

High Purity Excess Flow Shut-Off Valve (EFV)

SPECIFICATION

Key Features

Stainless steel construction

Provides maximum corrosion resistance.

Elgiloy diaphragm

Minimizes diffusion of air into valve and maintains gas purity.

Actuating knob

Designed to manually operate valve and clearly indicate relative operating position.
 Open (Reset) or Auto (Shut Off).

High pressure design

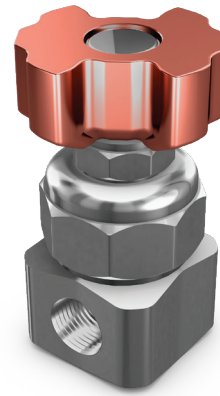
Allows for use between a gas cylinder and the inlet to a pressure regulator.

Threaded holes on bottom of valve

Permit front panel mounting.

Non altitude sensitive

Differential pressure that is created is not affected by mounting orientation.



How it Works

Purpose - The excess flow shut-off valves are designed to automatically shut-off delivery of gas in a line if the flow exceeds a preset limit.

Application - They are commonly used as a safety device to protect a system from excess flow in the event of equipment failure or to protect personnel and property in the event of a line rupture.

Valve position - The valve has two positions. In the Open (Reset) position, the valve provides direct passage from the inlet to the outlet. In the Auto Shut-Off position, the valve is set to sense the flow and automatically shuts off the passage, if the flow exceeds a preset value (see sizing chart). The valve will stay shut-off until it has been reset.

Ordering Information



| A | |
|----------------------------|----------|
| GAS | INSCRIBE |
| Air - compressed | CGA 346 |
| Argon | CGA 580 |
| Argon mix | CGA 580 |
| Carbon dioxide* | CGA 320 |
| Helium | CGA 580 |
| Hydrogen | CGA 350 |
| Argon/methane | CGA 320 |
| Nitrogen | CGA 580 |
| Air - industrial | CGA 590 |
| Nitrous oxide* | CGA 326 |
| Oxygen | GGA 540 |
| Other Gas: Provide CGA no. | |

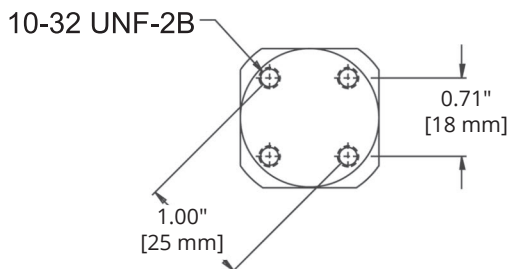
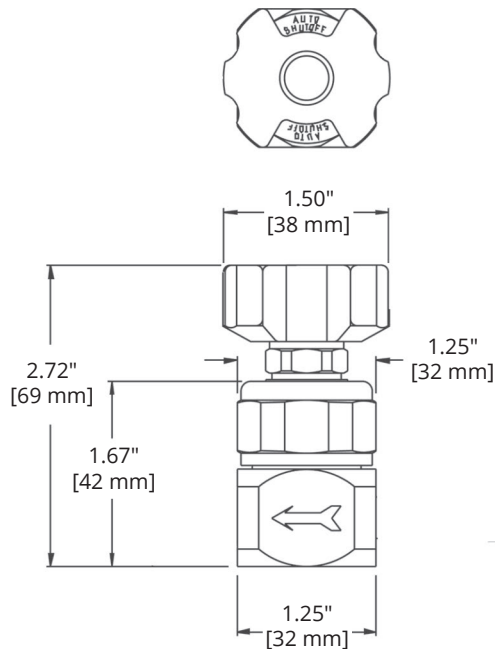
| B | |
|----------------------|----------|
| MATERIAL | INSCRIBE |
| 316L Stainless Steel | SS |

| D | |
|-----------------------|----------|
| INLET/OUTLET ASSEMBLY | INSCRIBE |
| 1/4" F.NPT | 4FS |

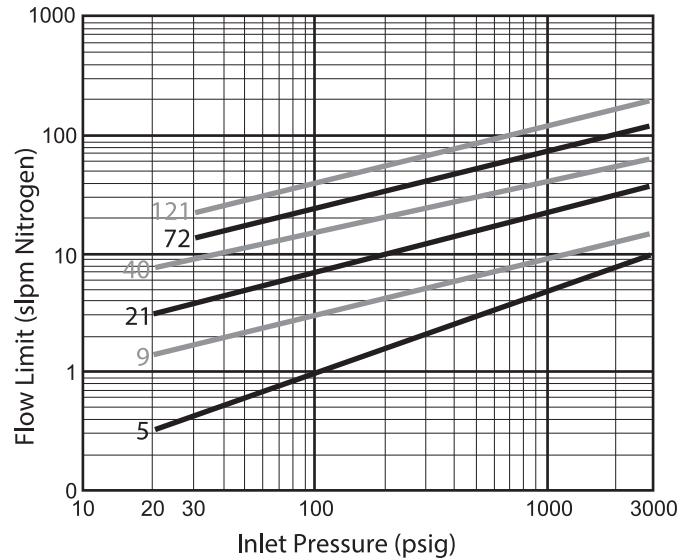
| C | |
|---|----------|
| FLOW LIMIT SETTING AT 30 PSI INLET (1000 PSI INLET) | INSCRIBE |
| 0.3 SLPM (5 SLPM) | 5 |
| 2 SLPM (9 SLPM) | 9 |
| 4 SLPM (21 SLPM) | 21 |
| 9 (40 SLPM) | 40 |
| 15 SLPM (72 SLPM) | 72 |
| 22 SLPM (121 SLPM) | 121 |

Dimensions

Approximate dimensions



Sizing Chart



Specifications

| | |
|------------------------------|-----------------------------------|
| Working Pressure Range | 10 to 3500 PSIG [0.7 to 241 barg] |
| Working Pressure Range (121) | 20 to 3500 PSIG [1.4 to 241 barg] |
| Differential Pressure | 5 to 12 PSIG [0.3 to 0.8 barg] |
| Flow Limit Settings | See Chart |
| Temperature | -10° F to 150° F [-23°C to 66°C] |
| Outboard Leak Rate | 2 X 10 ⁻⁹ scc/sec He |
| Approximate Weight | 12.5 oz. [354 g] |
| Cleaning | Oxygen Clean |

Materials

| Wetted | | Nonwetted | |
|--------------------|----------------------|-----------|----------------------------------|
| Body | 316L Stainless Steel | Knob | Anodized Aluminum (red) |
| Compression Member | 316L Stainless Steel | Stem | 416 Stainless Steel (lubricated) |
| Seat | PCTFE | Cap | 316 Stainless Steel |
| Diaphragm | Elgiloy | | |
| Spring | Hastelloy C - 22 | | |
| Poppet | 316 Stainless Steel | | |
| Orifice | 316 Stainless Steel | | |