

AUTO438 Datasheet

PRESSURE REGULATOR FOR HYDROGEN FUEL CELL VEHICLES

● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 438 bar (6,350 psi) | Max Outlet: 20 bar (290 psi) | Cv 0.5



INTRODUCING THE AUTO438...

The AUTO438 is a piston-sensed pressure regulator, designed specifically for Hydrogen fuel cell vehicles. With a **balanced main valve** as standard, it offers stable control of outlet pressures up to 20 bar (290 psi) from a maximum 438 bar (6,350 psi) inlet pressure.

In addition to critical safety features such as its double o-ring backup, the AUTO438 offers convenient access to the seat cartridge in the base of the regulator for simplified servicing.

SPECIFICATION

Max. Rated Inlet Pressure	438 bar (6,350 psi)
Outlet Ranges	Up to 20 bar (290 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	2.7kg (5.95lbs)

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)
Seat	PEEK™
Valve Spring	Inconel® X750
Piston	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Handwheel	Nylon
'O'-Ring Seals	EPDM
Loading Spring	AISI 302 Stainless Steel (UNS S30200)
Filter	40 Microns

FEATURES AND BENEFITS

1 DOUBLE O-RING

Safety back-up in the event of primary o-ring failure during use.

2 EASY ACCESS TO SEAT CARTRIDGE

Simplified servicing through the base of the regulator.

3 POSITIONABLE VENT PORT

Positionable vent port offers simplified assembly.

4 BALANCED MAIN VALVE DESIGN

Improved control across the pressure range.

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

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DRAWINGS AND INSTALLATION DIMENSIONS



Note:

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

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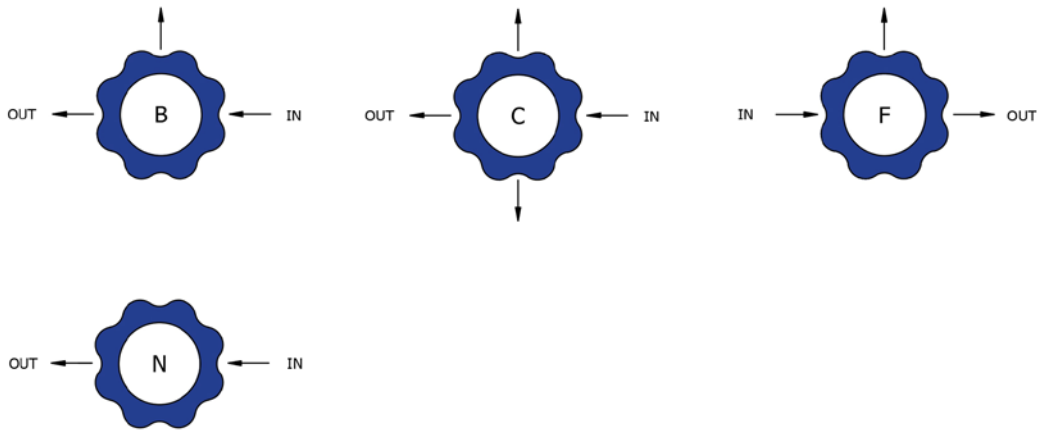
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FLOW CURVE

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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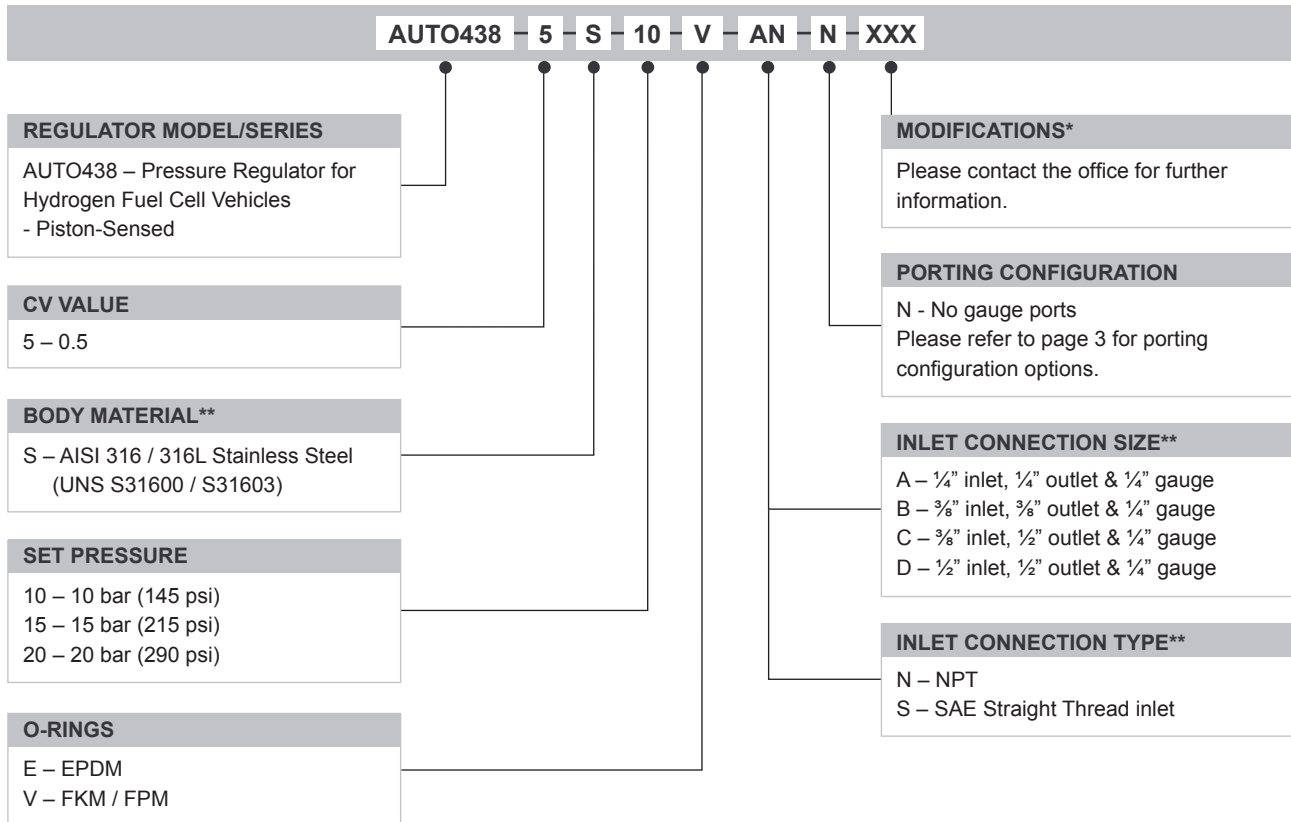
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ORDERING INFORMATION

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



OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-MF101-05-B...	Various 'Balanced' options available

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 options may be available - please contact the office

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