

H-ITVR

HYDROGEN FUEL DELIVERY MODULE

Key Features

The H-ITVR simplifies fuel cell systems and reduces costs by providing a regulated low pressure output directly from the tank.

The two stage regulator architecture provides stable and precise outlet pressure and the solenoid-operated valves are engineered for reliability in a safety critical system.

- Regulated low pressure output direct from tank
- Low and high pressure solenoid-operated valves
- Includes Thermally Activated Pressure Relief Device (T-PRD)
- Includes in-tank temperature sensor for fast-fill
- Includes manual valve for service flexibility
- Multiple SAE J1926 ports available for optional pressure relief valves and sensors
- Serviceable regulator
- Serviceable high pressure filter
- 12 V or 24 V options available





SPECIFICATIONS

H-ITVR				
GENERAL INFORMATION				
FUEL TYPE	Compressed Hydrogen			
PERFORMANCE				
TANK VALVE SERVICE PRESSURE	35 MPa (5,000 psi)			
MAX TANK VALVE WORKING PRESSURE	43.8 MPa (6,250 psi)			
regulator minimum inlet pressure	1,000 kPa (145 psi)			
REGULATOR ARCHITECTURE	Dual stage: piston + diaphram			
REGULATOR OUTLET PRESSURE SETPOINT	Configurable from 40 to 1000 kPa (g)			
REGULATOR OUTLET FLOW RATE	0-0.4 g/s (Hydrogen) standard; up to 1.6 g/s available			
TEMPERATURE-PRD ACTIVATION	110 °C ± 5 °C			
TEMPERATURE-PRD ORIFICE DIAMETER	up to 5.7 mm equivalent			
SERVICE TEMPERATURE	-40 °C to 85 °C			
VIBRATION	As per HGV 3.1-2015			
ENDURANCE	Regulator: 500,000 operational cycles Tank valve: 50,000 fill cycles			
COIL MODEL	High pressure SOV Low pressure injector (F		or (PWM required)	
NOMINAL VOLTAGE	12 V	24 V	12 V	24 V
NOMINAL CURRENT DRAW	0.62 A	0.33 A	1.14 A	1.25 A
CONNECTOR	Deutsch DTM06-4S OR bare leads AMP 282189			
TEMPERATURE SENSOR	2,700 Ω ± 2% @ 25 °C NTC curve Y			
FILTER EFFICIENCY	99,9%			
MASS	1.9 kg			
APPROVALS				
CERTIFICATIONS	HPRD1, GBT 35544, EC79 Compliant, ECE R134 pending			



