

# Pressure Control Panels

## FSR-1 Series Pressure Control Panels for Single Cylinder

### Features

- ⦿ With a FCR-1 Series Regulator
- ⦿ Maximum inlet pressure up to 4500 psig
- ⦿ With vent valves to relieve residual pressure quickly, easy and safe to remove and replace gas source
- ⦿ Anodized Aluminium panel
- ⦿ Bracket mounting as standard

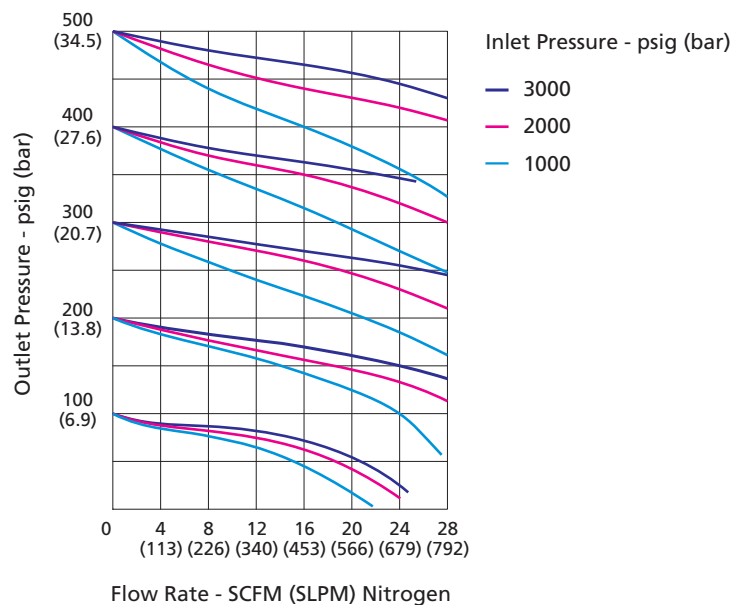


Model: FSR-16L-45-100-00-B-B-00-R-P

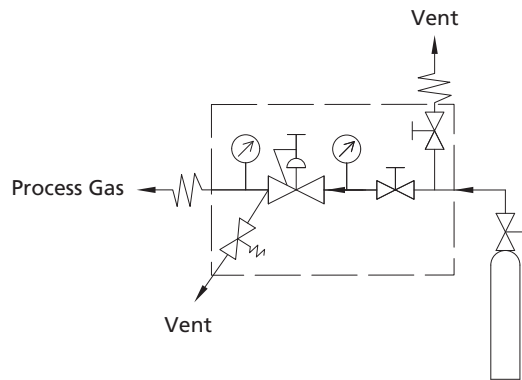
### Technical Data

- ⦿ Maximum inlet pressure: 3000 or 4500 psig
- ⦿ Outlet pressure range: 0~25, 0~50, 0~100, 0~250 or 0~500 psig
- ⦿ Material of the main components:
  - Seat: PCTFE (regulator and diaphragm valve)
  - Diaphragm: Hastelloy (regulator), Elgiloy (diaphragm valve)
  - Diaphragm valve body: 316L
  - Filter: 316L
- ⦿ Temperature: -10°F~+150°F (-23°C~+65°C)
- ⦿ Leak rates:
  - Internal:  $\leq 1 \times 10^{-7}$  mbar·l/s helium
  - External:  $\leq 1 \times 10^{-9}$  mbar·l/s helium
- ⦿ Flow coefficient (regulator Cv): 0.06

