

# MF301 Datasheet

## MEDIUM-FLOW PRESSURE REGULATOR



Gas  
  Liquid  
 |  
  Diaphragm  
  Piston  
 |  
  Self-Venting  
  Non-Venting  
 |  
 Max Inlet: 414bar (6,000psi)  
 |  
 Max Outlet: 300bar (4,350psi)  
 |  
 Cv 2.0



### INTRODUCING THE MF301...

The MF301 is a piston-sensed non-venting or self-venting regulator for gas applications.

The MF301 offers a **balanced main valve** as standard for up to 414bar (6,000psi) inlet pressure with a PEEK™ seat or up to 300bar (4,350psi) with a PCTFE seat. Pressures can be controlled up to 300bar (4,350psi) with this design.

Alternatively, an **unbalanced** option can be offered for applications with maximum inlet pressures of up to 50bar (725psi), whilst also offering pressure control up to 50bar (725psi).

### SPECIFICATION

Max Inlet Pressure:	BALANCED	UNBALANCED
PEEK™	414bar (6,000psi)	-
PCTFE	300bar (4,350psi)	50bar (725psi)

### 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	PCTFE / PEEK™
Valve Spring	AISI 316 S42 Stainless Steel
Piston	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Handwheel	Nylon
'O'-Ring Seals	FKM / FPM
Loading Spring	Silicon Chrome Wire

Outlet Ranges	Up to 250bar (3,625psi)
Design Proof Pressure	150% max WP
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	3.25kg (7.2lbs)

### FEATURES AND BENEFITS

#### 1 PISTON SENSING ELEMENT

Perfect for use in challenging conditions.

#### 2 BALANCED MAIN VALVE DESIGN

Improved control across the pressure range.

#### 3 SELF-VENTING OR NON-VENTING

Versatile use for a range of applications.

#### 4 LOWER ENTRY PLUG

For simplified seat servicing.

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

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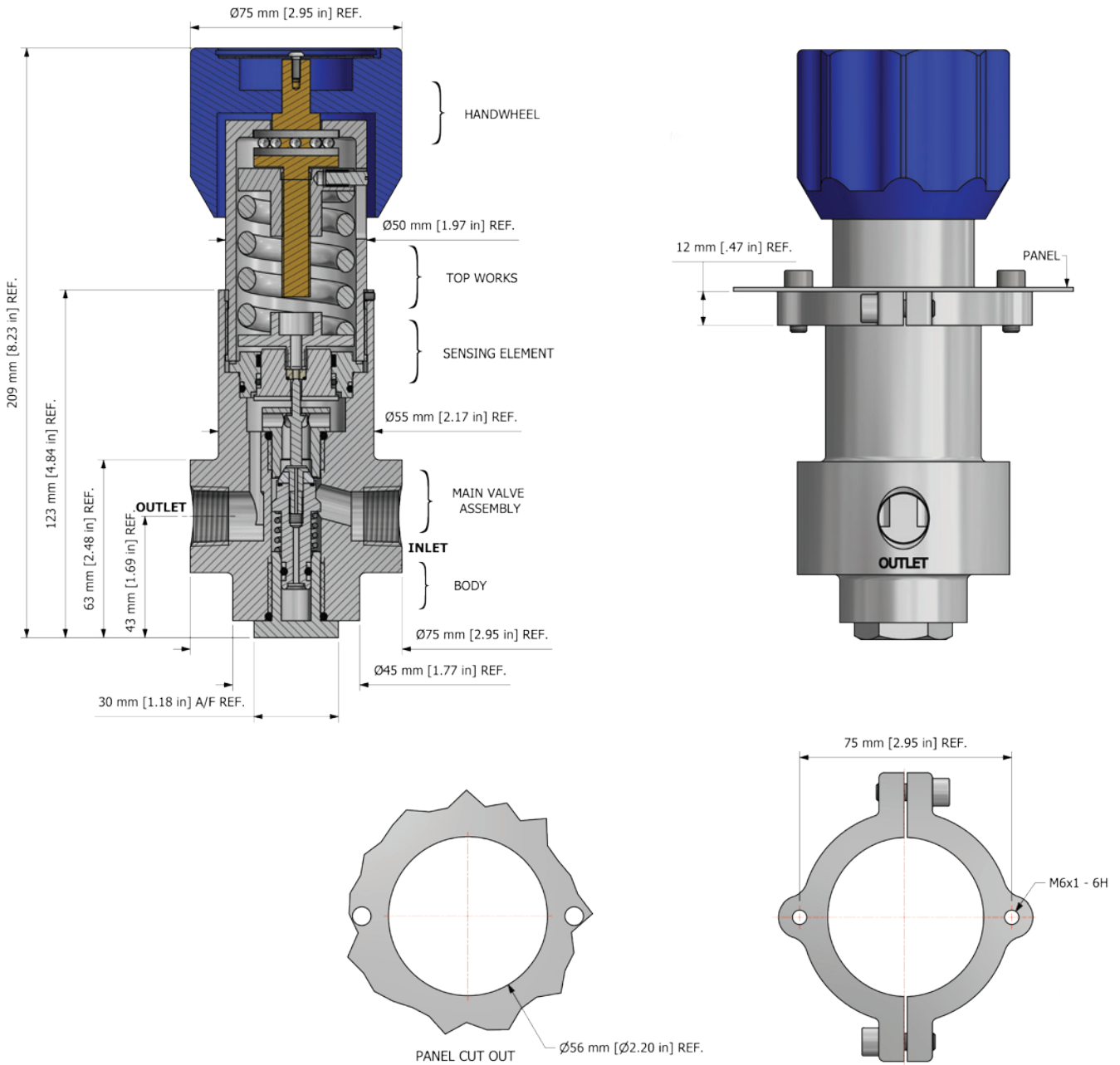
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## DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 1/2" NPT option - please contact the office for additional connections options.



