

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)

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

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> Ceramic (Zirconia) <i>Approx. Temperatures: 38°C to 800°C</i>
Valve Spring	ASTM A240 301 Stainless Steel (UNS S30100) <i>Approx. Temperatures: -29°C to 370°C</i>
Piston	ASTM A479 316/316L Stainless Steel
Handwheel	Nylon
O-Rings	NBR N70 (Nitrile Buna N) <i>Approx. Temperatures: -30°C to 120°C</i>
Loading Spring	ASTM A240 301 Stainless Steel

For the full list of material temperature ranges, please visit 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.

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.



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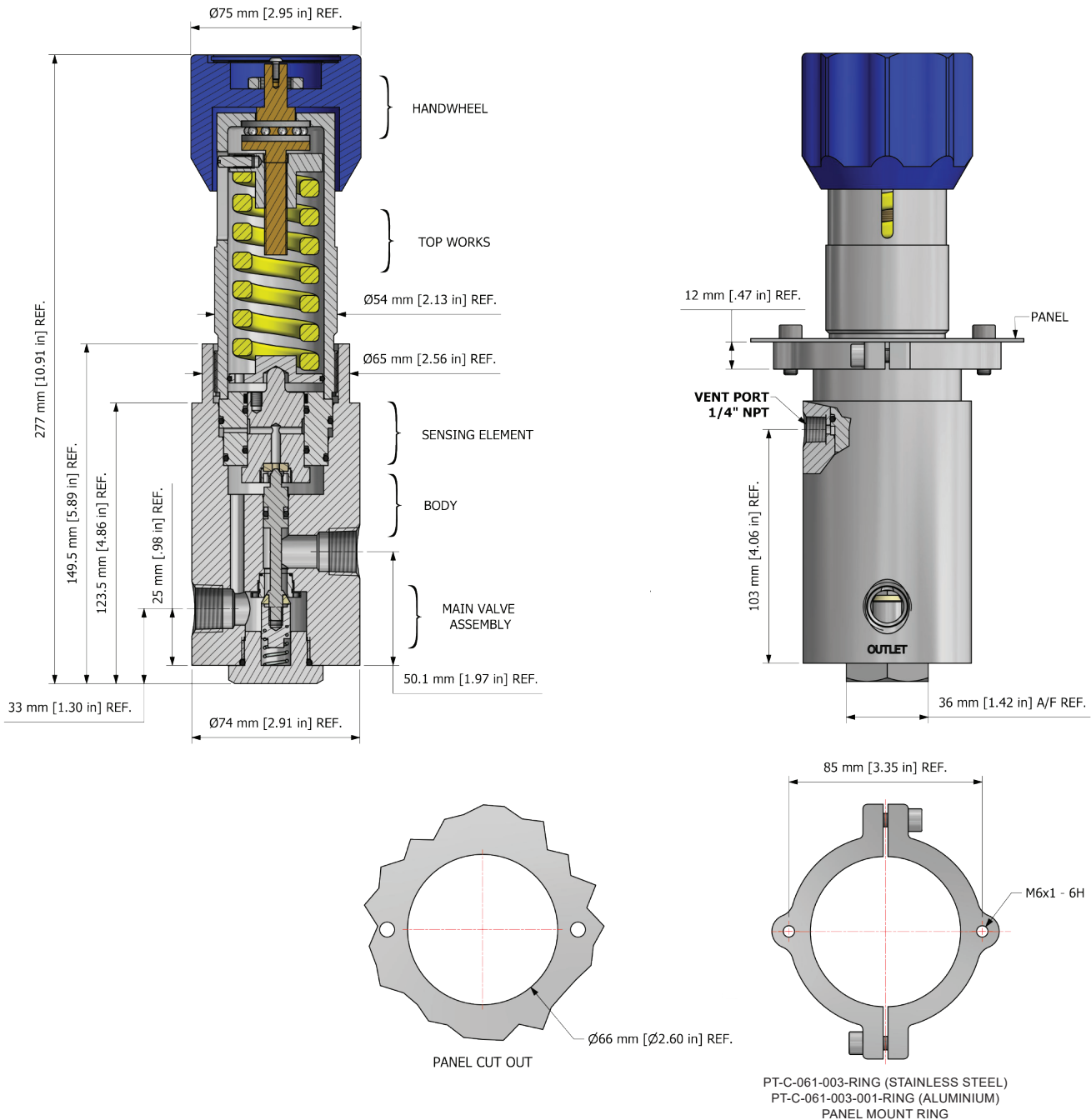
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DRAWINGS AND INSTALLATION DIMENSIONS