### Typical Flow Chart

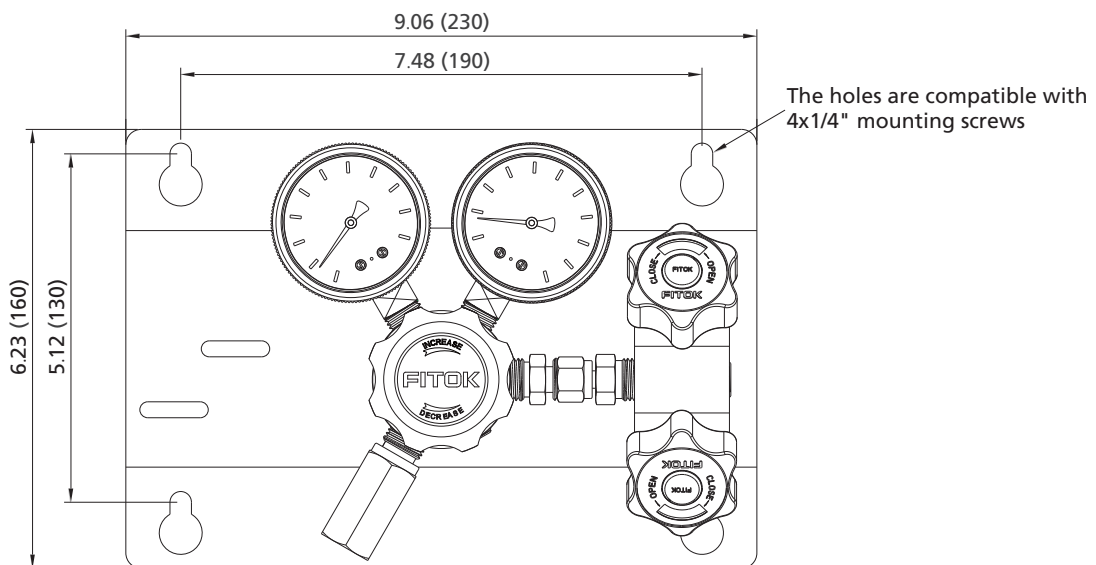
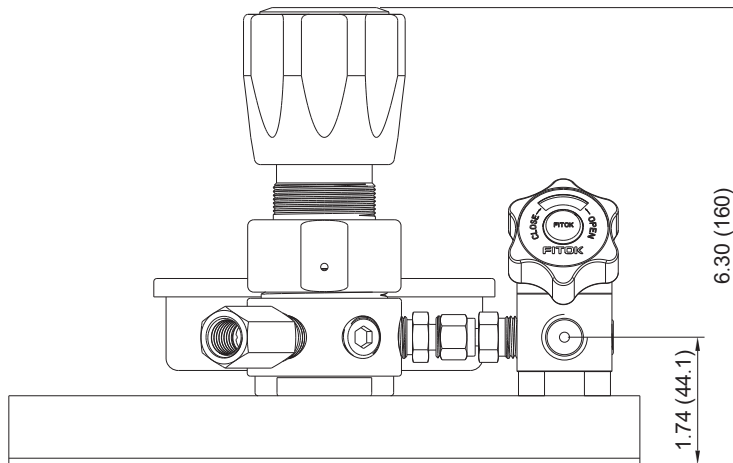


## Flow Schematic

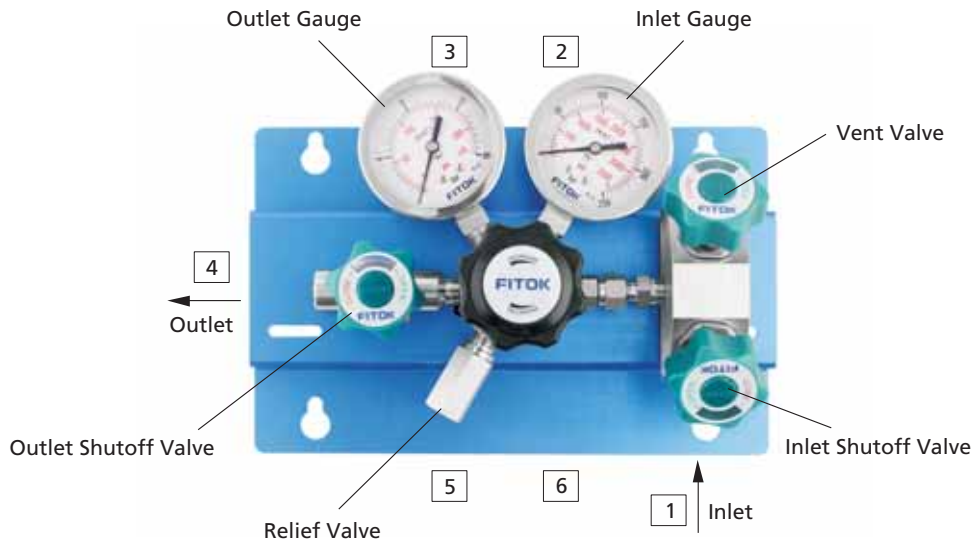


## Dimensions

Dimensions, in inches (millimeters), are for reference only.



