

Changeover Systems

FDR-1 Series Manual Changeover System (up to 500 psig)

Features

- ⦿ A small manual changeover system with a regulator similar to FCR-1 Series Regulators
- ⦿ Connecting with two independent gas sources at a time, gas source selected through diaphragm valves
- ⦿ Applicable to corrosive or toxic gases
- ⦿ With vent valves to relieve residual pressure quickly, easy and safe to remove and replace gas source
- ⦿ Anodized Aluminium panel

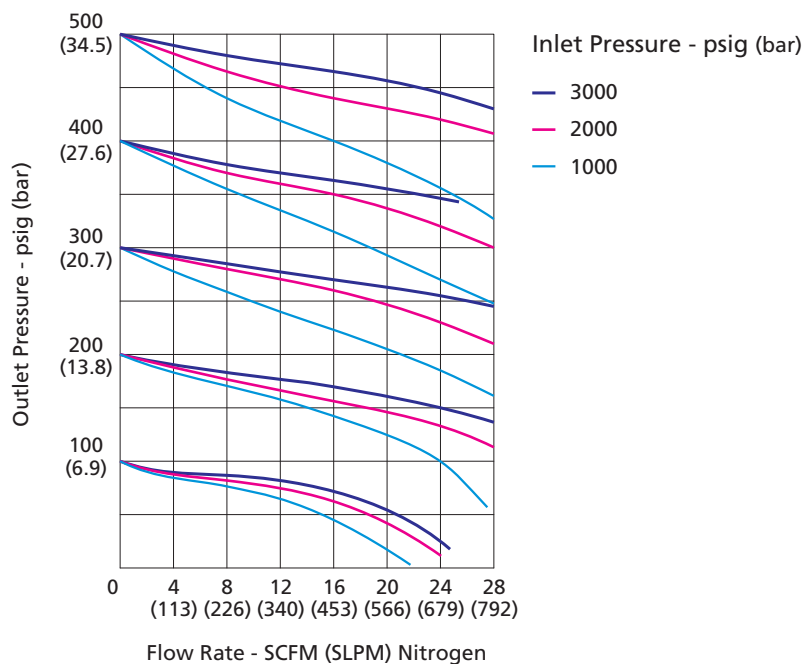


Model: FDR-16L-30-500-00-B-B-01-00-R

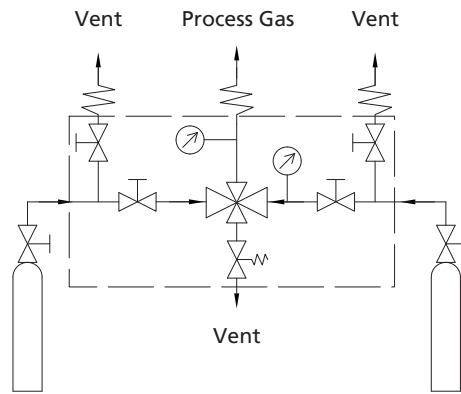
Technical Data

- ⦿ 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
 - O-ring: Viton
- ⦿ 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

