



Fuel Cell Solenoid Valve

- Regulates the pressure of hydrogen gas supplied from tank to fuel cells.
- Controls the downstream pressure (supply pressure) according to the input current.



Operation conditions:

Specification	Range	Unit
Supply voltage	12	V DC
Current control system	PWM	
Consumption current	0 to 1,5	A
Upstream pressure	Max. 1,6	MPa
Downstream pressure (Controlled pressure)	0 to upstream pressure	
Maximum flow rate	1000 NL/min (hydrogen gas) * At 1 MPa upstream pressure and 50 kPa differential pressure	
Leakage rate	Less than 10	mL/H

Without any sliding component, fuel cell valves incorporating metal bellows offer low internal friction and low internal leakage. By equalizing the pressurized areas of the valve and bellows, the effects of upstream pressure fluctuations are cancelled.

The solenoid valve is optimally designed to reduce the pressure fluctuation caused by downstream gas usage. Consequently, this fuel cell valve is highly stable and responsive, due to a structure that enables the controlled downstream pressure and solenoid thrust force to be in balance.