## Components Introduction



## Part Number Description

FSR – 16L – 30 – 50 – 00 – B – B – 30 – R – P

| Body Material (Regulator) | Connection 1         | Connection 2           | Connection 4                                 | Connection 5         |
|---------------------------|----------------------|------------------------|----------------------------------------------|----------------------|
| 6L 316L SS                | 00 1/4" Female NPT   | B With Gauge (psi/bar) | 00 1/4" Female NPT                           | R Relief Valve       |
| SS 316 SS                 | 01 1/4" Male NPT     | M With Gauge (MPa)     | 01 1/4" Male NPT                             | P Plug               |
| HC Hastelloy C-276        | 10 1/4" Tube Fitting | P Plug                 | 10 1/4" Tube Fitting                         | 00 1/4" Female NPT   |
| B Brass (Nickel-plated)   | 11 3/8" Tube Fitting | 00 1/4" Female NPT     | 11 3/8" Tube Fitting                         |                      |
|                           | 20 6 mm Tube Fitting |                        | 20 6 mm Tube Fitting                         |                      |
|                           | 21 8 mm Tube Fitting |                        | 21 8 mm Tube Fitting                         |                      |
|                           |                      | <b>Connection 3</b>    | 30 Diaphragm Valve with 1/4" Female NPT      | <b>Connection 6</b>  |
|                           |                      | Same as Connection 2   | 31 Diaphragm Valve with 1/4" Male NPT        | Same as Connection 5 |
|                           |                      |                        | 32 Diaphragm Valve with 1/4" Tube Fitting    |                      |
|                           |                      |                        | 33 Diaphragm Valve with 3/8" Tube Fitting    |                      |
|                           |                      |                        | 34 Diaphragm Valve with 6 mm Tube Fitting    |                      |
|                           |                      |                        | 35 Diaphragm Valve with 8 mm Tube Fitting    |                      |
|                           |                      |                        | Other connections are available upon request |                      |

| Inlet Pressure P1 | Outlet Pressure Range P2 |
|-------------------|--------------------------|
| 30 3000 psig      | 25 0~25 psig             |
| 45 4500 psig      | 50 0~50 psig             |
|                   | 100 0~100 psig           |
|                   | 250 0~250 psig           |
|                   | 500 0~500 psig           |

Note: Most configurations are available.

# Pressure Control Panels

## FSR-2 Series High Pressure Control Panels for Single Cylinder

### Features

- ⦿ With a FCR-2 Series Regulator
- ⦿ Applicable to non-corrosive gases or low-viscosity liquids
- ⦿ With vent valves to relieve residual pressure quickly, easy and safe to remove and replace gas source
- ⦿ Venting model available
- ⦿ Anodized Aluminium panel
- ⦿ Bracket mounting as standard

