PRESSURE REGULATOR FOR HYDROGEN FUEL CELL PASSENGER VEHICLES















Max Inlet: 875 bar (12,690 psi)

Max Outlet: 20 bar (290 psi)

Cv 0.5



INTRODUCING THE AUTO875...

The AUTO875 is a high-pressure, piston-sensed pressure regulator with a solid disk design, designed specifically for Hydrogen fuel cell passenger vehicles. With a balanced main valve as standard it offers stable control of outlet pressures up to 20 bar (290 psi) from a maximum 875 bar (12,690 psi) inlet pressure.

In addition to critical safety features such as its double o-ring backup, the AUTO875 offers convenient access to the seat cartridge in the base of the regulator for simplified servicing.

SPECIFICATION

| Max. Rated Inlet Pressure | 875 bar (12,690 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) |

Note: Pressure regulator rating may be limited by connection type, Cv and/or seat material. Contact the office for specific pressure requirements

STANDARD MATERIALS OF CONSTRUCTION

| PART | MATERIALS |
|----------------|--|
| Body | ASTM A479 316/316L Stainless Steel (UNS S31600/S31603) Approx. Temperatures: -196°C to 538°C |
| Main Valve Pin | ASTM A479 316/316L Stainless Steel |
| Seat | Tecasint® (2011) Approx. Temperatures: -196°C to 250°C |
| Valve Spring | Elgiloy® (UNS R30003) Approx. Temperatures: -196°C to 450°C |
| Piston | ASTM A479 316/316L Stainless Steel |
| O-Rings | EPDM (Ethalyne) Approx. Temperatures: -40°C to 150°C |
| Loading Spring | ASTM A479 316/316L Stainless Steel |
| Filter | 30 Microns |

For the full list of material temperature ranges, please visit www.pressure-tech.com.

Note: Temperature details are provided as nominal values for guidance purposes only. No warranty is made, expressed or implied. Contact the office for specific temperature

FEATURES AND BENEFITS

1 DOUBLE O-RING

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

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





PRESSURE TECH LTD

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

- +44 (0)1457 899 307
- E sales@pressure-tech.com

W www.pressure-tech.com

PRESSURE REGULATOR FOR HYDROGEN FUEL CELL PASSENGER VEHICLES



• Gas Liquid

DiaphragmPiston

Self-Venting

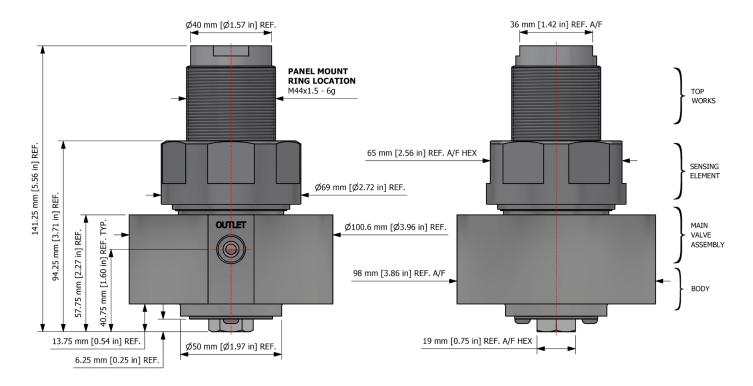
Non-Venting

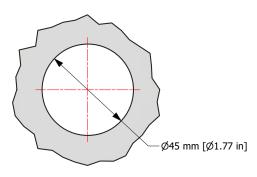
Max Inlet: 875 bar (12,690 psi)

Max Outlet: 20 bar (290 psi)

Cv 0.5

DRAWINGS AND INSTALLATION DIMENSIONS





PANEL CUTOUT

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

- +44 (0)1457 899 307
- E sales@pressure-tech.com W www.pressure-tech.com

PRESSURE REGULATOR FOR HYDROGEN FUEL CELL PASSENGER VEHICLES



• Gas Liquid

DiaphragmPiston

Self-Venting

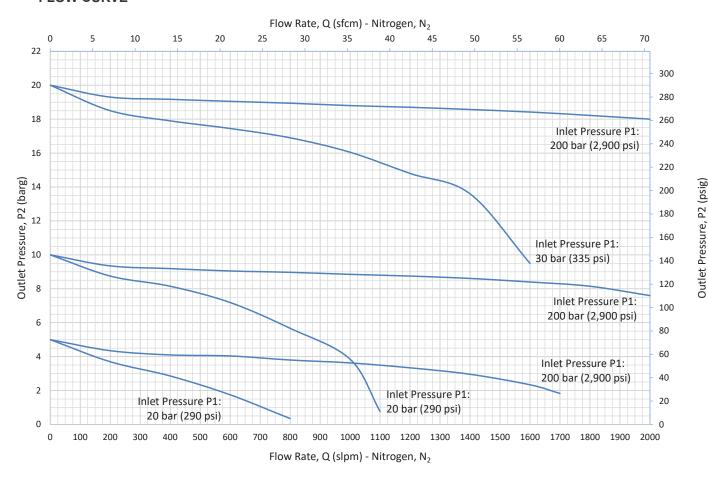
Non-Venting

Max Inlet: 875 bar (12,690 psi)

