

## Model: V100EFF

The fail freeze unit offers system security with its "fail in place" capabilities in addition to its conventional I/P operation.

On the loss of input signal ( 4-20 mA ) the V100EFF will literally hold the valve/actuator package in place no matter what the actuator fail mode.

The unit is loop powered and does not require an extra power supply.

Fail Freeze mode will operate when the input signal drops below 2mA (+/- 0.5 mA )

Maximum modularity equals maximum flexibility and with a simple design and quality components, the performance is a maximum as well.

### Input Signal

4-20 mA ( Ri<250 ohms )

### Supply Pressure

0.15 - 0.7MPa (20 - 100 PSI)

### Linearity Error

<1.0% FS

### Hysteresis

<0.6% FS

### Repeatability

<0.5% FS

### Pressure Gain

@ 600KPa (87PSI) according to ISA S75.13

750 Pout/Pin 49% Pout/Pin

### Air Capacity

|                  |         |          |
|------------------|---------|----------|
| @ 200KPa (29PSI) | 270SLM  | 9.5SCFM  |
| @ 600KPa (87PSI) | 800SLM  | 28.3SCFM |
| @ 1MPa (145PSI)  | 1350SLM | 47.1SCFM |

### Bleed Rate

|                  |         |         |
|------------------|---------|---------|
| @ 200KPa (29PSI) | 5.7SLM  | 0.2SCFM |
| @ 600KPa (87PSI) | 17SLM   | 0.6SCFM |
| @ 1MPa (145PSI)  | 28.3SLM | 1.0SCFM |

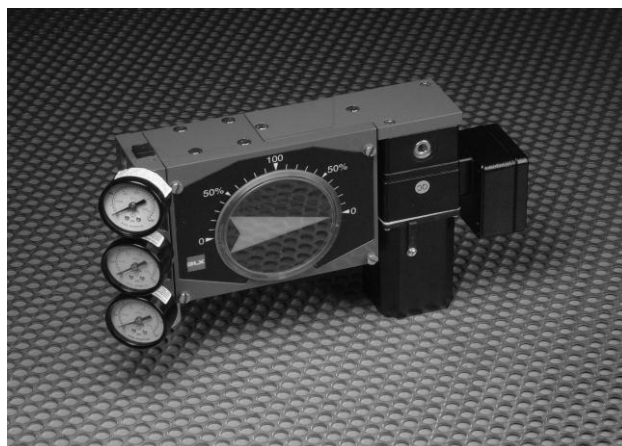
### Temperature Range

-20 to +70 Celsius (-4 to +158 Fahrenheit)

### Benefits

Simple calibration. With the non-interactive zero and span adjustment and the external zero adjustment, calibration is simple and time saving.  
Flexibility. One housing for pneumatic or electro-pneumatic. The I/P can be installed or removed at any time. Multiple mounting capability. Standard indicator allows for air to open or air to close operation. Flat or raised indicator available. F05 standard housing with changeable drives.

## FAIL FREEZE VALVE POSITIONER



### Thread sizes

|                  |                             |
|------------------|-----------------------------|
| Air connections  | 1/4" G                      |
|                  | Optional 1/4" NPT           |
| Electrical entry | M20                         |
|                  | Optional 1/2" NPT or PG13.5 |
|                  | Optional DIN 43650          |
| Gauge ports      | 1/8" G                      |
|                  | Optional 1/8" NPT           |

### Ingress Protection

IP66 (NEMA 4X)

### Surface Finish

Powder Polyester

### Weight

2.65Kg (5.8lbs)

### Options

Various Spindles for different actuators  
Various cams  
Gauges  
Feedback modules  
Indicators

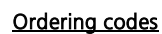
### Pilot Valves

W1 Low Gain Pilot Valve, pressure gain 300 @ 600KPa  
Bleeds 33% less, air delivery 10% less than W3  
W2 High Gain Pilot Valve, pressure gain >1000 @ 600KPa  
Bleeds 33% more, air delivery equal to W3  
W3 Standard Pilot Valve, Air capacity and Bleed as left  
W1 for better stability, W2 for better response & accuracy

### Benefits

Maintenance friendly. The pilot valve assembly can be cleaned by removing one screw and can only be installed one way - the correct way. The gauge block is standard. I/P test point positioner loop testing.  
Durable. Cast aluminium, polyester coated housing. Stainless steel retained fasteners. Double locked stainless steel cam. Quality internal parts. Unique electrical compartment fitted with an o-ring is pressure sealed by the cover.

**Model : V100EFF**



| Positioner         |   | Threads            |   | Drive     |   | Front Cover |   | Indicator          |   | Cam |
|--------------------|---|--------------------|---|-----------|---|-------------|---|--------------------|---|-----|
| V100EFF            | - |                    | - |           | - |             | - |                    | - |     |
| 1/4G / M20         |   | GM                 |   |           |   |             |   |                    |   |     |
| NPT / NPT          |   | NN                 |   |           |   |             |   |                    |   |     |
| (others available) |   |                    |   |           |   |             |   |                    |   |     |
|                    |   | Rotary Namur       |   | D1        |   |             |   |                    |   |     |
|                    |   | Long Linear        |   | D2        |   |             |   |                    |   |     |
|                    |   | Short Linear       |   | D8        |   |             |   |                    |   |     |
|                    |   | (others available) |   |           |   |             |   |                    |   |     |
|                    |   |                    |   | 90 degree |   | 90          |   |                    |   |     |
|                    |   |                    |   | 60 degree |   | 60          |   |                    |   |     |
|                    |   |                    |   | 45 degree |   | 45          |   |                    |   |     |
|                    |   |                    |   | 30 degree |   | 30          |   |                    |   |     |
|                    |   |                    |   | blank     |   | 0           |   |                    |   |     |
|                    |   |                    |   |           |   | Flat Arrow  |   | A                  |   |     |
|                    |   |                    |   |           |   | Raised      |   | B                  |   |     |
|                    |   |                    |   |           |   |             |   | Linear 90/180 deg  |   | C1  |
|                    |   |                    |   |           |   |             |   | Linear 30/60 deg   |   | C3  |
|                    |   |                    |   |           |   |             |   | (others available) |   |     |