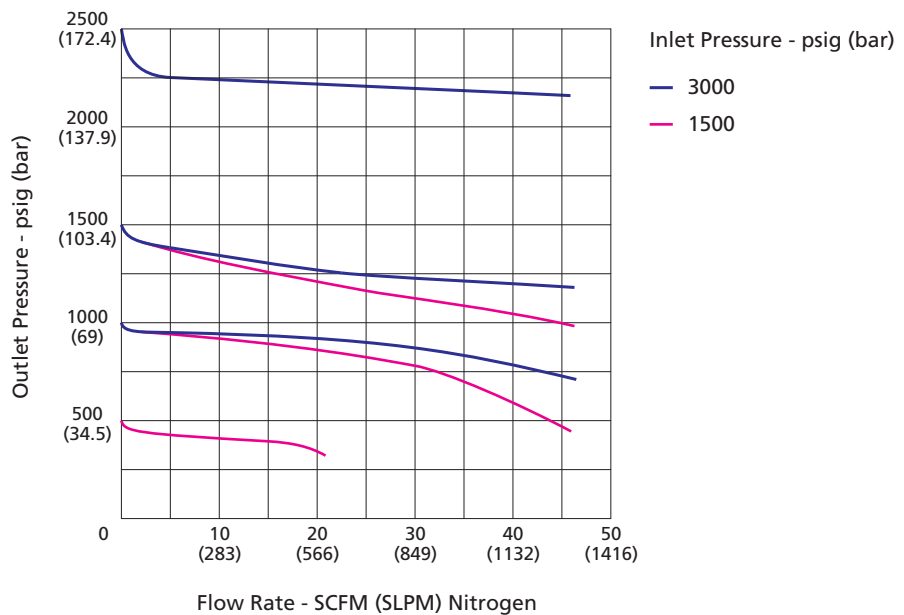


Model: FSR-2Z6L-45-750-00-B-B-00-P-P

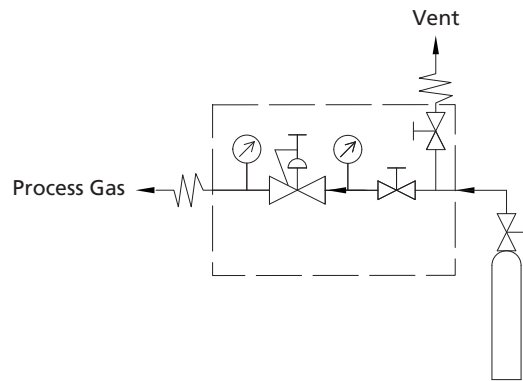
### Technical Data

- ⦿ Maximum inlet pressure: 3000 or 4500 psig
- ⦿ Outlet pressure range: 0~750, 0~1500 or 0~2500 psig
- ⦿ Material of the main components:
  - Seat: PCTFE (regulator and diaphragm valve)
  - Piston: 316L
  - Diaphragm: Elgiloy (diaphragm valve)
  - Diaphragm valve body: 316L
  - O-ring: Viton or Kalrez
  - Filter: 316L
- ⦿ Temperature: -10°F~+150°F (-23°C~+65°C)
- ⦿ Leak rates:
  - Internal: Bubble-tight
  - External: Bubble-tight
- ⦿ Flow coefficient (regulator Cv):
  - Without vent: 0.06
  - With vent: 0.1

