



Hydrogen Fuel Cell

Electronic Pressure Control Valve

H-PCV Series



Designed for hydrogen applications with inlet pressures up to 1.4 MPa (g) (203 psig), the H-PCV series electronic pressure control valve is an electronic pressure regulator that delivers stable outlet pressures under varying fuel cell flow demands and inlet pressures.

This H-PCV can also be integrated with a low pressure isolation valve such as the H-IVL family, a pressure relief valve (PRV), pressure sensors, filters and other desired options.

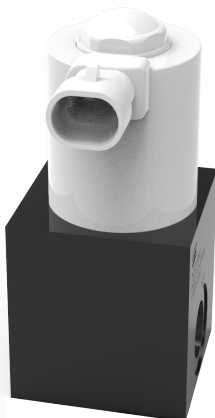


DESIGN

- Electronic pressure regulator for stable fuel cell performance
- Designed for hydrogen inlet pressures up to 1.4 MPa (203 psig)
- Available with integrated pressure sensor and filtration options
- Customizable pressure range configurations

PERFORMANCE & OPTIONS

- Optional high-flow integrated Pressure Relief Valve (PRV)
- Integrated isolation valve for added system protection (optional)
- Support for additional safety components such as filters and check valves
- Electronically actuated for precise control
- Configurable with standard fuel cell ECU interfaces



SPECIFICATIONS

GENERAL INFORMATION

APPLICATION	Hydrogen low pressure regulator
DESIGN	Electronically controlled proportional valve
BODY MATERIAL	Aluminum, anodized
FUEL TYPE	Hydrogen

PERFORMANCE

WORKING PRESSURE	Up to 1.4 MPa (g); higher pressure customizations possible
REGULATED FLOW RATE	Configurable; > 4.1 g/s hydrogen (@ 20 °C)
OPERATING TEMPERATURE	-40 °C to 85 °C
OUTLET PRESSURE	Configurable from 0.2 to 3 bar nominal; electronically controlled
OPTIONAL PRESSURE RELIEF VALVE	Multiple settings available; to be determined with customer
OPTIONAL FILTER (REPLACEABLE)	10 µm or 40 µm
OPTIONAL PRESSURE SENSOR OR PORT	Customer defined
COIL	12 V: 5.5 ohm @20 °C; 24 V: 22.5 ohm @ 20 °C; PWM controlled

CONNECTIONS

INLET THREAD TYPE	9/16" - 18 UNF; other configurations possible
OUTLET THREAD TYPE	9/16" - 18 UNF; other configurations possible

