



Electronic Pressure Control Module (Regulator & Isolation Valve)

H-PCM Series



Designed for hydrogen applications with up to 1.4 MPa(g) (203 psig) inlet pressure. The H-PCM series electronic Pressure Control Module (PCM) integrates GFI's Pressure Control Valve (PCV) and Low pressure Isolation Valve (IVL) along with a Pressure Relief Valve (PRV), filter and other customer defined features such as pressure sensor ports.



This system is an electronic pressure regulator that delivers stable outlet pressures under varying fuel cell flow demands and inlet pressures with an integrated low pressure isolation valve.

Each PCM is 100% functionally tested, Helium leak checked and serialized for complete traceability.

DESIGN

- Available in a wide range of pressure configurations

PERFORMANCE & OPTIONS

- Stable, electronically controlled outlet pressure
- Integrated low pressure isolation valve
- Integrated high-flow Pressure Relief Valve (PRV)
- Integrated filter (40 or 10 micron)
- Optional integrated pressure sensor and/or ports



SPECIFICATIONS

GENERAL INFORMATION

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

PERFORMANCE

NOMINAL WORKING PRESSURE	Up to 1.4 MPa (g); higher pressure customizations possible
REGULATED FLOW RATE	Configurable; > 4.1 g/s hydrogen
WORKING TEMPERATURE	-40 °C to 85 °C (-40 °F to 185 °F)
OUTLET PRESSURE	Configurable from 0.2 to 3 barg nominal; electronically controlled
PRESSURE RELIEF VALVE	Multiple settings available; to be determined with customer
FILTER (REPLACEABLE)	40 micron and 10 micron available
OPTIONAL PRESSURE SENSOR OR PORT	Customer defined
COIL - PROPORTIONAL VALVE	12V: 5.5 ohm @20 °C; 24V: 22.5 ohm @ 20 °C; PWM controlled
COIL - ISOLATION VALVE	12 V: 10.6 ohm @ 20 °C ± 5%; 24 V: 44 ohms @ 20 °C ± 5% AMP Super seal 1.5 series, male, 2 way

CONNECTIONS

INLET THREAD TYPE	9/16" - 18 UNF; other configurations possible
OUTLET THREAD TYPE	3/4" - 16 UNF; other configurations possible

H-PCM-017 shown; other form factors available and customizations possible

