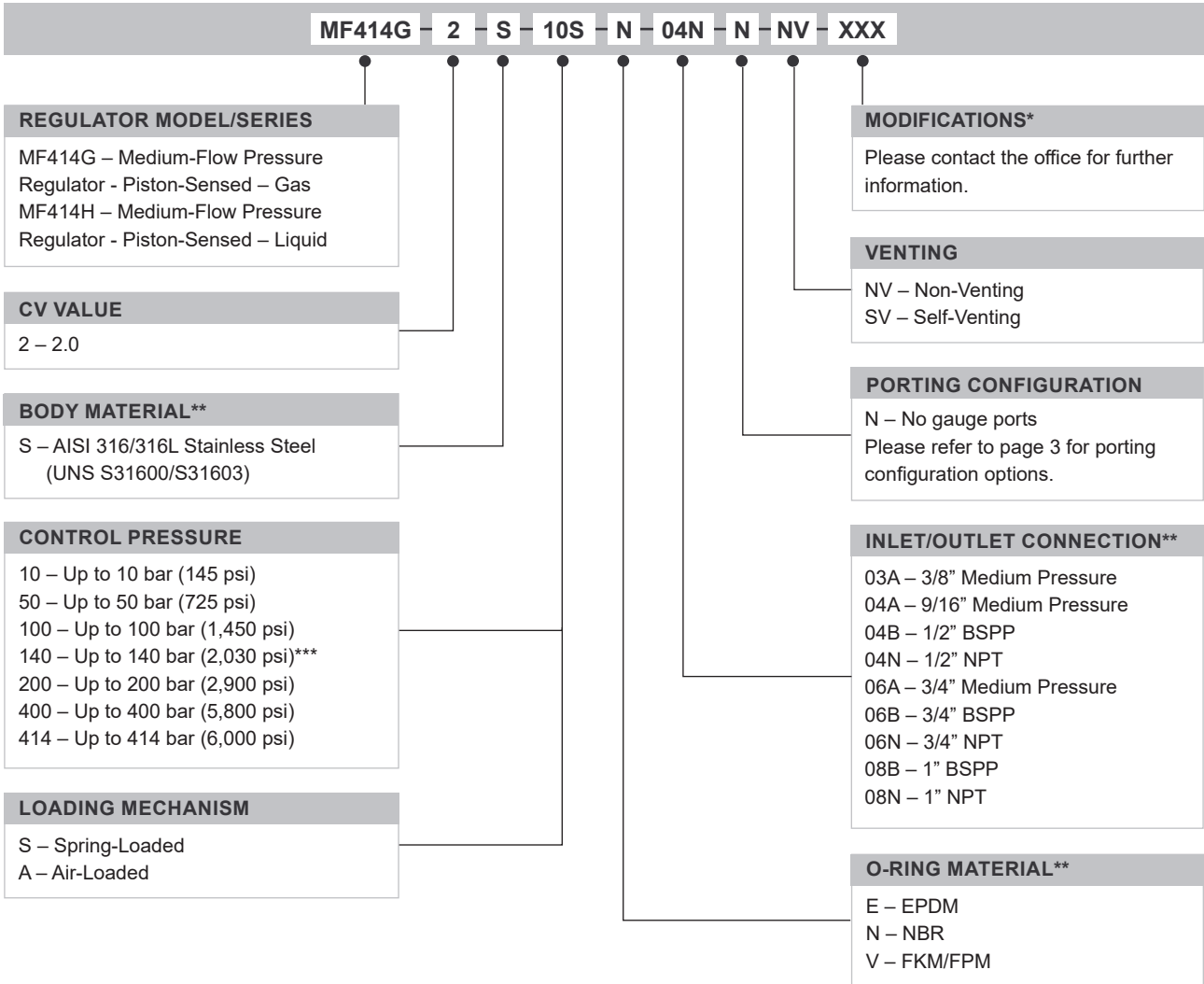
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## ORDERING INFORMATION

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



OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-MF414-2-B...	Various options available
Panel Mount Ring	PT-C-061-003-RING	Stainless Steel panel mount ring
Panel Mount Ring	PT-C-061-003-001-RING	Aluminium panel mount ring

*Note:*  
Ancillary equipment also available

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

\* Where applicable  
 \*\* Other connections/materials may be available - please contact the office  
 \*\*\* Air-loaded only

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