PRESSURE REGULATOR FOR HYDROGEN PASSENGER VEHICLES













Max Inlet: 875 bar (12,690 psi)

Max Outlet: 100 bar (1,450 psi)

Cv 0.5



#### **INTRODUCING THE H875...**

The H875 is a piston-sensed pressure regulator, designed specifically for hydrogen passenger vehicles. Its two-stage design offers accurate pressure control through two stages of pressure reduction.

With a balanced main valve as standard, it offers stable control of outlet pressures up to 100 bar (1,450 psi) from a maximum 875 bar (12,690 psi) inlet pressure.

#### **SPECIFICATION**

Max. Rated Inlet Pressure	875 bar (12,690 psi)
Outlet Ranges	Up to 100 bar (1,045 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	Aluminium 1.5kg / Stainless Steel 3.5kg
Hydrogen Service Level	H35 or H70

### STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	Aluminium T6511 (UNS AW6082) or ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Main Valve Pin	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Seat	Vespel®
Valve Spring	Elgiloy® (UNS R30003)
Sensor	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
O-Rings	FPM/FKM Low Temp & AED (Viton)
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**

TWO-STAGE **DESIGN** 

Accurate pressure control through two stages of pressure reduction.

COMPACT 2 COIVIT DESIGN

Perfect for when installation space is restricted.

**BALANCED** MAIN VALVE

For improved control across the pressure range.

1 DUAL **FILTRATION** 

Offers excellent protection to sensitive internal components.

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





PRESSURE REGULATOR FOR HYDROGEN PASSENGER VEHICLES













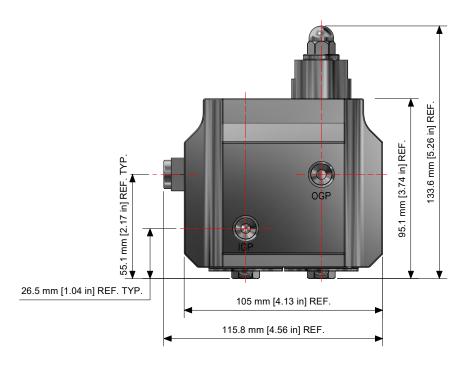
Max Inlet: 875 bar (12,690 psi)

Max Outlet: 100 bar (1,450 psi)

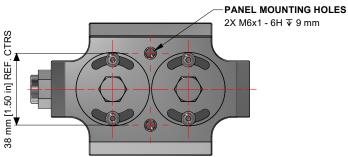
Cv 0.5

### **DRAWING AND INSTALLATION DIMENSIONS**

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







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





PRESSURE REGULATOR FOR HYDROGEN PASSENGER VEHICLES











Max Inlet: 875 bar (12,690 psi)

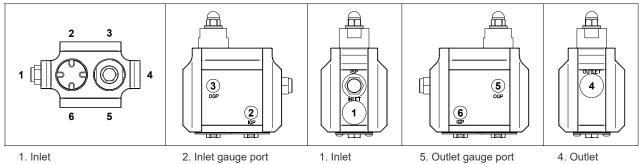
Max Outlet: 100 bar (1,450 psi)

Cv 0.5

#### **PORT POSITIONS**

Use 'ORDERING INFORMATION' on page 4 to select connection size and type for each port position.

3. Outlet gauge port



- 1. Inlet
- 2. Inlet gauge port
- 3. Outlet gauge port
- 4. Outlet
- 5. Outlet gauge port
- 6. Inlet gauge port

- 1. Inlet 5. Outlet gauge port
  - 6. Inlet gauge port
- 4. Outlet

#### **FLOW CURVES**



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









PRESSURE REGULATOR FOR HYDROGEN PASSENGER VEHICLES

• Gas Liquid

Diaphragm 
Piston

Self-Venting

Non-Venting

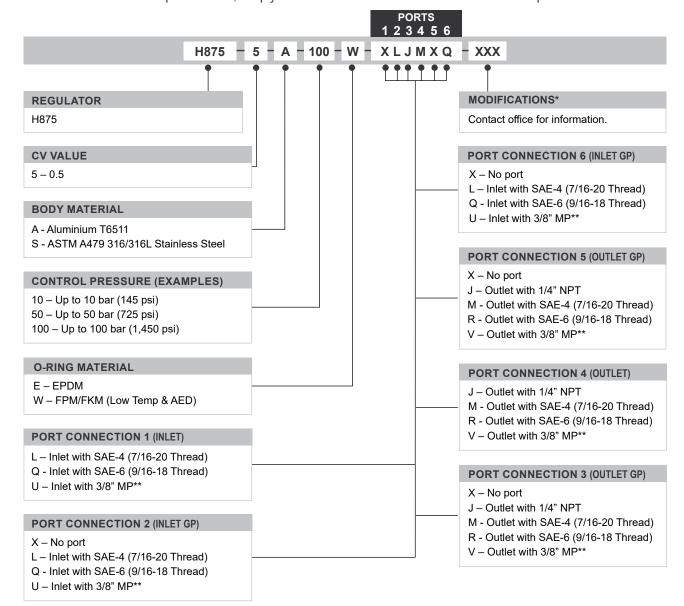
Max Inlet: 875 bar (12,690 psi)

Max Outlet: 100 bar (1,450 psi)

Cv 0.5

#### ORDERING INFORMATION

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



OPTIONAL EXTR	AS	
	PART NUMBER	DESCRIPTION
Service Kit	SRK-H875-T-5-A-10-V	H875 service kit.
Note: Ancillary equipment also available		

TRADEMARKS: Inconel® is a registered trademark of Inco Alloys International

- \* Where applicable
- \*\* Only available with 316/316L stainless steel body material

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





PRESSURE TECH LTD

Unit 24, Graphite Way, Hadfield, Glossop, Derbyshire, UK, SK13 1QH