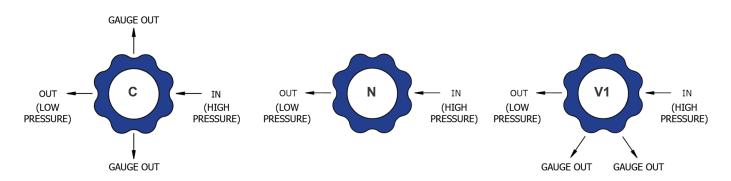
Max Outlet: 20 bar (290 psi)

Cv 0.5

FLOW CURVE



PORTING CONFIGURATIONS



oduct 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

+44 (0)1457 899 307

sales@pressure-tech.com W www.pressure-tech.com

PRESSURE REGULATOR FOR HYDROGEN FUEL CELL PASSENGER VEHICLES



• Gas Liquid

DiaphragmPiston

Self-Venting

Non-Venting

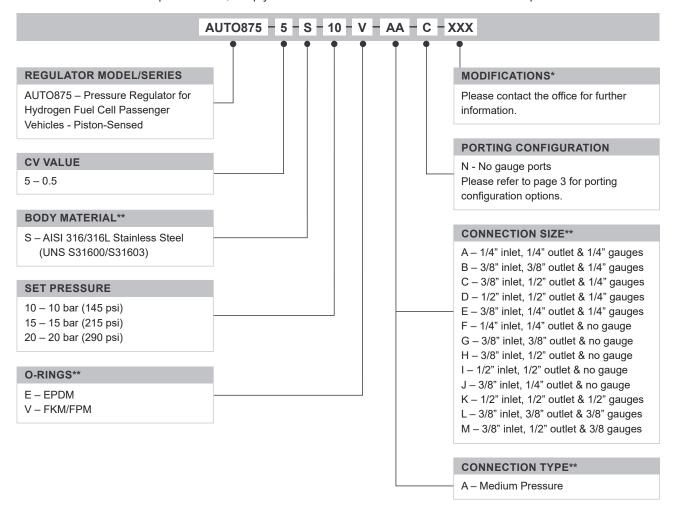
Max Inlet: 875 bar (12,690 psi)

Max Outlet: 20 bar (290 psi)

Cv 0.5

ORDERING INFORMATION

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



| | PART NUMBER | DESCRIPTION |
|------------|----------------|--------------------------------------|
| ervice Kit | SRK-MF101-05-B | Various 'Balanced' options available |

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

- +44 (0)1457 899 307
- E sales@pressure-tech.com W www.pressure-tech.com



PRESSURE REGULATOR FOR HYDROGEN FUEL CELL PASSENGER VEHICLES



• Gas Liquid

DiaphragmPiston

Self-Venting

Non-Venting

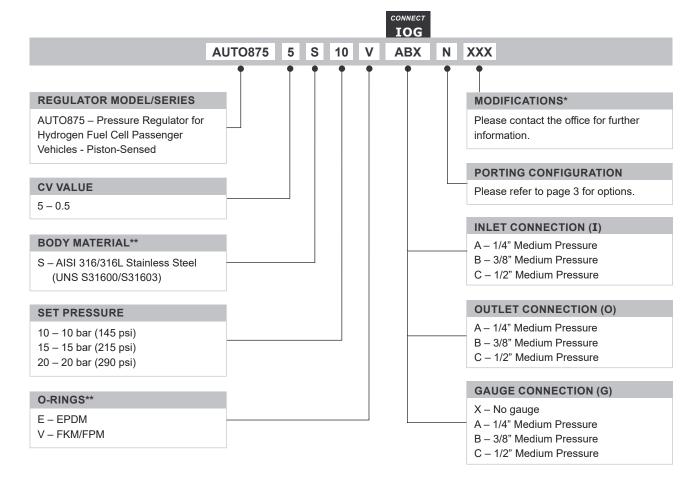
Max Inlet: 875 bar (12,690 psi)

Max Outlet: 20 bar (290 psi)

Cv 0.5

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-AUTO875-05-B | Various 'Balanced' options available |
| Note: Ancillary equipment also available | | |

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

* Where applicable

** Other options may be available - please contact the office

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

- +44 (0)1457 899 307
- E sales@pressure-tech.com W www.pressure-tech.com

