

# 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

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)

### STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body & Bonnet	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Main Valve Pin	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Soft Seat	PEEK™ (450G) PCTFE (Kel-F)
Valve Spring	<i>UNBALANCED:</i> ASTM A240 301 Stainless Steel (UNS S30100) <i>BALANCED:</i> Inconel® X750 (UNS N07750)
Piston	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Handwheel	Nylon
O-Rings	FKM/FPM (Viton)
Loading Spring	ASTM A240 301 Stainless Steel (UNS S30100)

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)

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

### FEATURES AND BENEFITS

<p><b>1</b> LARGE PRECISION-MACHINED SENSING ELEMENT</p> <p>Accurate control of outlet pressures up to 40 bar (580 psi) on non-venting models.</p>	<p><b>2</b> OPTIONAL BALANCED DESIGN</p> <p>For inlet pressures of up to 414 bar (6,000 psi).</p>	<p><b>3</b> LIGHTWEIGHT &amp; COMPACT DESIGN</p> <p>Perfect for when installation space is restricted.</p>	<p><b>4</b> SELF-VENTING OR NON-VENTING</p> <p>Versatile use for a range of applications.</p>
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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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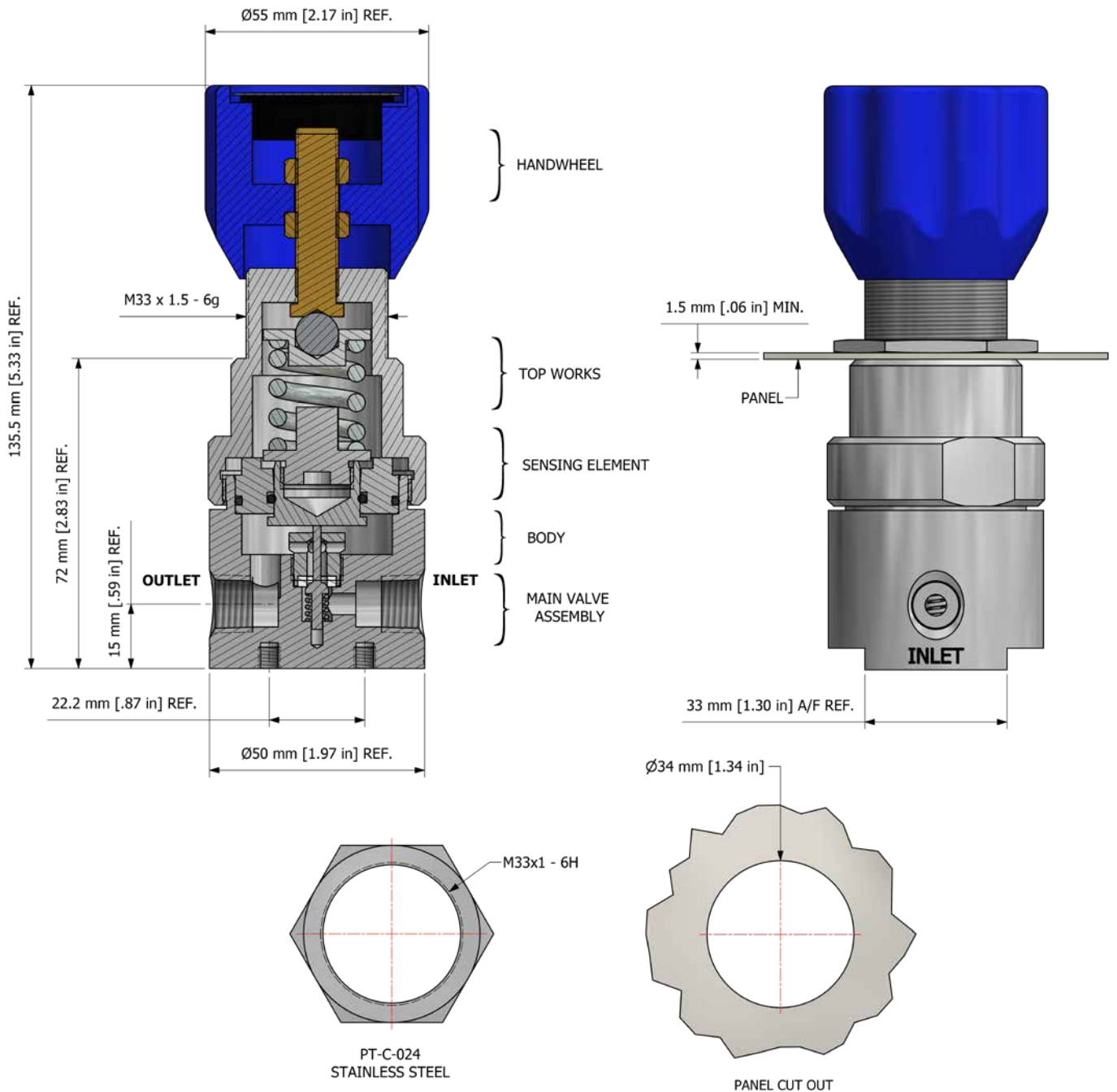
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## DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 1/4" NPT option and standard configurations only - please contact the office for other options.



