

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)

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

Versatile use for a range of applications.

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
Soft Seat	PEEK™ (450G) PCTFE (Kel-F)
Valve Spring	UNBALANCED: ASTM A240 301 Stainless Steel (UNS S30100) BALANCED: Inconel® X750 (UNS N07750)
Piston	ASTM A479 316/316L Stainless Steel
Handwheel	Nylon
O-Rings	FKM/FPM (Viton)
Loading Spring	ASTM A240 301 Stainless Steel

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.

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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PAGE:
1 OF 4

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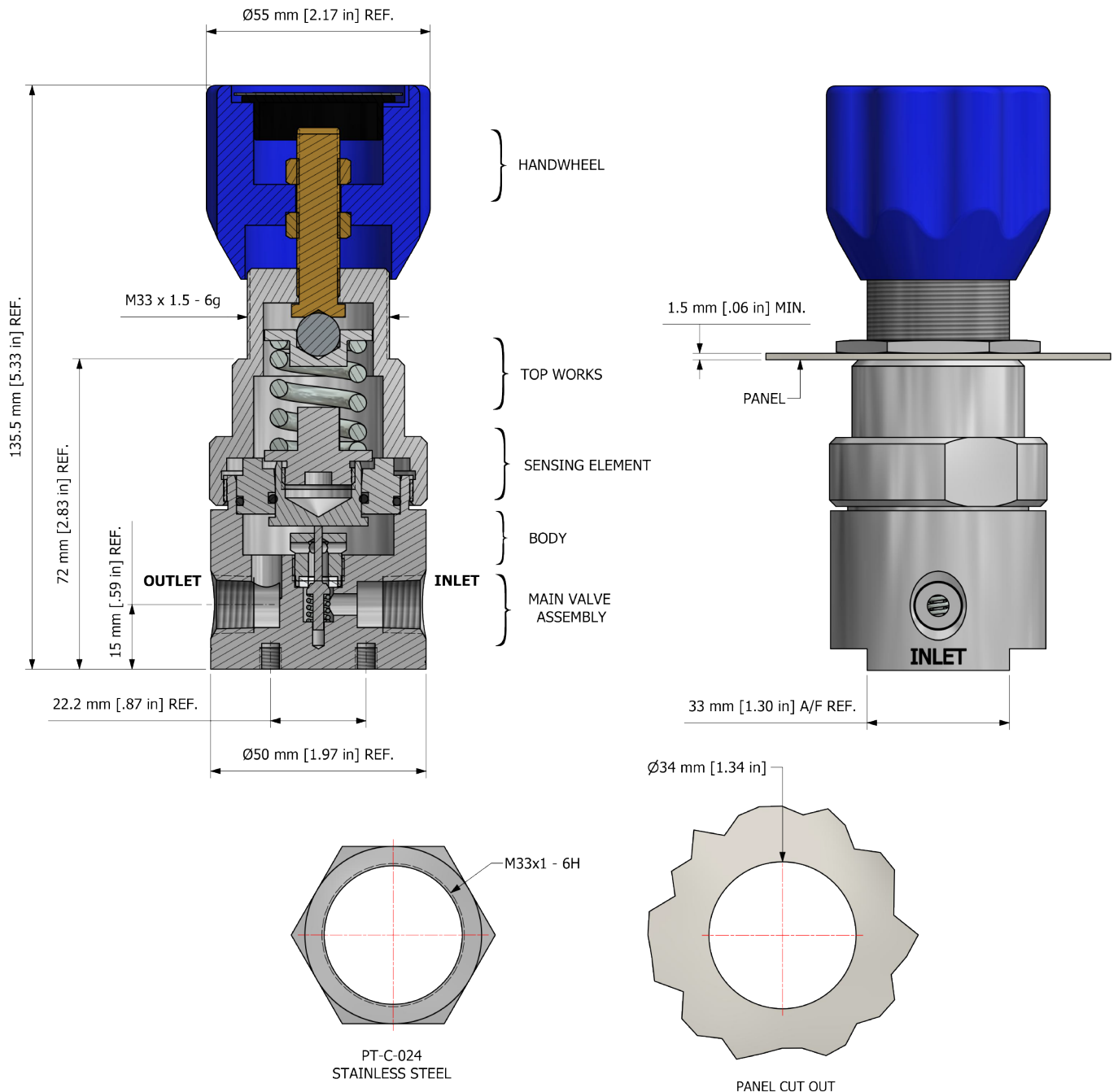
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DRAWINGS AND INSTALLATION DIMENSIONS

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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PAGE:
2 OF 4

