

H-ITVR

35MPa HYDROGEN TANK VALVE WITH INTEGRATED REGULATOR

Key Features

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

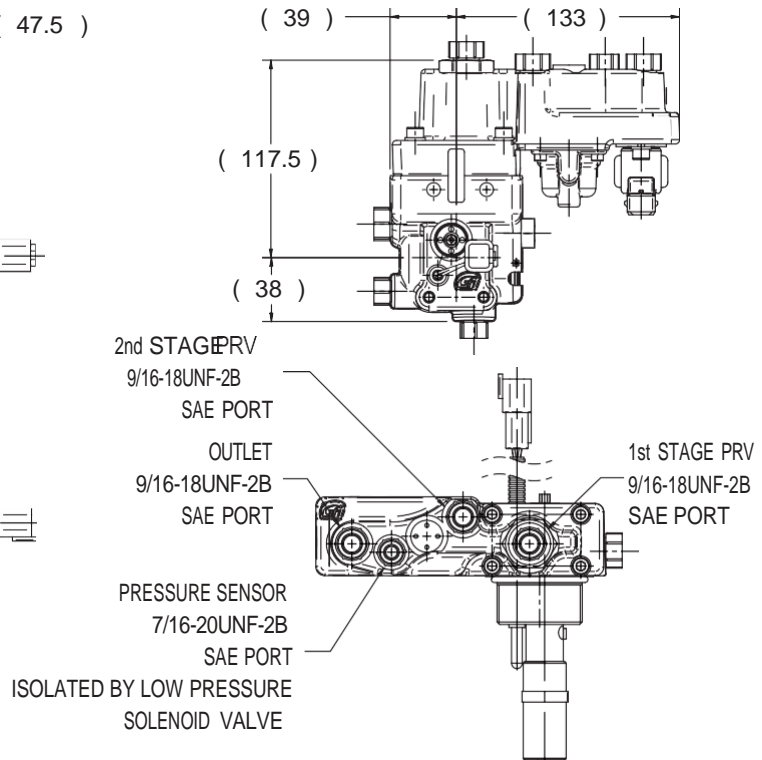
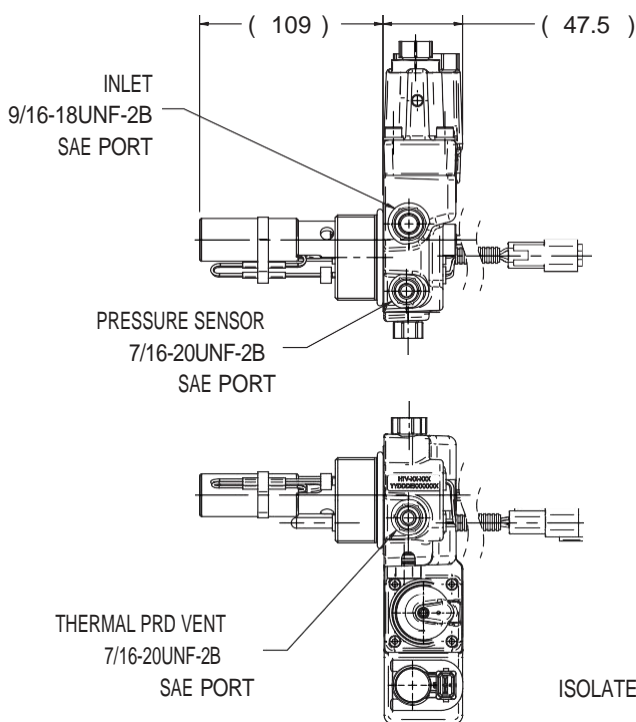
The two stage regulator architecture provides stable and precise outlet pressure and the solenoid-operated valves are engineered for reliability in a safety critical system.

- 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
- 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
- Compliant/approved to ECE R134, HPRD1, GB/T 35544, UN GTR 13, EU 535, ISO 19882



SPECIFICATIONS

H-ITVR				
GENERAL INFORMATION				
FUEL TYPE	Compressed Hydrogen			
PERFORMANCE				
TANK VALVE NOMINAL WORKING 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 + diaphragm			
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			
OPERATING TEMPERATURE	-40 °C to 85 °C			
ENDURANCE	Regulator: 500,000 operational cycles Tank valve: 50,000 fill cycles			
COIL MODEL	High pressure SOV		Low pressure injector (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	ECE R134, HPRD1, GB/T 35544, UN GTR 13, EU 535, ISO 19882			



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