

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.

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)

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>
	PCTFE (Kel-F) <i>Approx. Temperatures: -196°C to 180°C</i>
Valve Spring	Inconel® X750 (UNS N07750) <i>Approx. Temperatures: -196°C to 700°C</i>
Piston	ASTM A479 316/316L Stainless Steel
Handwheel	Nylon
O-Rings	FKM/FPM (Viton) <i>Approx. Temperatures: -20°C to 200°C</i>
Loading Spring	ASTM A240 301 Stainless Steel (UNS S30100) <i>Approx. Temperatures: -29°C to 370°C</i>

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.

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

1 OPTIONAL CONNECTION TYPES

Threaded or flanged connection type options.

2 BALANCED MAIN VALVE DESIGN

Improved control across the pressure range.

3 PISTON SENSING ELEMENT

Perfect for use in challenging conditions.

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

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

220721

PAGE:
1 OF 4

MF401 Datasheet

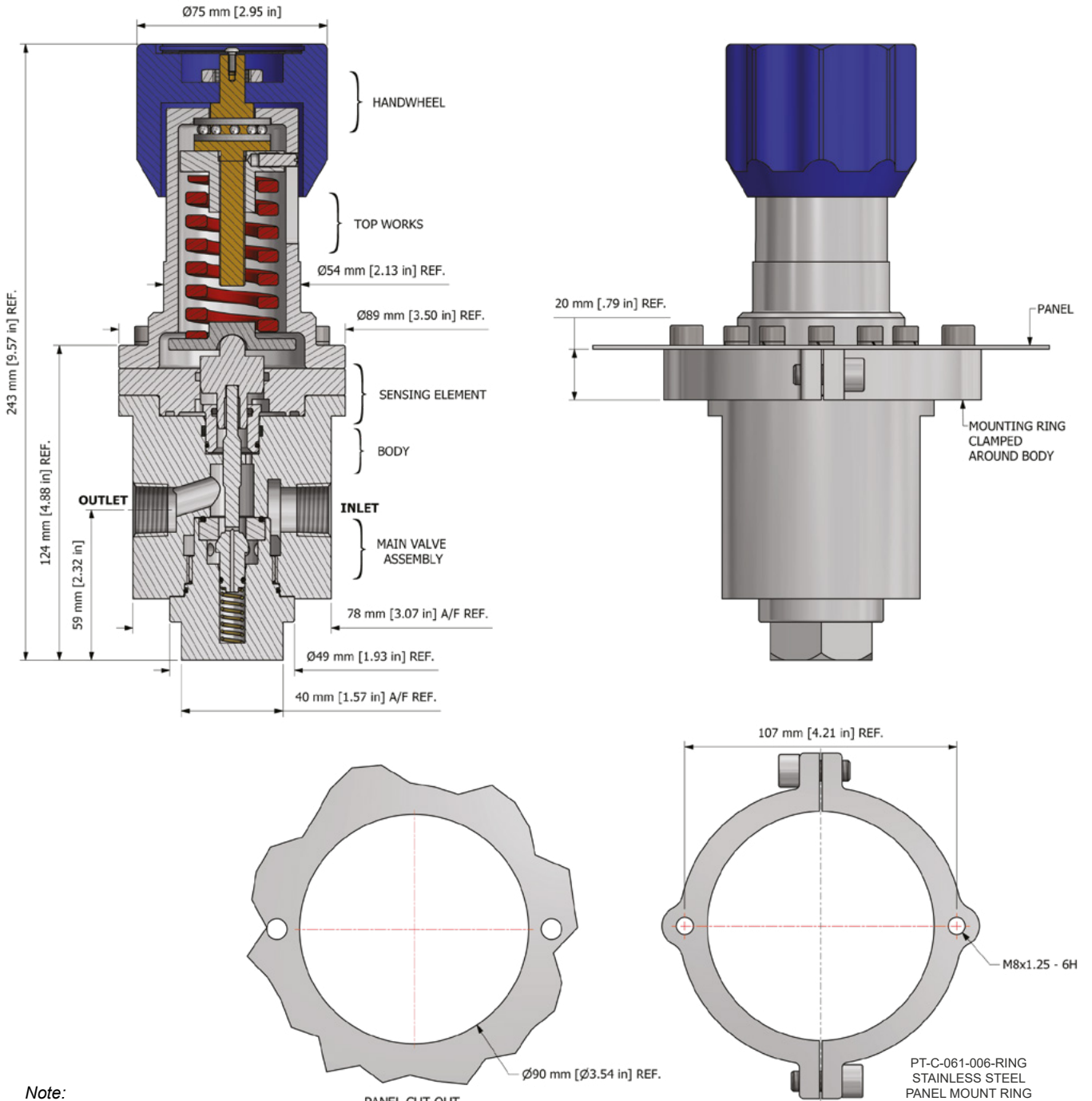
MEDIUM-FLOW PRESSURE REGULATOR



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

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.