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

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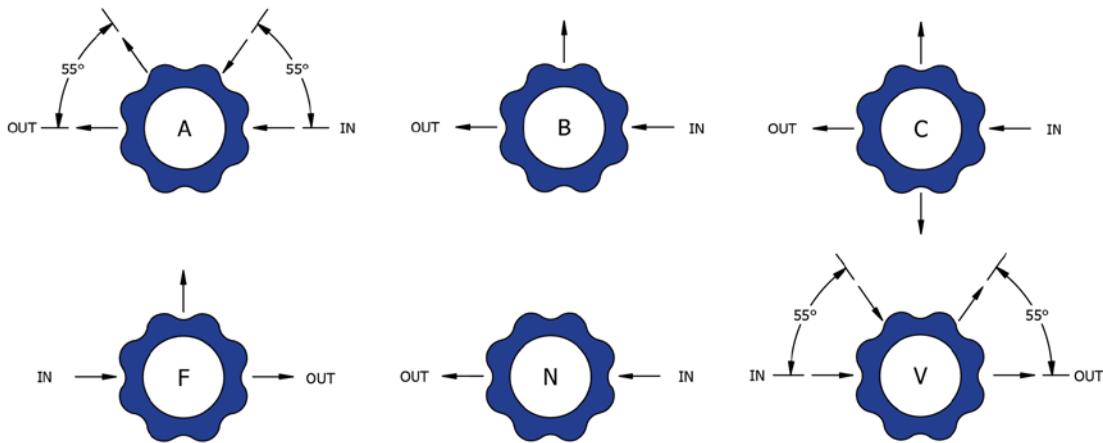


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## FLOW CURVE

Please contact the office for further information.

