

**VALVES**

**Excess Flow**

## Excess Flow Shut-Off Valve



Tag Out

**Description:** The Airgas® Excess Flow Shut-Off Valve is a non-attitude sensitive, excess flow shut-off valve designed to operate with a wide range of inlet pressures.

The capability of operating from 10 to 3,500 psig allows it to be used either between a high-pressure source at the inlet to the pressure regulator, or in the low-pressure delivery line to a process. In both applications, this control valve will automatically shut off the delivery of gas if it exceeds a preset limit.

The functional components of the Airgas Excess Flow Shut-Off Valve are incorporated within the body style of a 1¼ inch Quantum valve. An actuating knob has been designed to manually operate the valve and clearly indicate the relative operating position - either “Open (Reset)” or “Auto (Shut Off).” A pneumatic actuator may be substituted for the knob, which makes it possible to reset the valve by sending a pressure signal from a remote source.

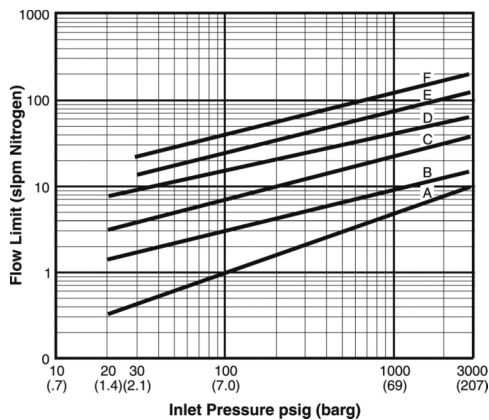
The Airgas Excess Flow Shut-Off Valve is offered with six different pressure/low limits: A, B, C, D, E, and F (see flow curve)\*. The nominal differential pressure created at the flow limit is 5 psig for limit valves A, B, C, and D. For limit values E and F, the differential pressure is 12 psig. The differential pressure that is created is not affected by mounting orientation (nonattitude sensitive).

This valve can also be supplied with an unique lock out tag out device that requires the operator to repair the pipe line before the valve can be put back into operational mode.

**Design Features**

**Control Valve Automatically Shuts Off**  
the gas delivery if the gas flow exceeds a preset limit.

**Differential Pressure not Affected**  
by mounting orientation (non-attitude sensitive).



Specifications	
Maximum Rate Inlet Pressure	3,500 psig (241 bar)
Flow Shut-Off @ 1000 psi Inlet	5, 9, 22, 40, 72, 121 slpm
Ambient Operating Temperature	-10° F to 150° F (-23° C to 66° C)
Designed Leak Rate	2 x 10 <sup>-9</sup> ccs (helium)
Weight	12.5 oz. (.32 kg)
Inlet	¼" FNPT
Outlet	¼" FNPT
Differential Pressure Effect	5 psig (3 bar) @ 30 psig; 12 psig (8 bar) @ 1,000 psig
Orifice	Hastelloy C-22®

Materials	
Body	Stainless Steel
Bonnet	Stainless Steel
Seat	PCTFE
Diaphragm	Elgiloy®
Valve Stem	Stainless Steel (lubricated)
Valve Spring	Hastelloy C-22®

**Ordering Information**

Product Number		Chart Code	Material	1,000 psig Inlet Press.	30 psig Inlet Press.
Without Lock out	With Lock out				
Y99-4EFV005	Y99-4EF005LO	A	Stainless Steel	4.8 SLPM	0.4 SLPM
Y99-4EFV009	Y99-4EF009LO	B	Stainless Steel	9.1 SLPM	1.7 SLPM
Y99-4EFV022	Y99-4EF022LO	C	Stainless Steel	21.8 SLPM	3.9 SLPM
Y99-4EFV040	Y99-4EF040LO	D	Stainless Steel	39.5 SLPM	9.0 SLPM
Y99-4EFV072	Y99-4EF072LO	E	Stainless Steel	72.3 SLPM	14.4 SLPM
Y99-4EFV121	Y99-4EF121LO	F	Stainless Steel	120.6 SLPM	22.5 SLPM