### Typical Flow Chart

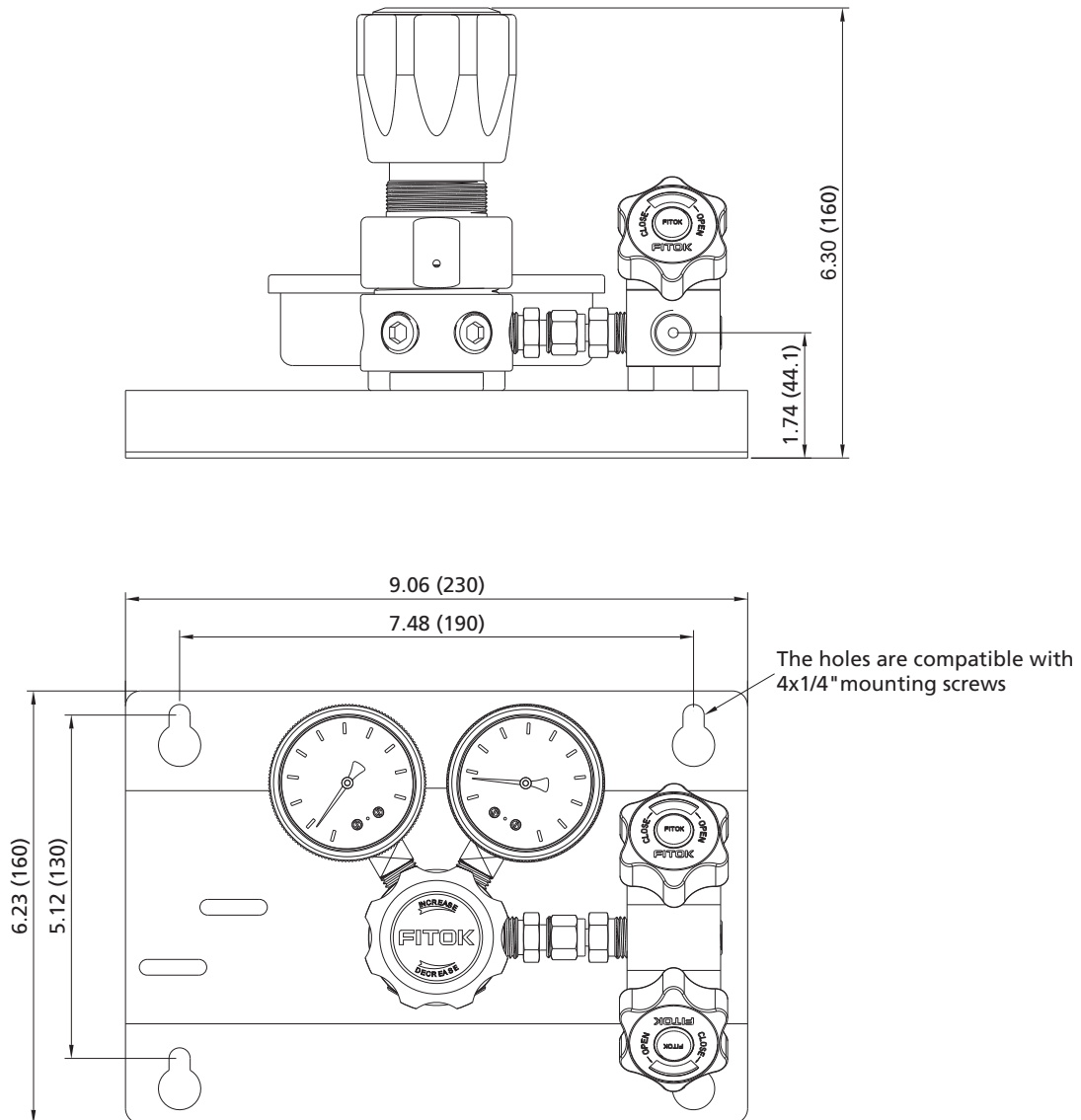


## Flow Schematic

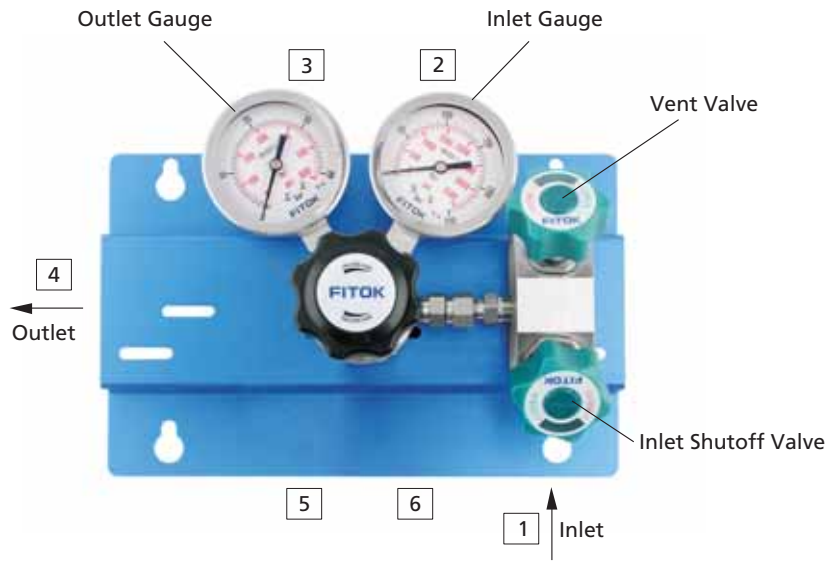


## Dimensions

Dimensions, in inches (millimeters), are for reference only.



# Components Introduction



## Part Number Description

**FSR - 2V Z 6L - 30 - 1500 - 00 - B - B - 30 - P - P**

| Vent Option | Inlet Pressure P1 | Connection 1                                 | Connection 2           | Connection 4                                 | Connection 5       |
|-------------|-------------------|----------------------------------------------|------------------------|----------------------------------------------|--------------------|
| Without     | 30 3000 psig      | 00 1/4" Female NPT                           | B With Gauge (psi/bar) | 00 1/4" Female NPT                           | R Relief Valve     |
| V With      | 45 4500 psig      | 01 1/4" Male NPT                             | M With Gauge (MPa)     | 01 1/4" Male NPT                             | P Plug             |
|             |                   | 10 1/4" Tube Fitting                         | P Plug                 | 10 1/4" Tube Fitting                         | 00 1/4" Female NPT |
|             |                   | 11 3/8" Tube Fitting                         | 00 1/4" Female NPT     | 11 3/8" Tube Fitting                         |                    |
|             |                   | 20 6 mm Tube Fitting                         |                        | 20 6 mm Tube Fitting                         |                    |
|             |                   | 21 8 mm Tube Fitting                         |                        | 21 8 mm Tube Fitting                         |                    |
|             |                   | Other connections are available upon request |                        | 30 Diaphragm Valve with 1/4" Female NPT      |                    |
|             |                   |                                              |                        | 31 Diaphragm Valve with 1/4" Male NPT        |                    |
|             |                   |                                              |                        | 32 Diaphragm Valve with 1/4" Tube Fitting    |                    |
|             |                   |                                              |                        | 33 Diaphragm Valve with 3/8" Tube Fitting    |                    |
|             |                   |                                              |                        | 34 Diaphragm Valve with 6 mm Tube Fitting    |                    |
|             |                   |                                              |                        | 35 Diaphragm Valve with 8 mm Tube Fitting    |                    |
|             |                   |                                              |                        | Other connections are available upon request |                    |

| O-ring Material | Outlet Pressure Range P2 | Connection 3         | Connection 6         |
|-----------------|--------------------------|----------------------|----------------------|
| Viton           | 750 0~750 psig           | Same as Connection 2 | Same as Connection 5 |
| Z Kalrez        | 1500 0~1500 psig         |                      |                      |
|                 | 2500 0~2500 psig         |                      |                      |

| Body Material (Regulator) |
|---------------------------|
| 6L 316L SS                |
| SS 316 SS                 |
| B Brass (Nickel-plated)   |

Note: Most configurations are available.