## PORTING CONFIGURATIONS



**Note:**

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

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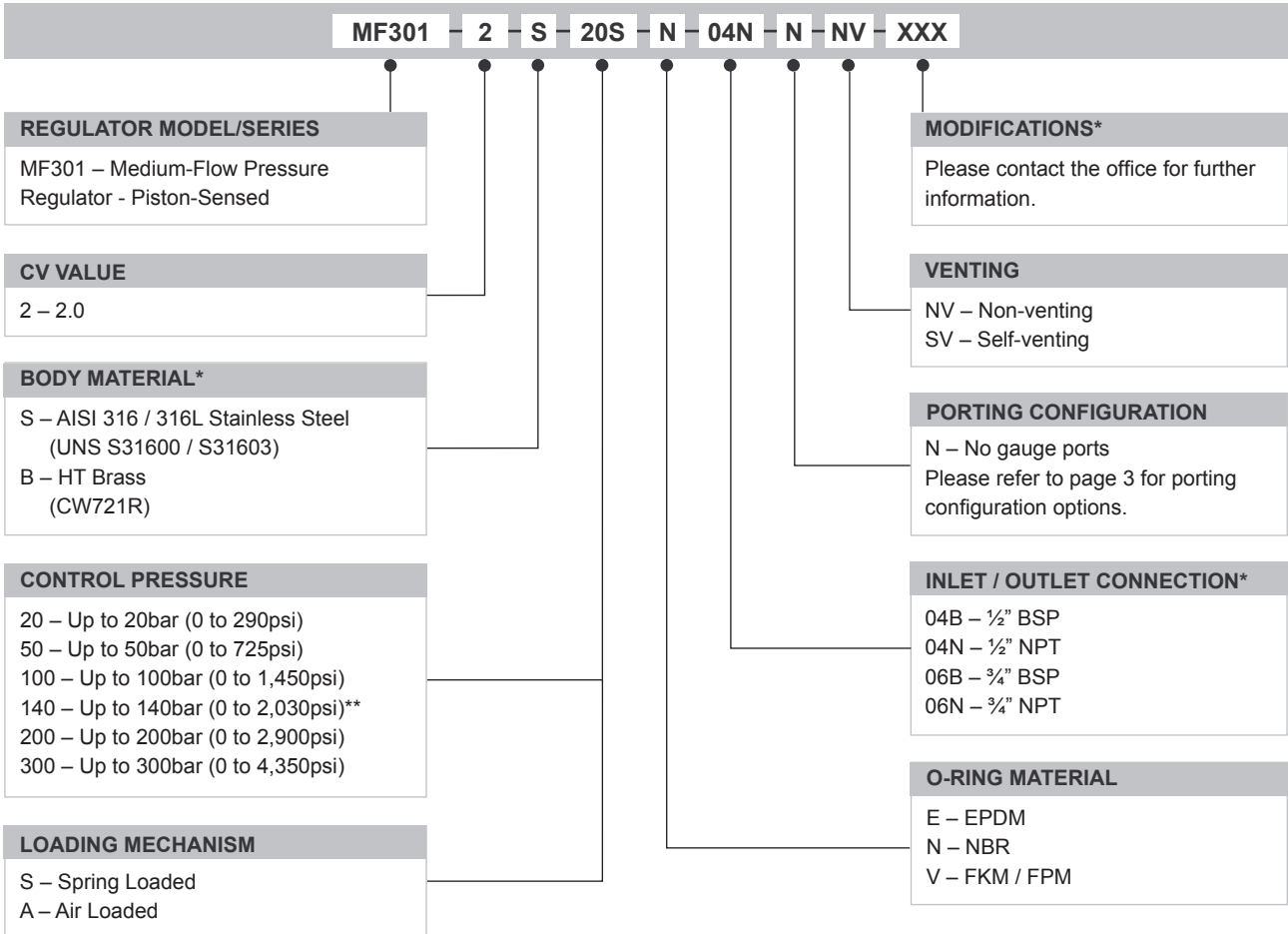
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## ORDERING INFORMATION

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



OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-MF301-2-B...	Various 'Balanced' options available
Service Kit	SRK-MF301-2-U...	Various 'Unbalanced' options available
Panel Mount Ring	PT-C-061-005-RING	Stainless Steel panel mount ring
Panel Mount Ring	PT-C-061-005-001-RING	Aluminium panel mount ring

*Note:*  
Ancillary equipment also available

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

\* Other connections/materials may be available - please contact the office  
 \*\* Air loaded only

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