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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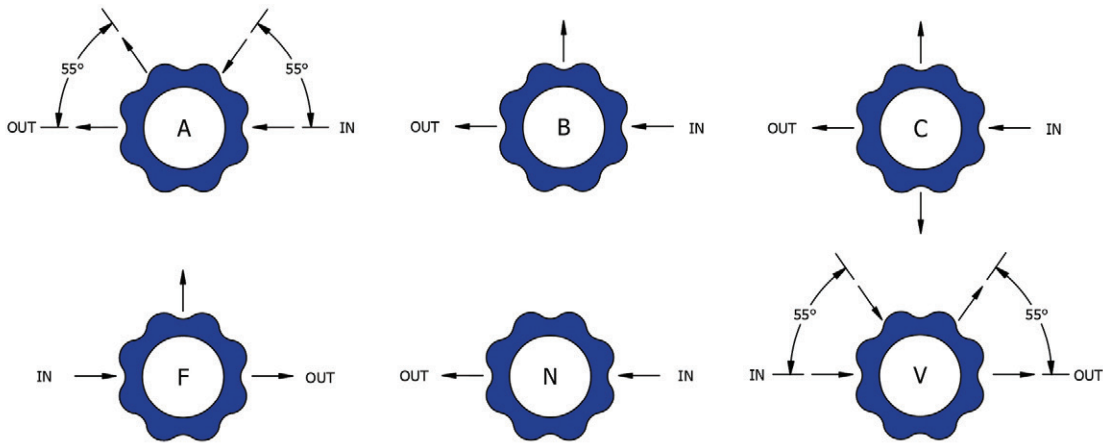


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FLOW CURVE

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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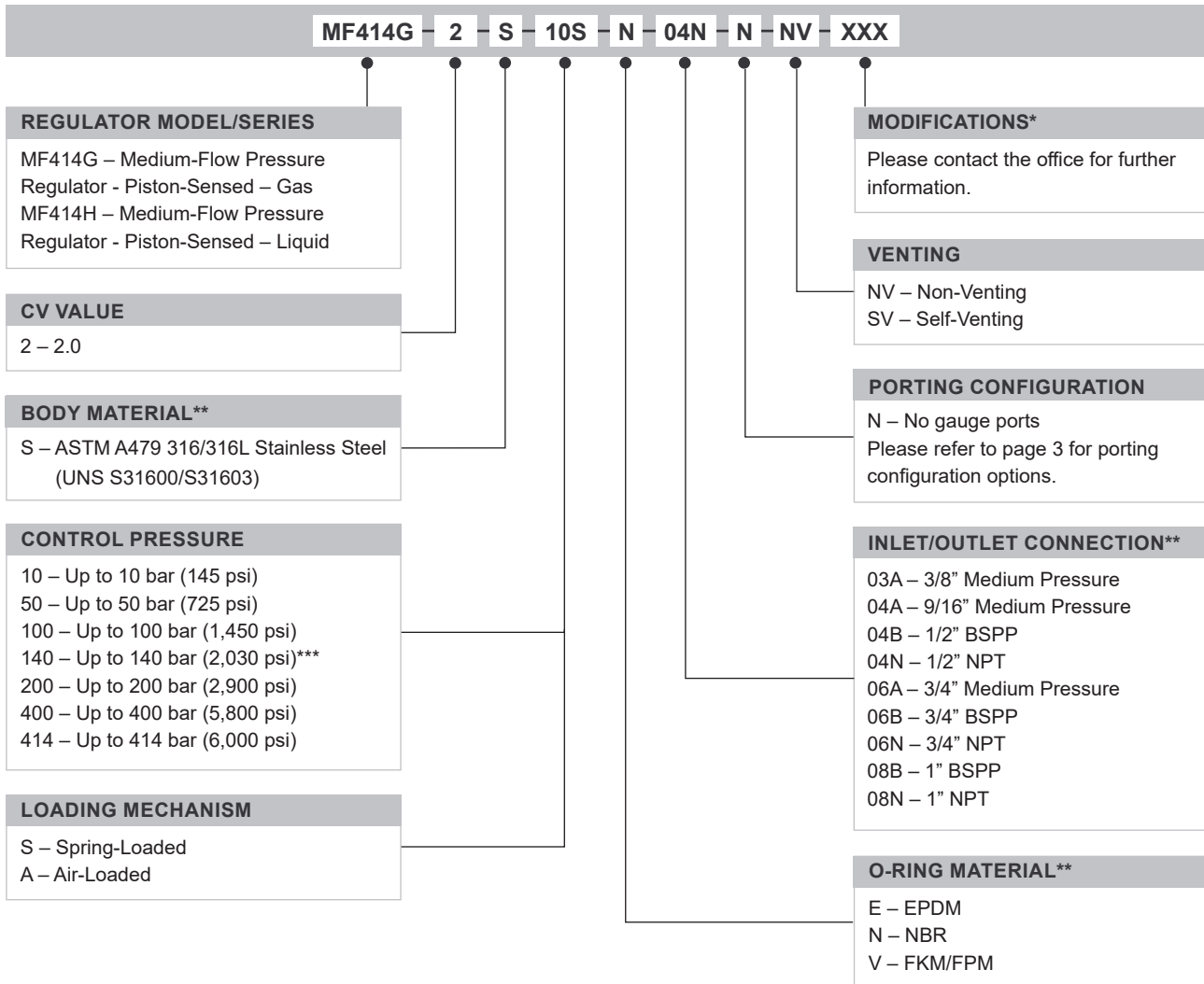
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ORDERING INFORMATION

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



OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-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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