**Note:**  
All gauge ports are 1/4" NPT as standard.

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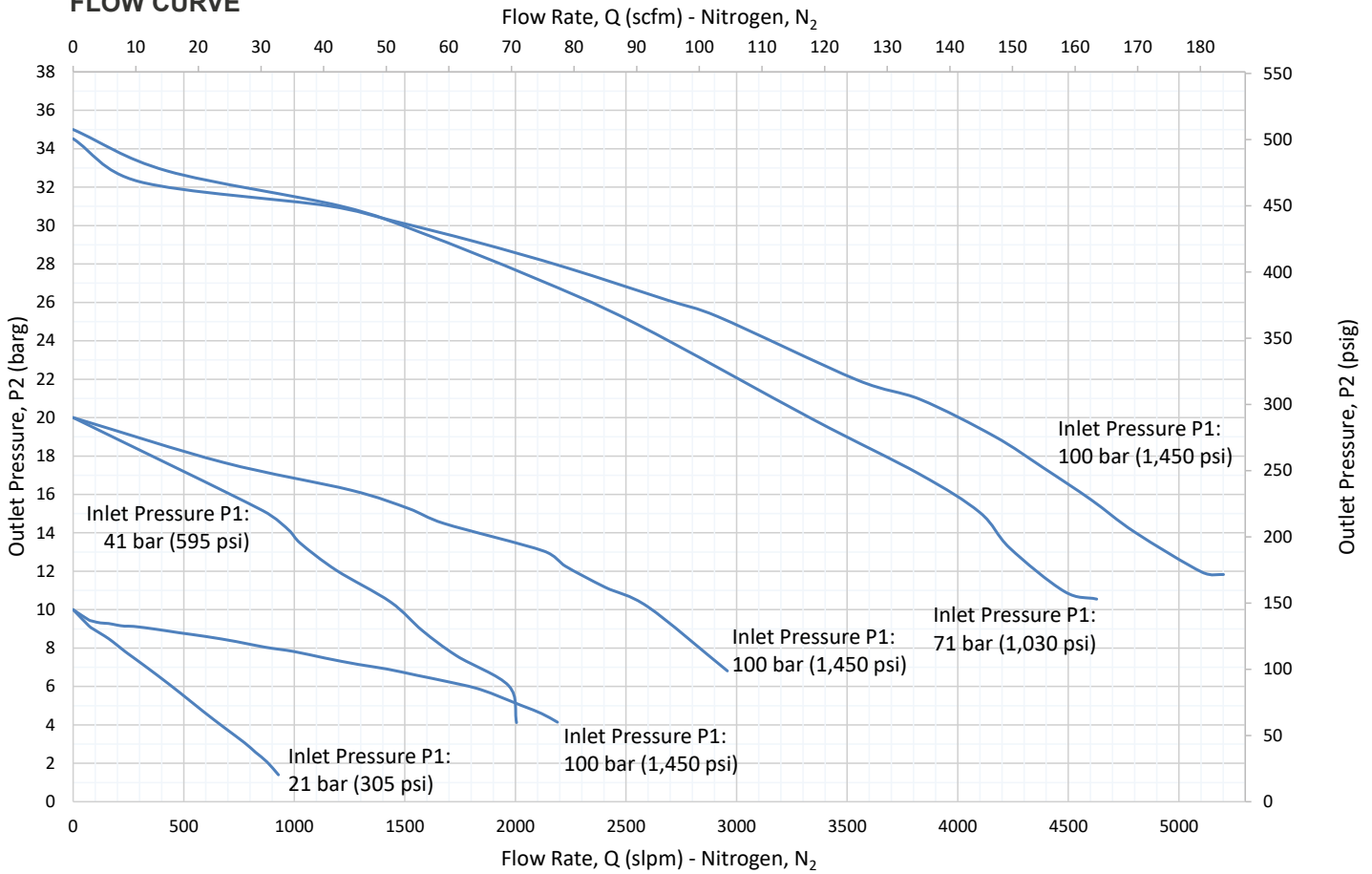
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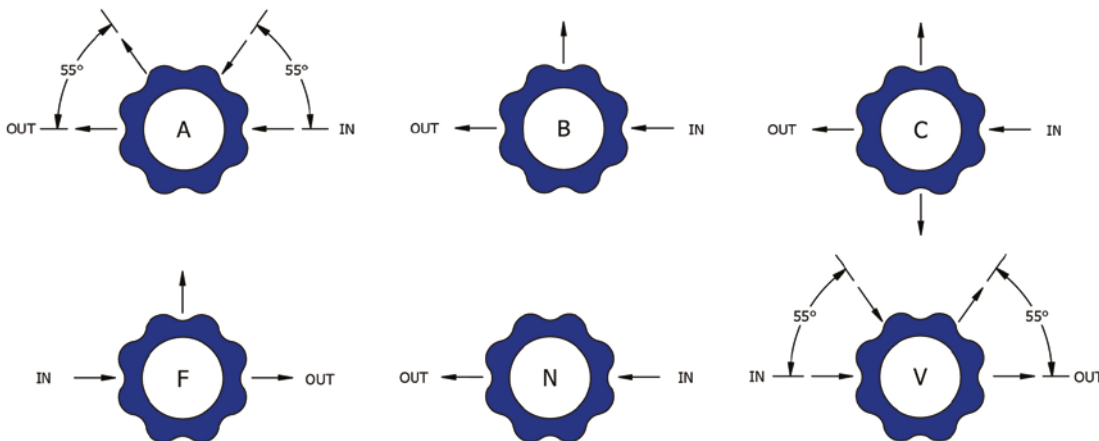


