

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.

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.

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.

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 sales@pressure-tech.com
 W www.pressure-tech.com

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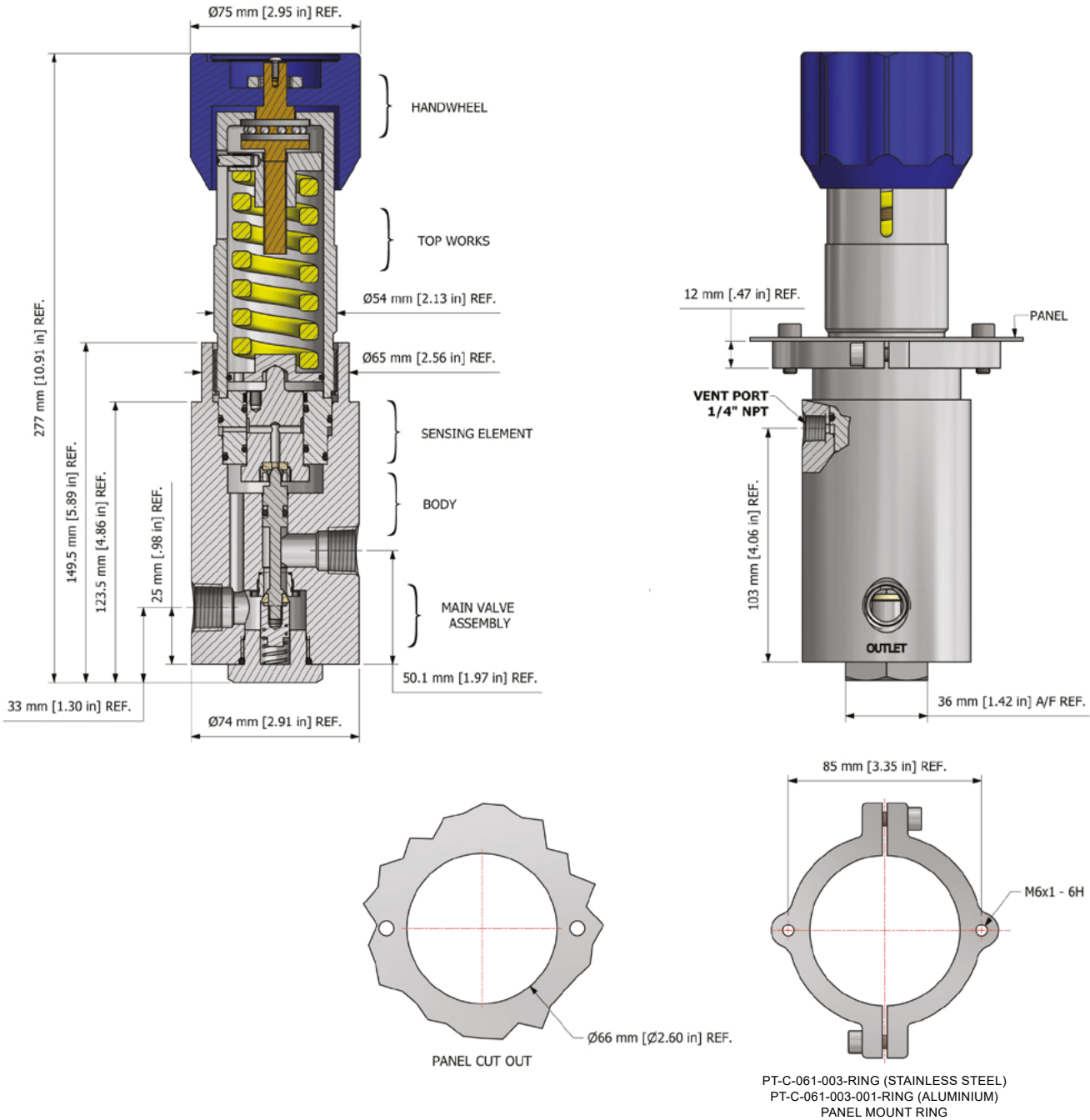
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DRAWINGS AND INSTALLATION DIMENSIONS

