

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 & 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	AISI 302 S26 Stainless Steel (Unbalanced) Inconel® X750 (Balanced)
Piston	AISI 316/316L Stainless Steel (UNS S31600/S31603)
Handwheel	Nylon
O-Rings	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)

* Pressure regulator rating may be limited by connection type, Cv and seat material

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.



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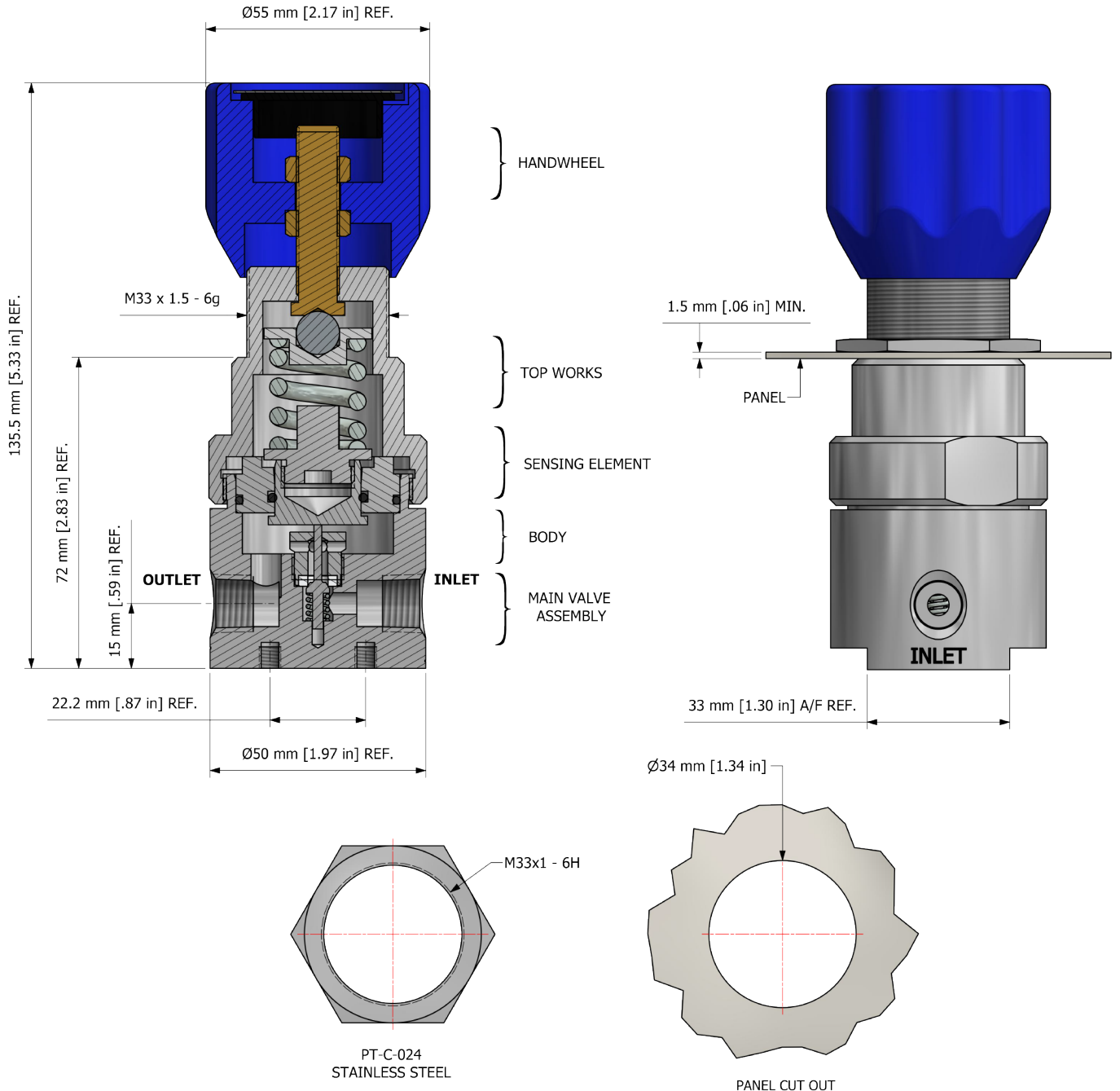
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DRAWINGS AND INSTALLATION DIMENSIONS