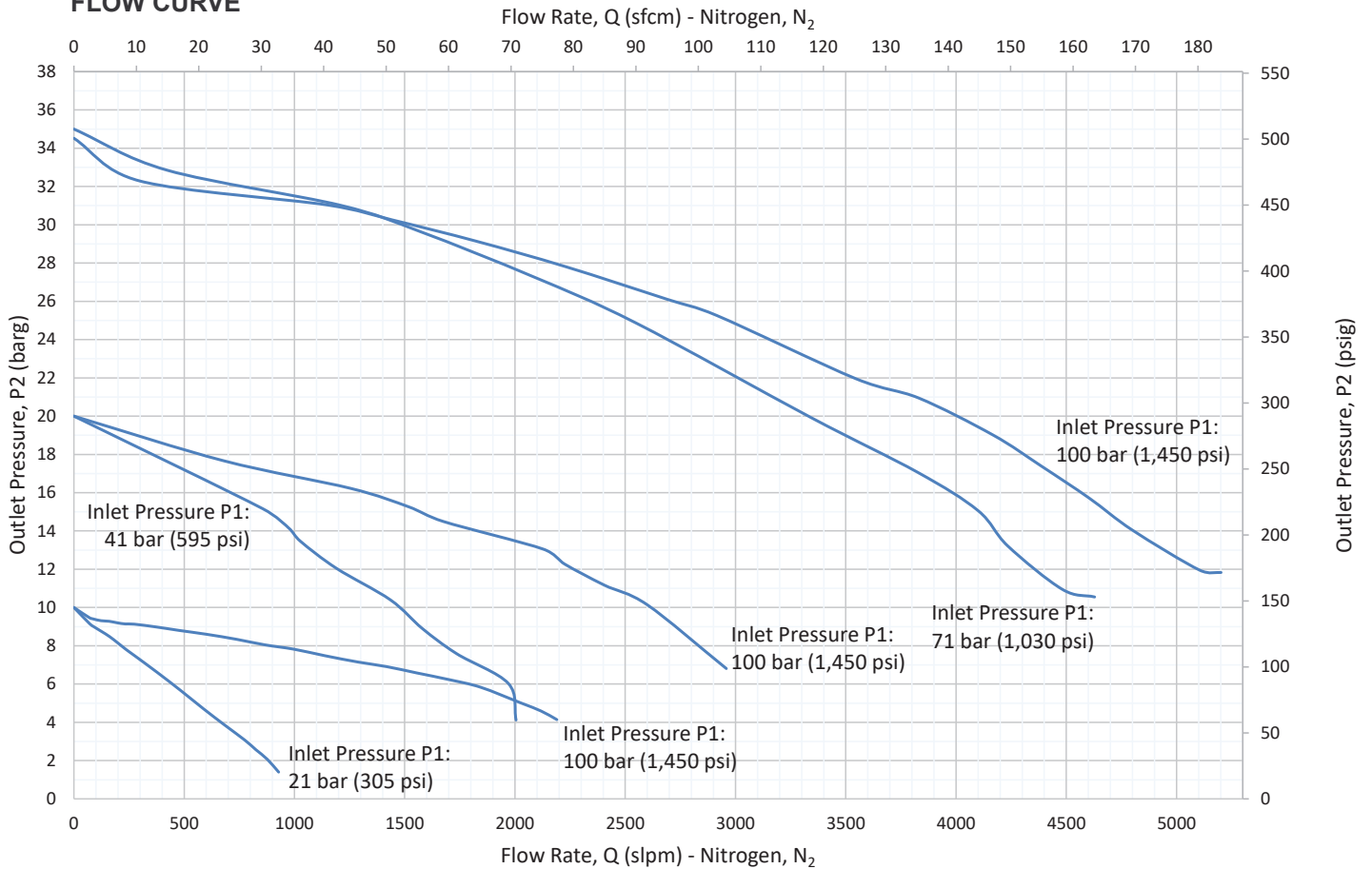
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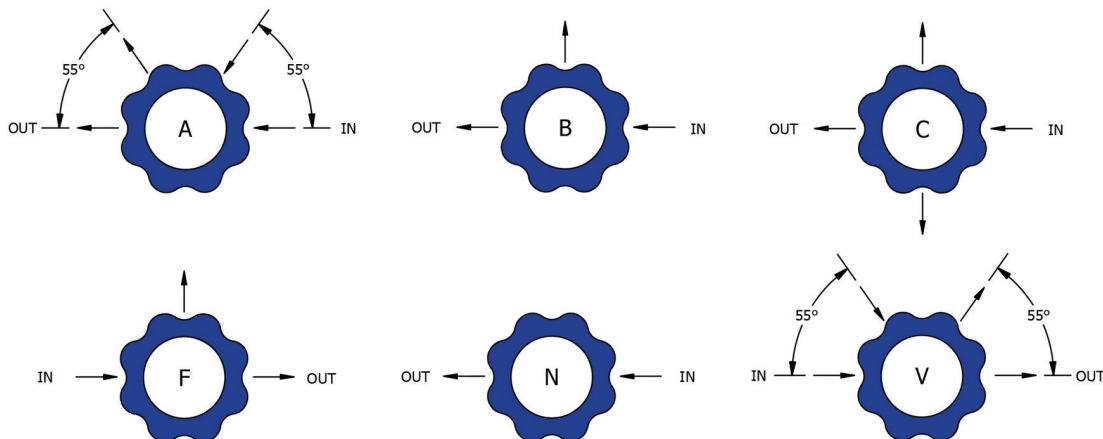


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FLOW CURVE



PORTING CONFIGURATIONS



Note:

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

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PAGE:
3 OF 4

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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			MODIFICATIONS*						
MF101			Contact the office for information.						
CV VALUE			PORTING CONFIGURATION						
5 – 0.5			N - No gauge ports Refer to page 3 for porting options.						
BODY MATERIAL **			INLET/OUTLET CONNECTION**						
S – ASTM 316/316L Stainless Steel B – HT Brass			02N – 1/4" NPT 03N – 3/8" NPT 04N – 1/2" NPT						
CONTROL PRESSURE			SEAT MATERIAL **						
10 – Up to 10 bar (145 psi) 20 – Up to 20 bar (290 psi) 35 – Up to 35 bar (510 psi) 40 – Up to 40 bar (580 psi) - (Non-Venting only)			T – PTFE (max. inlet 20 bar/290 psi) F – FEP (max. inlet 50 bar/725 psi) K – PCTFE (max. inlet 100 bar/ 1,450 psi - unbalanced) K – PCTFE (max. inlet 300 bar/ 4,350 psi - balanced) - mod required P – PEEK™ (max. inlet 100 bar/ 1,450 psi - unbalanced) P – PEEK™ (max. inlet 414 bar/ 6,000 psi - balanced) - mod required						
O-RING MATERIAL **									
E – EPDM N – NBR V – FKM/FPM									

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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PAGE:
4 OF 4