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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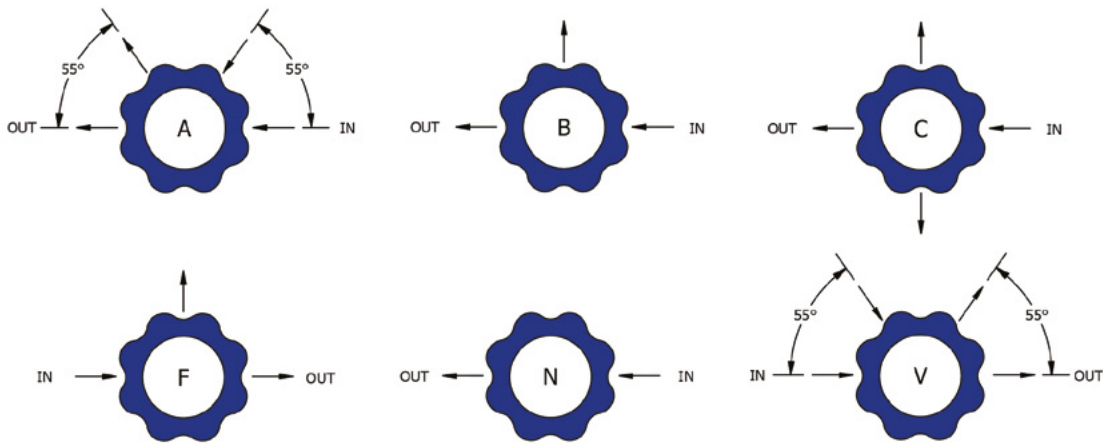


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FLOW CURVE

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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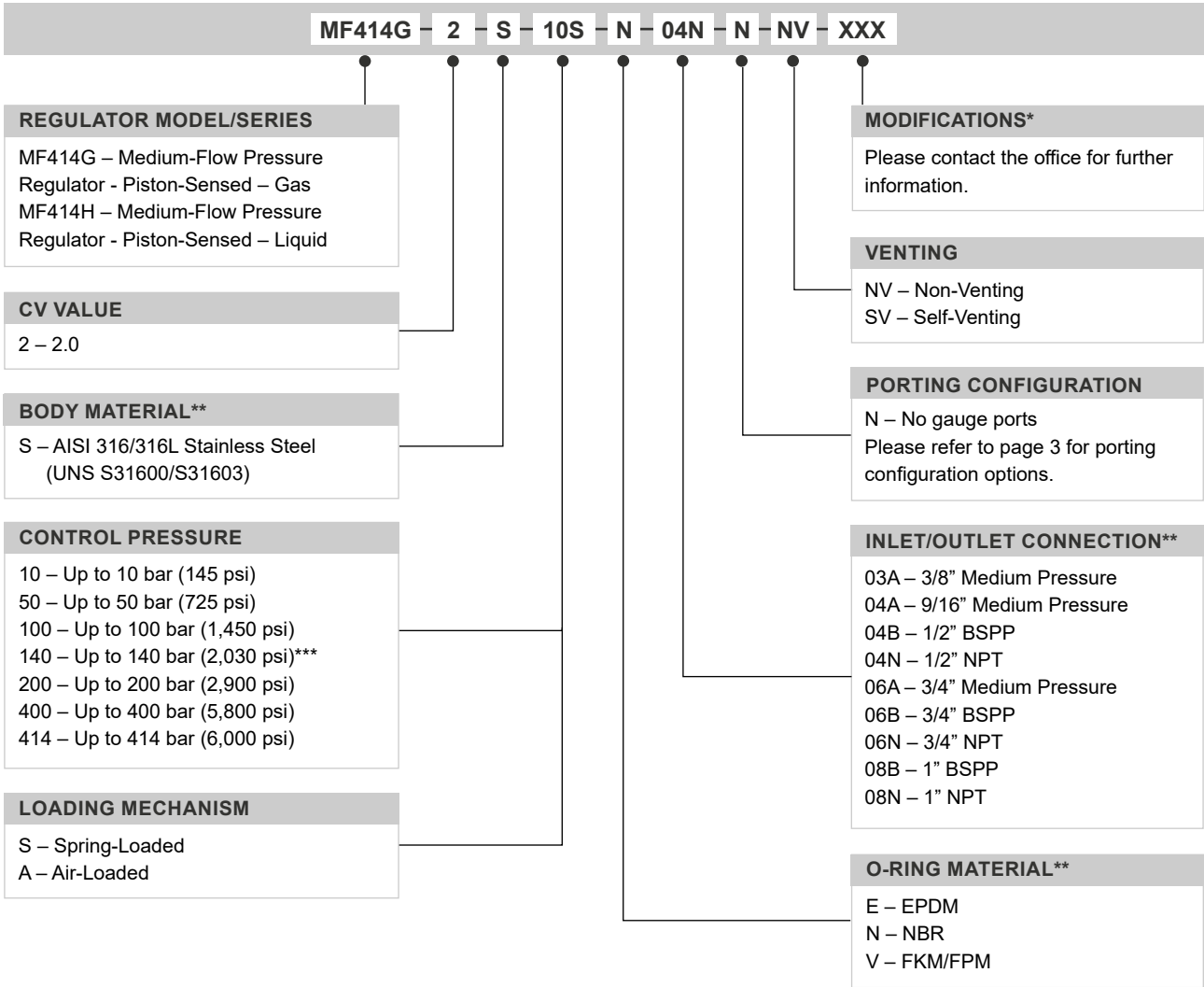
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ORDERING INFORMATION

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



OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-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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