

MF-101 Datasheet

MEDIUM-FLOW PRESSURE REGULATOR



● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 414bar (6,000psi) | Max Outlet: 40bar (580psi) | Cv 0.5



INTRODUCING THE MF-101...

The MF-101 is a piston-sensed medium-flow pressure regulator. As standard the MF-101 features an **unbalanced main valve** and non-venting design, controlling outlet pressures up to 40bar (580psi) from a maximum 100bar (1,450psi) inlet pressure.

Alternatively, its **balanced main valve** features a non-venting or self-venting (non-captured) design and enables inlet pressures of up to 414bar (6,000psi) using a PEEK™ seat, controlling outlet pressures up to 35bar (510psi).

SPECIFICATION

Max Inlet Pressure:	Balanced	Unbalanced
PEEK™	414bar (6,000psi)	100bar (1,450psi)
PCTFE	300bar (4,350psi)	100bar (1,450psi)

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 PCTFE
Valve Spring	Inconel® X750
Piston	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Handwheel	Nylon
'O'-Ring Seals	FKM / FPM
Loading Spring	AISI 302 Stainless Steel (UNS S30200)

Outlet Ranges	Up to 35bar (510psi)
Design Proof Pressure	150% max WP
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	1.2kg (2.4lbs)

FEATURES AND BENEFITS

1 LARGE PRECISION-MACHINED SENSING ELEMENT

Accurate control of outlet pressures up to 40bar (580psi) on non-venting models.

2 OPTIONAL BALANCED DESIGN

Enables inlet pressures of up to 414bar (6,000psi)

3 LIGHTWEIGHT & COMPACT DESIGN

Perfect for when installation space is restricted.

4 SELF-VENTING OR NON-VENTING MODELS

Versatile use for a range of applications.

