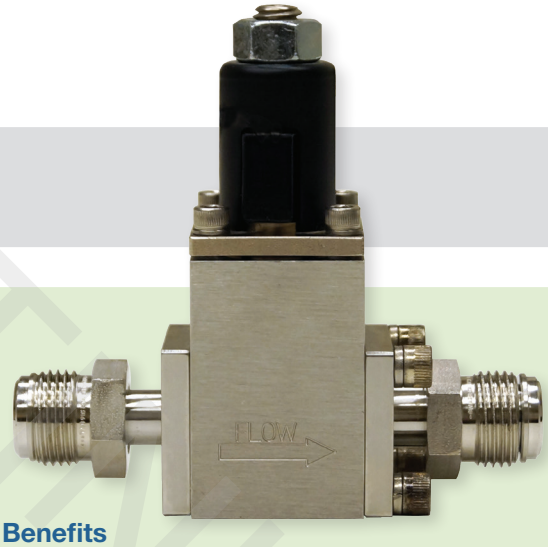
154B
Solenoid Control Valve

The 154B control valve is a modified solenoid valve that when supplied with a controlling current will modulate the flow of gas. When used with an MKS controller and appropriate flow sensor, the 154B valve modulates gas flow while maintaining accurate and precise pressure or flow.

The valve seat connected to the armature is lifted away from the adjustable orifice as increasing current is applied to the solenoid. Two spiral springs center the armature within the valve body and oppose the magnetic lifting force. These springs minimize friction and hysteresis, major causes of poor control performance. With a 1249 control valve driver to provide the necessary drive signal to operate the solenoid valve, the 154B valve can be used for either pressure or flow control.

The orifice of the 154B valve is easily adjusted or replaced without special tools. Adjustment may be required to eliminate leakage across the valve resulting from normal operational wear. Replacement is required when wear is excessive or to change the flow range of the valve.

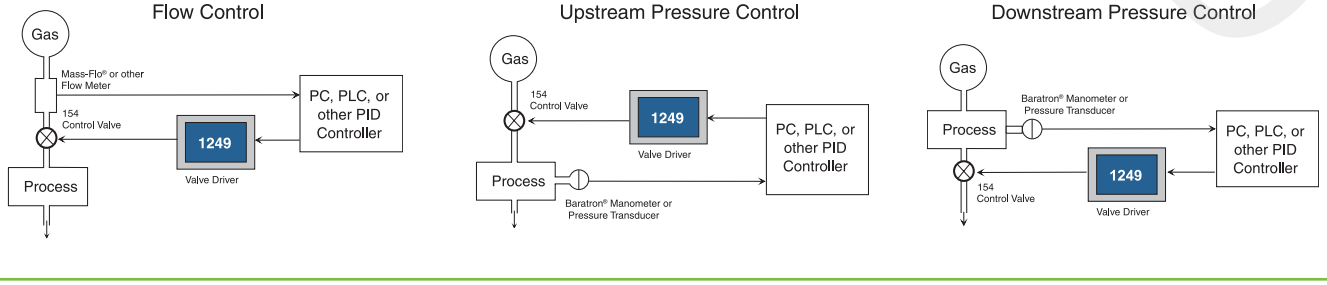


Product Features

- High flow up to 200 slm
- Balanced bellows design to minimize closed conductance leak
- Variety of fittings and elastomer seals

Key Benefits

- Offers better response time as compared to other high flow control valves
- Modulates gas flow while maintaining precise pressure or flow



Applications for 154B Solenoid Control Valve

DISCONTINUED

Specifications

Full Scale Flow Ranges		50 - 200 slm
Minimum Controllable Flow		0.1% of Full Scale (>100 sccm)
Leak Integrity	**External (scc/sec/Helium)** **Through closed Valve**	• <1 x 10^{-9} • <1% of Full Scale (Orifice size) @ 15 psig inlet to atmosphere N_2
Wetted Materials	**Standard** **Optional**	316 S.S., nickel, Viton, Elgiloy® Neoprene®, Buna-N, Kalrez®
Fitting	**Standard** **Optional**	½'' Swagelok® 8 VCR® or 8 VCO® male
Operating Temperature Range		-10°C to +60°C
Compliance[1]		CE

[1]*For CE compliance an overall metal braided shielded cable, properly grounded at both ends, must be used.*

Ordering Information

Ordering Code Example: 0154B-200LSV	Code	Configuration
154B Control Valve	0154B	0154B
Full Scale Range		
50,000 slm 200 slm	050L 200L	200L
Fitting		
1/2'' Swagelok Swagelok 8 VCR Swagelok 8 VCO	S (standard) R (optional) G (optional)	S
Seal Material		
Viton Neoprene Buna-N Kalrez	V (standard) N (optional) B (optional) K (optional)	V

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154B_08/21
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