

# MF101 Datasheet

## MEDIUM-FLOW PRESSURE REGULATOR



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



### INTRODUCING THE MF101...

The MF101 is a piston-sensed medium-flow pressure regulator. With an **unbalanced main valve** and non-venting design as standard, the MF101 controls outlet pressures up to 40 bar (580 psi) from a maximum 100 bar (1,450 psi) inlet pressure.

Alternatively, a balanced option can be offered with a non-venting or self-venting (non-captured) design and enables inlet pressures of up to 414 bar (6,000 psi) using a PEEK™ seat, controlling outlet pressures up to 35 bar (510 psi).

### SPECIFICATION

MAXIMUM INLET PRESSURE		
Seat Material	Balanced	Unbalanced
PEEK™	414 bar (6,000 psi)	100 bar (1,450 psi)
PCTFE	300 bar (4,350 psi)	100 bar (1,450 psi)

### 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 35 bar (510 psi)
Design Proof Pressure	150% max. working pressure
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 40 bar (580 psi) on non-venting models.

#### 2 OPTIONAL BALANCED DESIGN

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

#### 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](mailto:info@pressure-tech.com)  
W [www.pressure-tech.com](http://www.pressure-tech.com)

190619

PAGE:  
1 OF 4

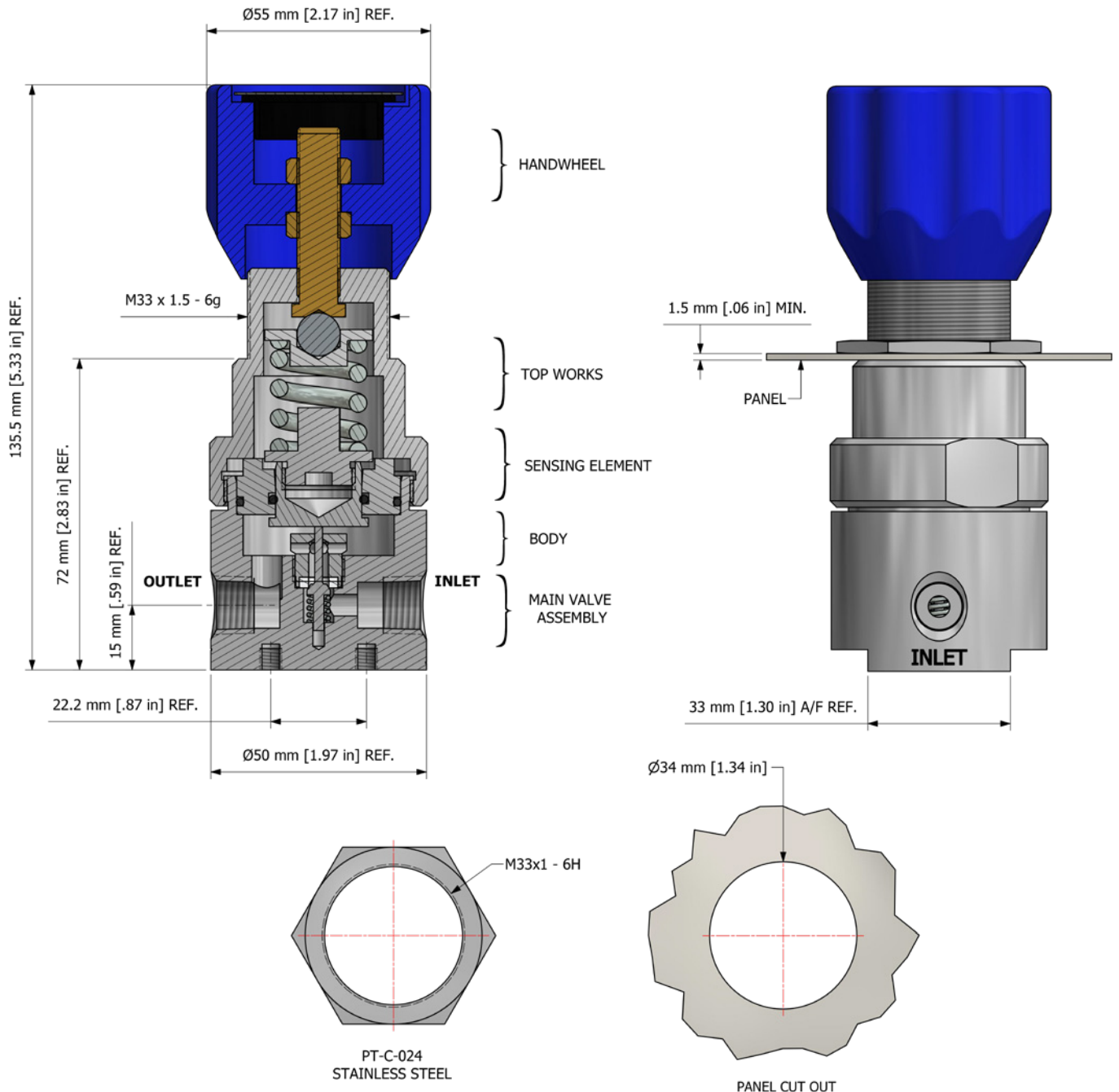
# MF101 Datasheet

MEDIUM-FLOW PRESSURE REGULATOR



● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 414 bar (6,000 psi) | Max Outlet: 40 bar (580 psi) | 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](mailto:info@pressure-tech.com)  
W [www.pressure-tech.com](http://www.pressure-tech.com)