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

160218

PAGE:
1 OF 4

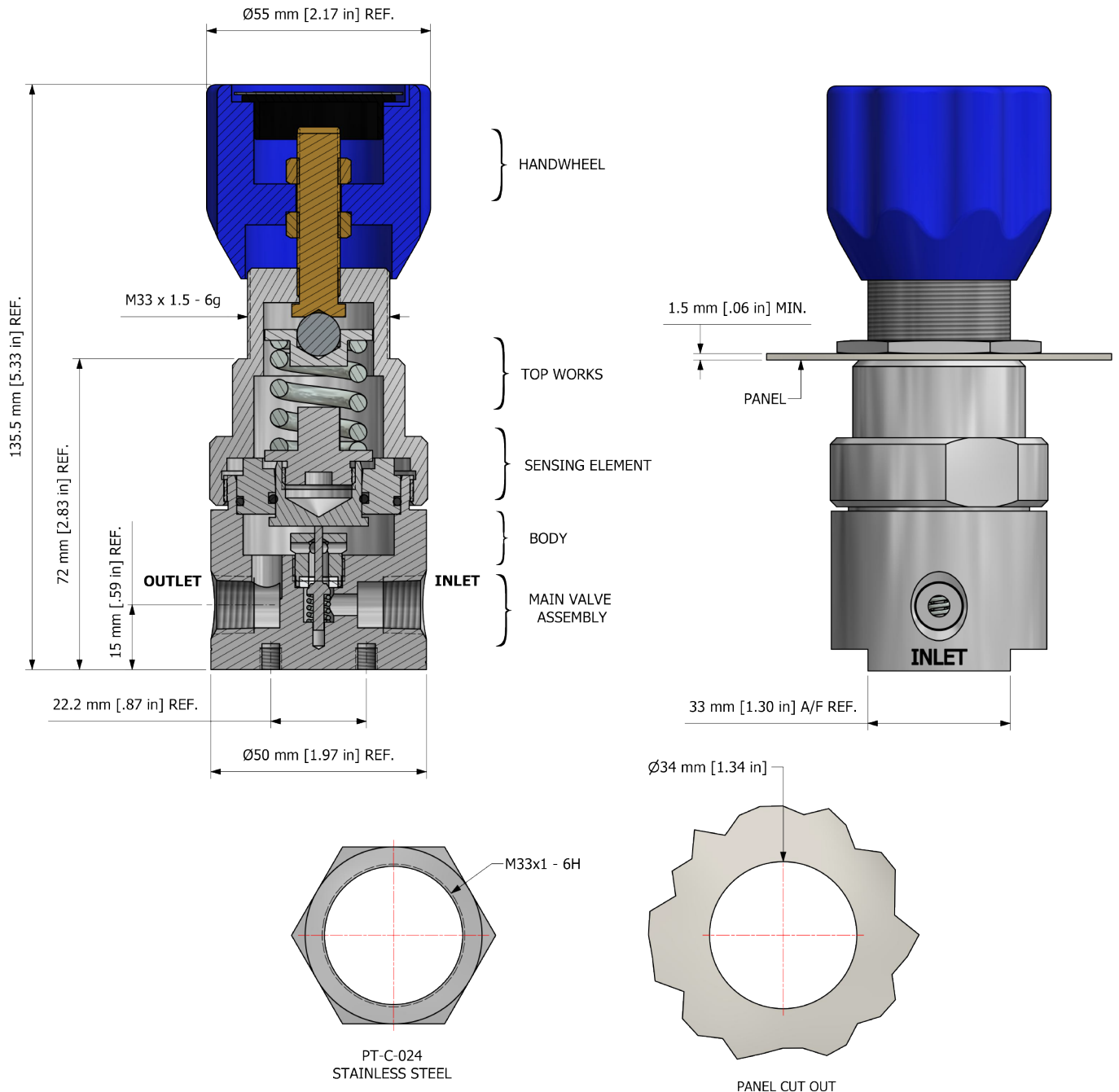
MF-101 Datasheet

MEDIUM-FLOW PRESSURE REGULATOR



☒ Gas ☒ Liquid | ☒ Diaphragm ☒ Piston | ☒ Self-Venting ☒ Non-Venting | Max Inlet: 414bar (6,000psi) | Max Outlet: 40bar (580psi) | Cv 0.5

DRAWINGS AND INSTALLATION DIMENSIONS



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 info@pressure-tech.com

W www.pressure-tech.com

160218

PAGE:
2 OF 4

MF-101 Datasheet

MEDIUM-FLOW PRESSURE REGULATOR

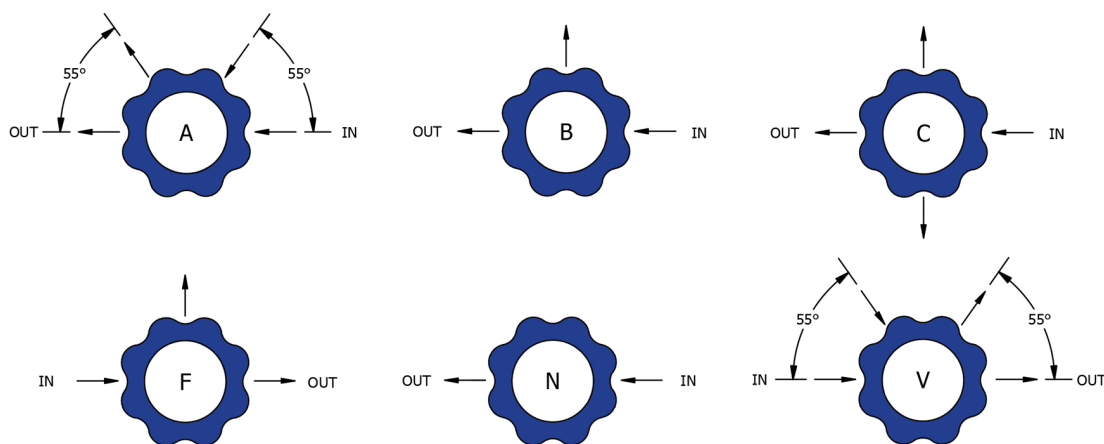


● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 414bar (6,000psi) | Max Outlet: 40bar (580psi) | Cv 0.5

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 info@pressure-tech.com

W www.pressure-tech.com

160218

PAGE:
3 OF 4

MF-101 Datasheet

MEDIUM-FLOW PRESSURE REGULATOR

PRESSURE TECH

● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 414bar (6,000psi) | Max Outlet: 40bar (580psi) | Cv 0.5

ORDERING INFORMATION

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

MF101 – 5 – S – 35 – V – P – 02N – N – XXX									
REGULATOR MODEL/SERIES			MODIFICATIONS*						
MF101 – Medium-Flow Pressure Regulator - Piston-Sensed			Please contact the office for further information.						
CV VALUE			PORTING CONFIGURATION						
5 – 0.5			N - No gauge ports Please refer to page 3 for porting configuration options.						
BODY MATERIAL **			INLET/OUTLET CONNECTION						
S – AISI 316 / 316L Stainless Steel (UNS S31600 / S31603) B – HT Brass			02N – ¼" NPT 03N – ⅜" NPT 04N – ½" NPT						
CONTROL PRESSURE			SEAT MATERIAL**						
10 – 0 to 10bar (0 to 145psi) 20 – 0 to 20bar (0 to 290psi) 35 – 0 to 35bar (0 to 510psi) 40 – 0 to 40bar (0 to 580psi) - (Non-Venting only)			T – PTFE (20bar / 290psi inlet) F – FEP (50bar / 725psi inlet) K – PCTFE (100bar / 1,450psi inlet) K – PCTFE (300bar / 4,350psi inlet - balanced option) P – PEEK™ (414bar / 6,000psi inlet - balanced option)						
O-RING MATERIAL **									
V – FKM/FPM N – NBR E – EPDM									

OPTIONAL EXTRAS

	PART NUMBER	DESCRIPTION
Service Kit	SRK-MF101-05-B...	Various 'Balanced' options available
Service Kit	SRK-MF101-05-U...	Various 'Unbalanced' options available
Panel Mount Ring	PT-C-024	-

Note:

Ancillary equipment also available

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

* Where applicable
** Other 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 info@pressure-tech.com

W www.pressure-tech.com

160218

PAGE:
4 OF 4