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

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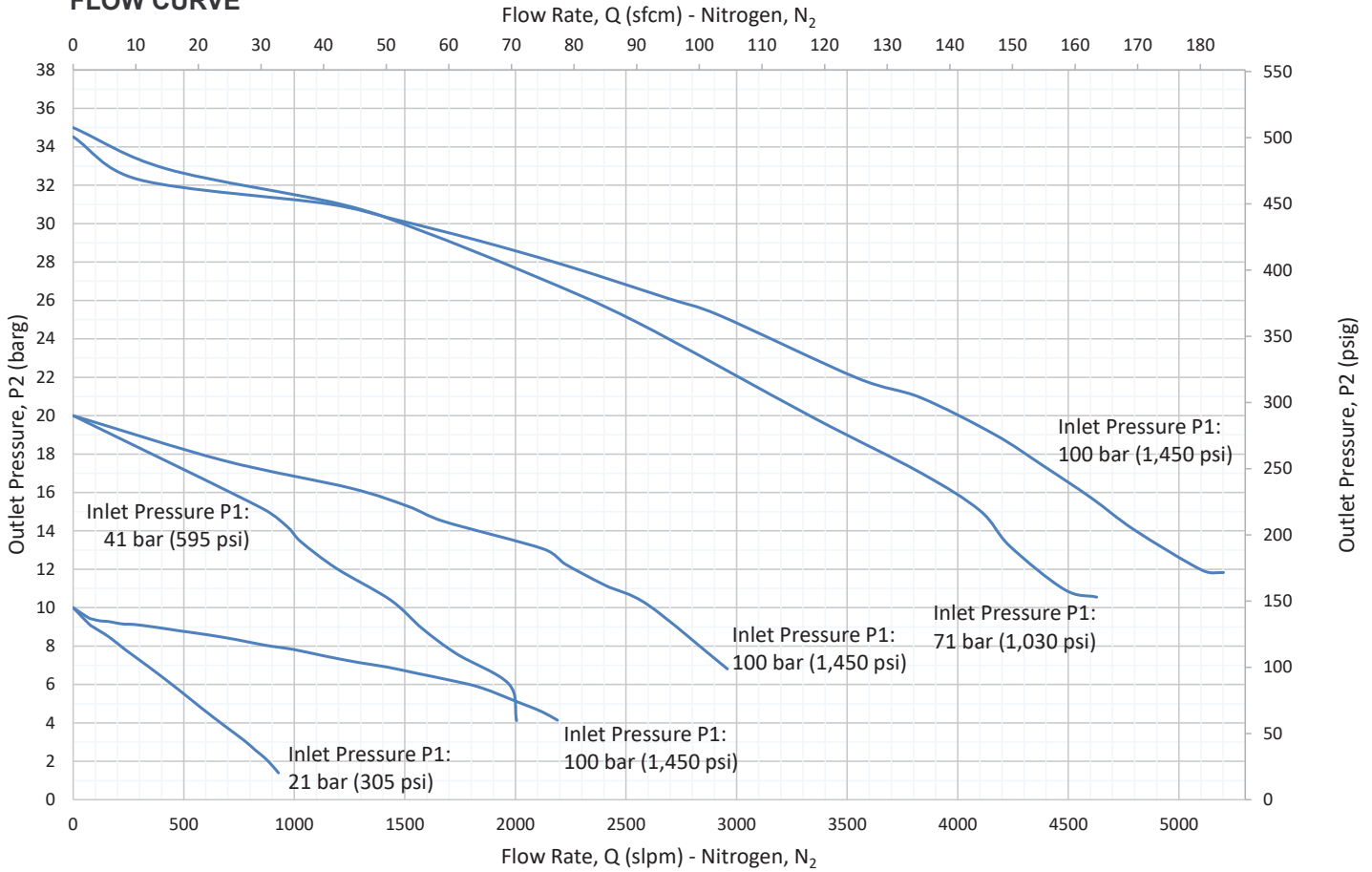
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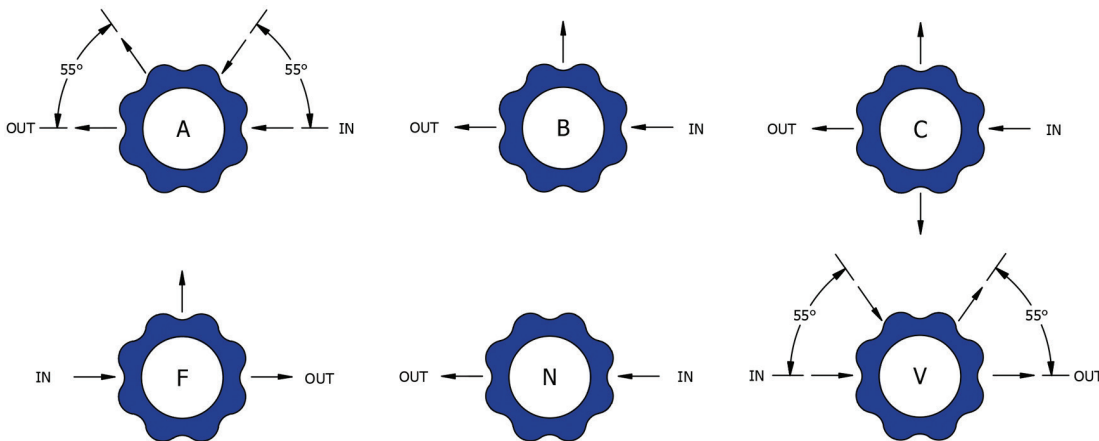


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FLOW CURVE



PORTING CONFIGURATIONS



Note:

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

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ORDERING INFORMATION

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

REGULATOR MODEL/SERIES	CV VALUE	BODY MATERIAL **	CONTROL PRESSURE	O-RING MATERIAL **	MODIFICATIONS*	PORTING CONFIGURATION	INLET/OUTLET CONNECTION**	SEAT MATERIAL**
MF101 – Medium-Flow Pressure Regulator - Piston-Sensed	5 – 0.5	S – AISI 316/316L Stainless Steel (UNS S31600/S31603) B – HT Brass	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)	V – FKM/FPM N – NBR E – EPDM	Please contact the office for further information.	N - No gauge ports Please refer to page 3 for porting configuration options.	02N – 1/4" NPT 03N – 3/8" NPT 04N – 1/2" NPT	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) P – PEEK™ (max. inlet 100 bar/1,450 psi - unbalanced) P – PEEK™ (max. inlet 414 bar/6,000 psi - balanced)

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 - please contact the office

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