190619

PAGE:  
2 OF 4

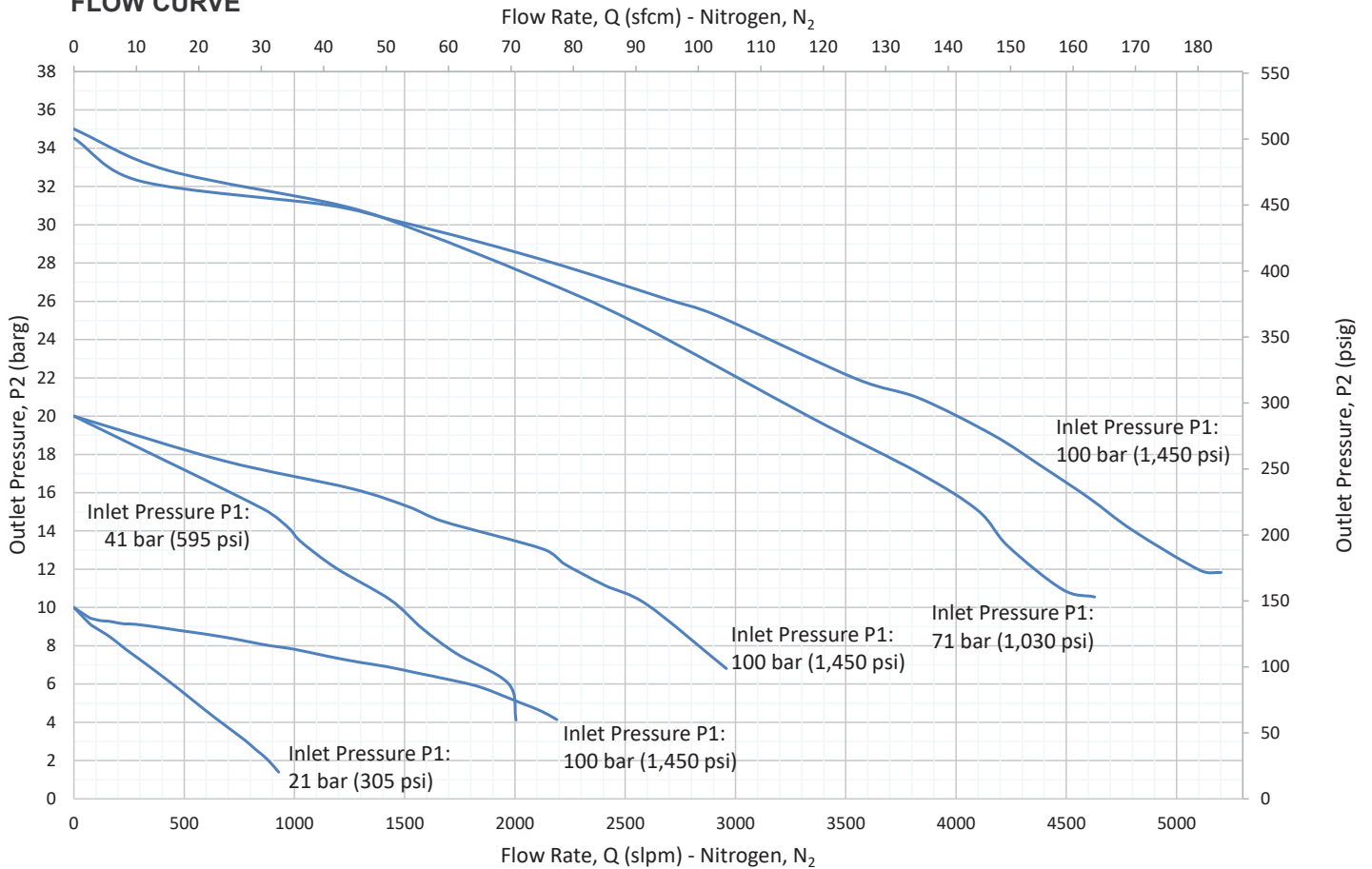
# MF101 Datasheet

## MEDIUM-FLOW PRESSURE REGULATOR

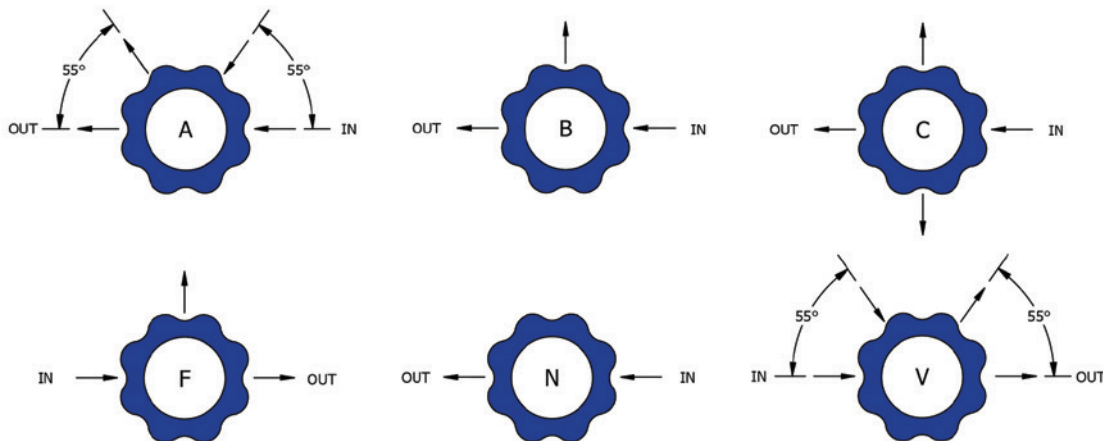


☒ Gas 
 ☒ Liquid 
 ☐ Diaphragm 
 ☐ Piston 
 ☒ Self-Venting 
 ☐ Non-Venting 
 Max Inlet: 414 bar (6,000 psi) 
 Max Outlet: 40 bar (580 psi) 
 Cv 0.5

### FLOW CURVE



### 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](mailto:info@pressure-tech.com)

W [www.pressure-tech.com](http://www.pressure-tech.com)