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

220721

PAGE:
2 OF 4

MF401 Datasheet

MEDIUM-FLOW PRESSURE REGULATOR

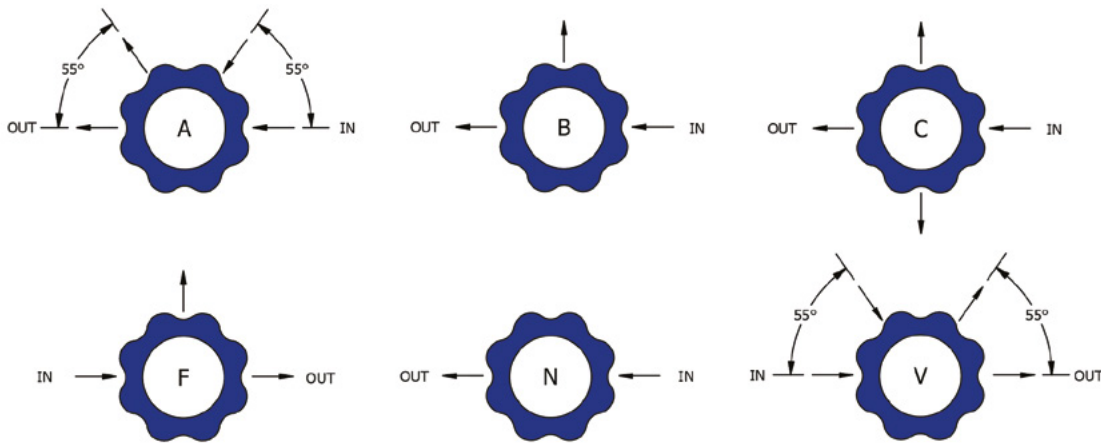


● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 400 bar (5,800 psi) | Max Outlet: 400 bar (5,800 psi) | Cv 2.0

FLOW CURVE

Please contact the office for further information.

PORTING CONFIGURATIONS



Note:

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

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

220721

PAGE:
3 OF 4

MF401 Datasheet

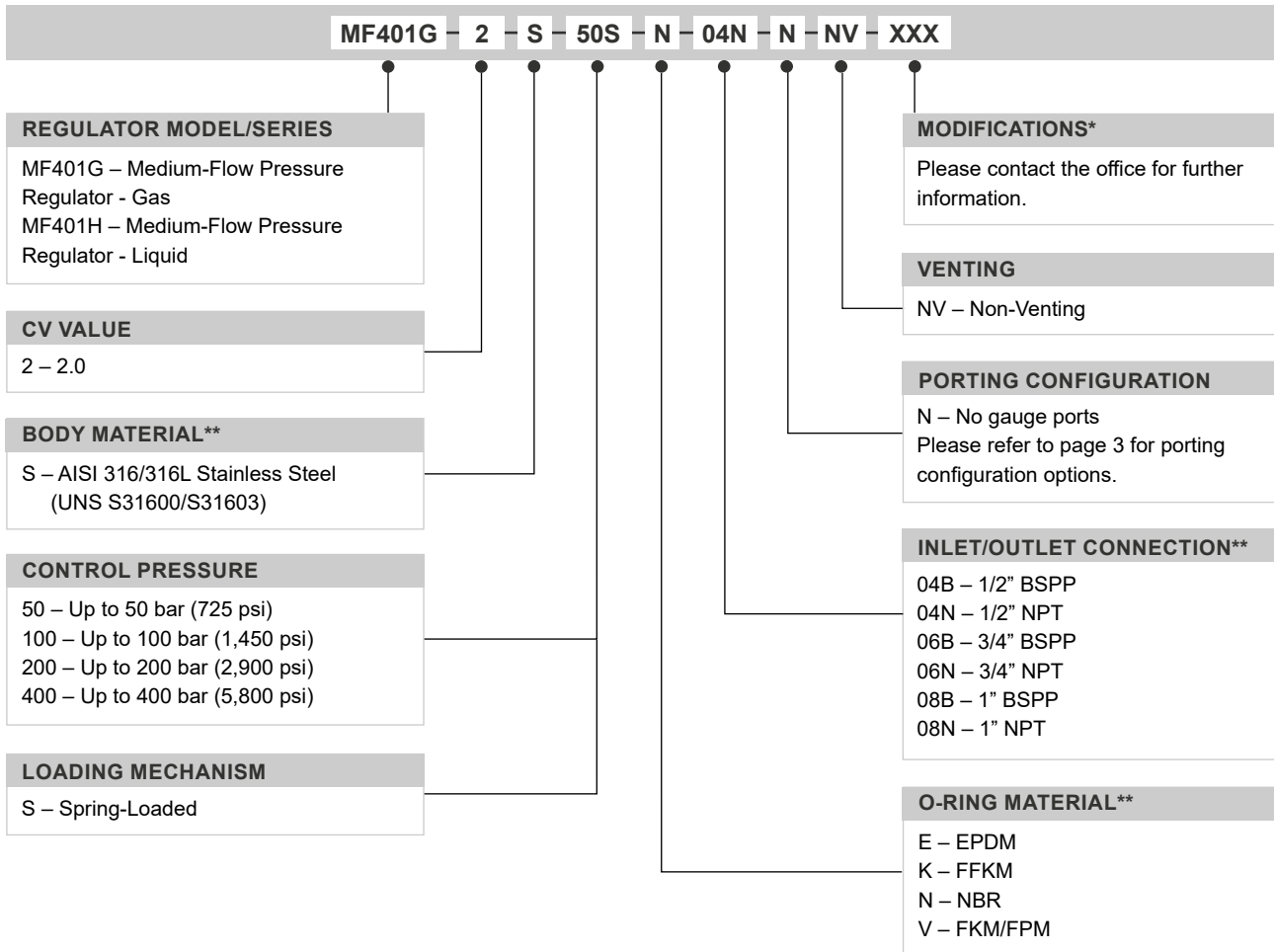
MEDIUM-FLOW PRESSURE REGULATOR



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

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

* Where applicable

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

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

220721

PAGE:
4 OF 4