

GV6

Pressure Control Valve

Application

The GV6 valve is an electrically controlled high-speed solenoid valve for anode pressure control in H2 fuel cell or other pressure regulation applications.

Using an appropriate control strategy, the GV6 can significantly improve the pressure load change characteristic as compared to analog pressure control devices.

Construction

Materials All parts exposed to the gas are resistant to corrosion and stress corrosion cracking. Stainless steel housing.

Mounting The GV6 can be mounted in any orientation; however a vertical (outlet down) is preferred. Orientation and position of GV6 should be designed to minimize the risk of condensates flowing back into the valve.

A special mounting system has been integrated into the GV6 housing allowing the GV6 valve to isolate the valve vibration, which reduces noise.

Gas Inlet Hole Diameter 6 holes, each 3mm (0,12in)

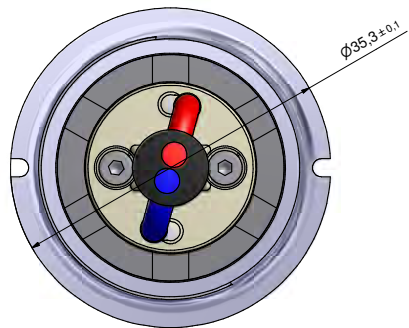
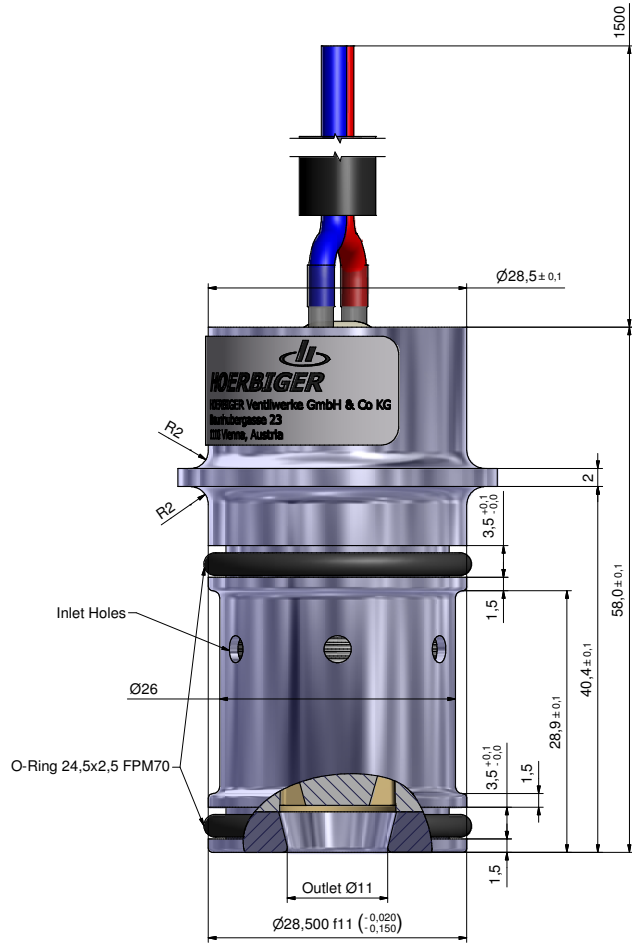
Gas Outlet Hole Diameter 11mm (0,43in)

Specifications

Equivalent Flow Area	6mm ²
Steady State Flow-Rate	3.7g/s H2 @ P1=9barg,
(Contact Hoerbiger for specific application)	P2=ATM
	10.3g/s NG @ P1=9barg
Internal Leakage.....	<0.2% of steady state flow-rate
Nominal Differential Pressure	9barg (130psig)
Maximum Differential Pressure	12barg (170psig)
Maximum Backfire Pressure Spike	2barg (29psig)
(without backflowing through valve)	
Maximum Housing Pressure	20barg (290psig)
(non operating)	
Opening Time of Valve	1ms*
Response Time.....	1ms*
Voltage Supply	12V–24V
Peak Current	9amps
Hold Current	2amps
*(assumes the use of a HOERBIGER SDM (Solenoid Driver Module) or Provebo software)	
(Boost Voltage 90–110V; Peak time 0,7ms)	
Max. particle size within fuel gas.....	<5µm
Max. particle concentration:	1ppm
Ambient Temperature:	-20–95°C (-4–203°F)
Fuel Gas Temperature:	-20–85°C (-4–185°F)



Dimensions



altronic

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