190619

PAGE:  
3 OF 4

# MF101 Datasheet

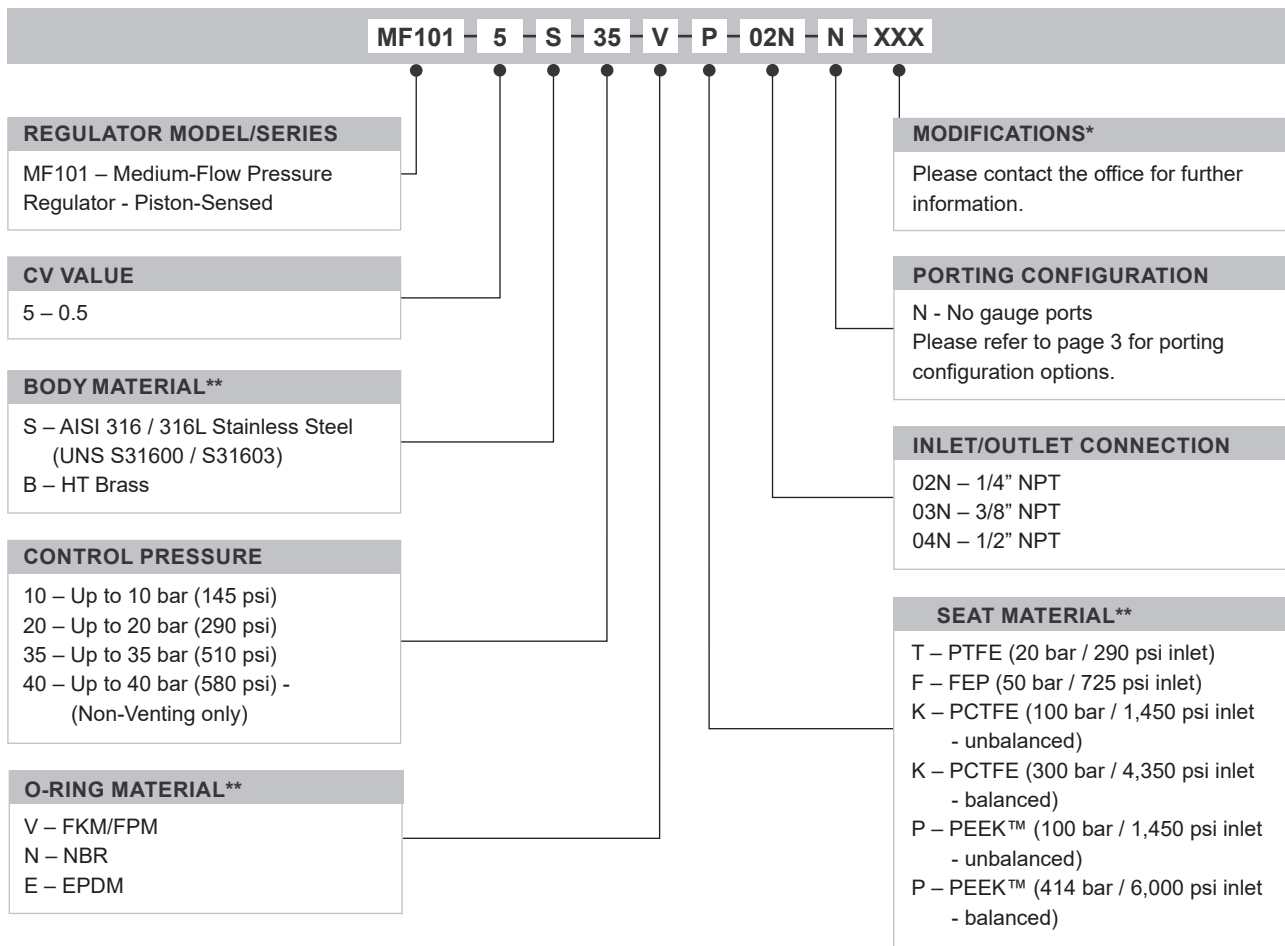
MEDIUM-FLOW PRESSURE REGULATOR



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

## 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-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

190619

PAGE:  
4 OF 4