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## FLOW CURVE



## PORTING CONFIGURATIONS



**Note:**

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

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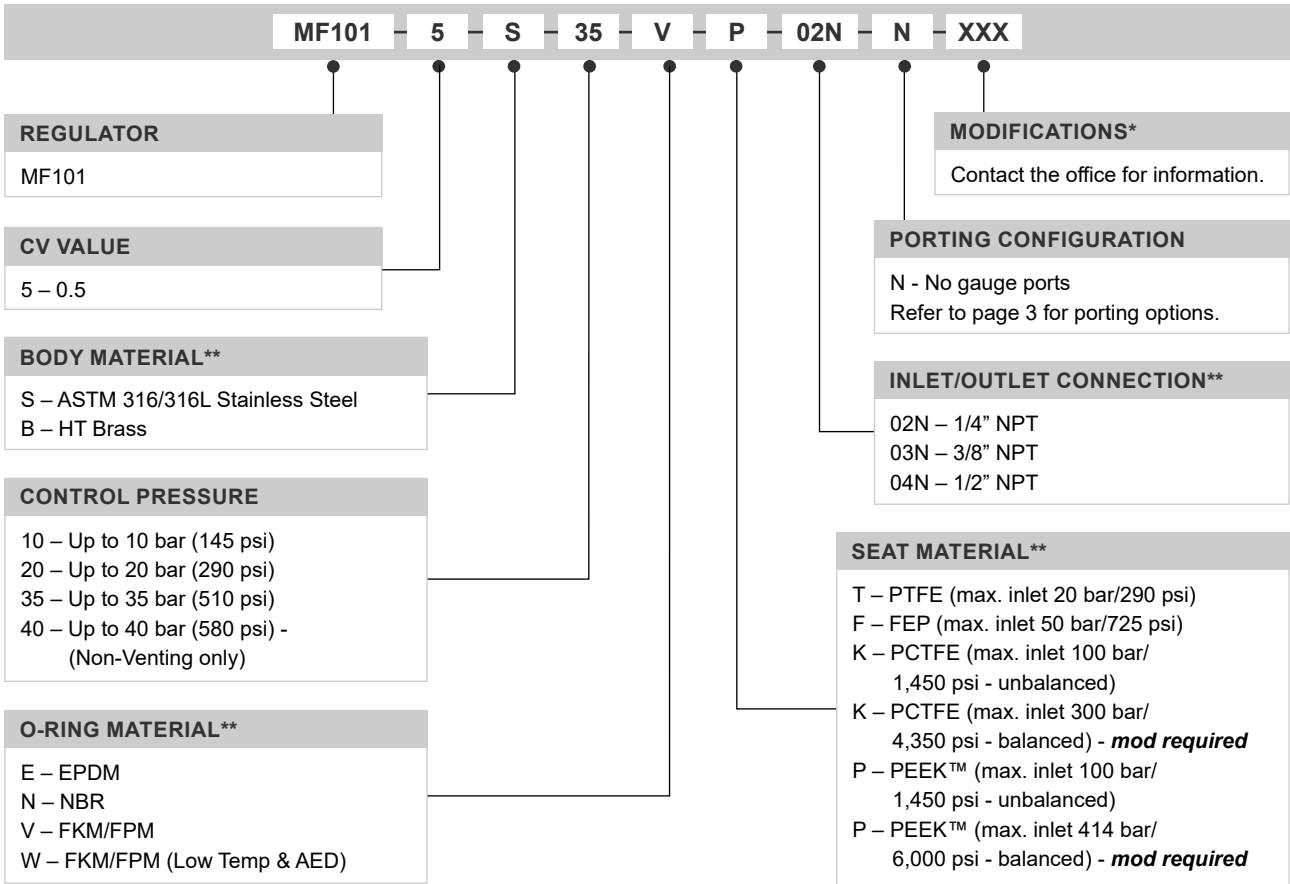
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### ORDERING INFORMATION

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



OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-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/connections may be available

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