EC79 APPROVED PRESSURE REGULATOR FOR HYDROGEN BUSES AND TRUCKS



DiaphragmPiston





Non-Venting

Max Inlet: 438 bar (6,350 psi)

Max Outlet: 20 bar (290 psi)

Cv 0.25



#### **INTRODUCING THE AUTO438...**

The AUTO438 is an EC79/2009 approved pistonsensed pressure regulator, designed specifically for hydrogen fuel cell buses and trucks. During the EC79 testing process, it was put through 90,000 cycles by external certification body, KIWA Nederland B.V. equating to 10 years life time on a typical installation!

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.

## **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 (Aluminium Body)	1.8kg (3.97lbs)

## STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body	Anodised Aluminium T6511 (UNS AW6082)
Main Valve Pin	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Valve Spring	Elgiloy® (UNS R30003)
Piston	ASTM A479 316/316L Stainless Steel
O-Rings	FPM/FKM Low Temp & AED (Viton)
Loading Spring	ASTM A479 316/316L Stainless Steel
Filter	30 Microns

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**

EC79/2009 **APPROVED** 

> Permits use on hydrogen service for vehicles in the public domain

**EASY ACCESS TO** SEAT CARTRIDGE

> Simplified servicing through the base of the regulator.

**IN-LINE LEAKAGE** SENSE LINE

> Easy to connect pipework to sense for H2 leakage, and makes set point anti-tamper proof.

**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







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• Gas Liquid

DiaphragmPiston





Non-Venting

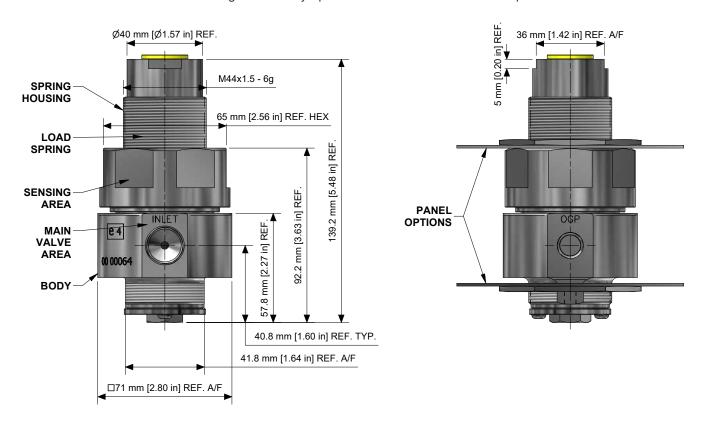
Max Inlet: 438 bar (6,350 psi)

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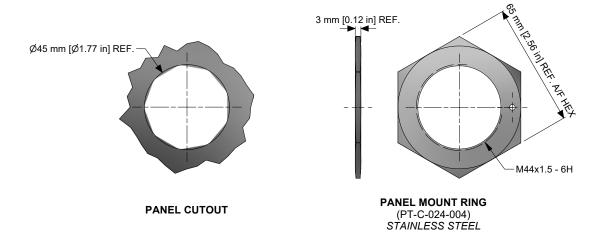
## **DRAWINGS AND INSTALLATION DIMENSIONS**

Dimensions shown for standard configurations only - please contact the office for other options.



## **MOUNTING CONFIGURATION**

Mounting panel is secured between the body and bonnet with a panel mounting nut (see above right and below).



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Gas

Liquid

DiaphragmPiston

Self-Venting

Non-Venting

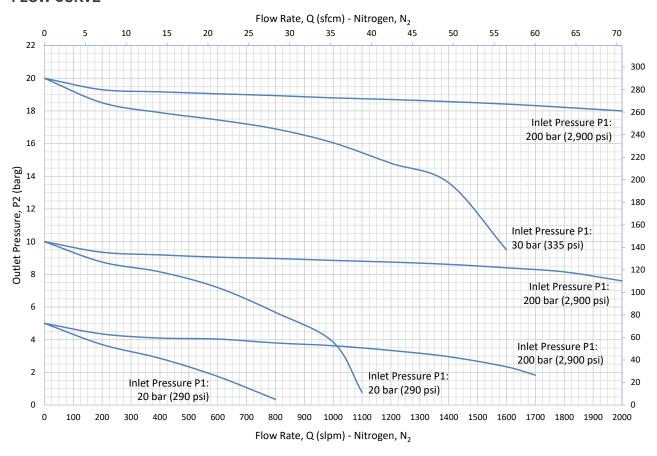
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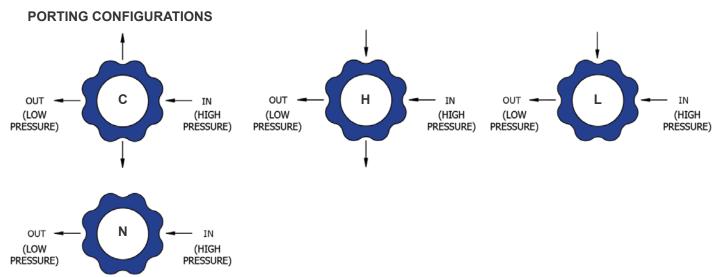
Max Outlet: 20 bar (290 psi)

Cv 0.25

Outlet Pressure, P2 (psig)

### **FLOW CURVE**





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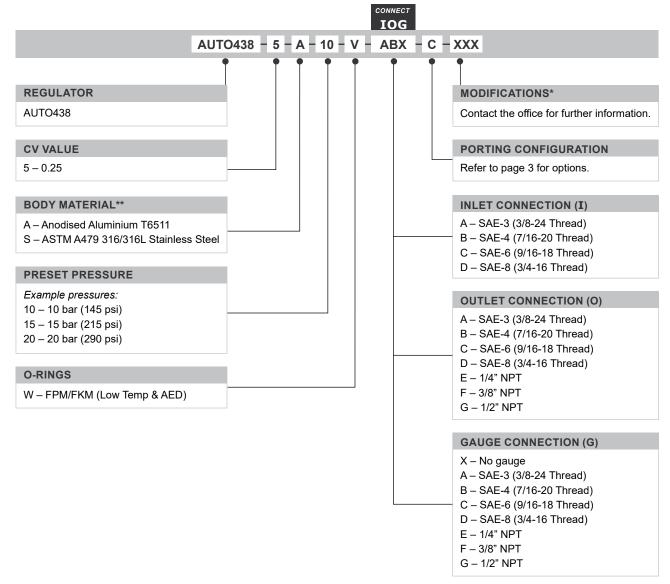
Max Inlet: 438 bar (6,350 psi)

Max Outlet: 20 bar (290 psi)

Cv 0.25

#### ORDERING INFORMATION

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



OPTIONAL EXT	RAS	
	PART NUMBER	DESCRIPTION
Service Kit	SRK-AUTO438-05-B	Various 'Balanced' options available
Note: Ancillary e	quipment also available	

TRADEMARKS: Elgiloy® is a registered trademark of Elgiloy Specialty Metals

- \* Where applicable
- \*\* Other options may be available

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