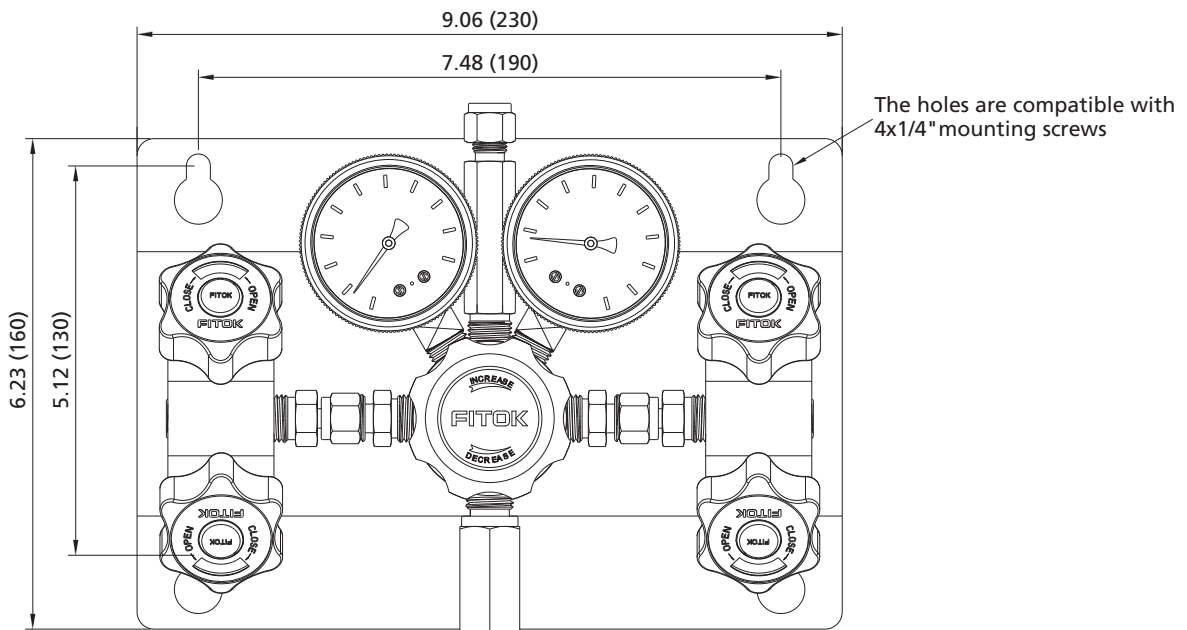
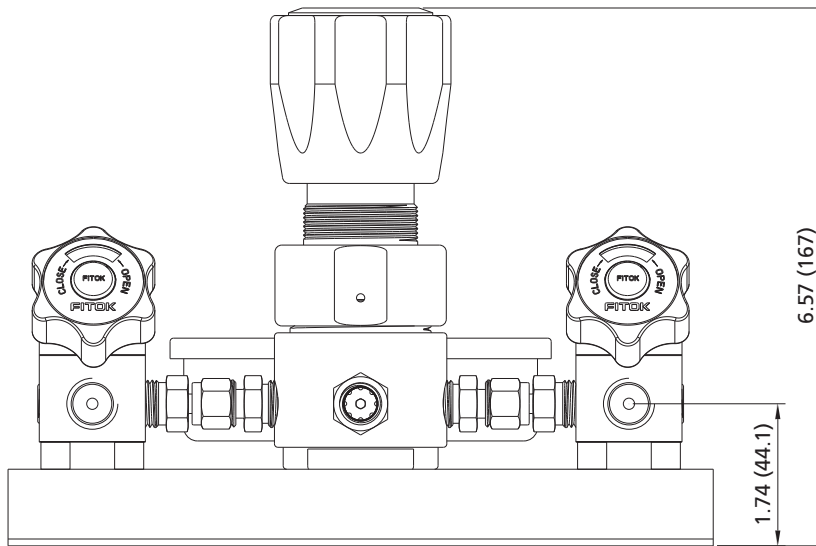


Flow Schematic

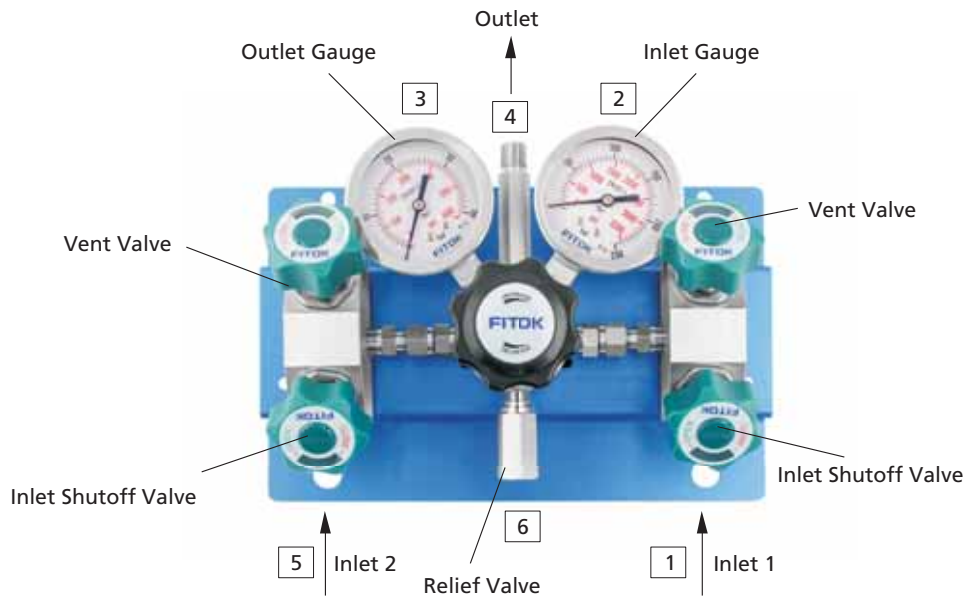


Dimensions

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



Components Introduction



Part Number Description

FDR - 16L - 30 - 250 - 00 - B - B - 01 - 00 - R

Body Material (Regulator)	
6L	316L SS
SS	316 SS
HC	Hastelloy C-276
B	Brass (Nickel-plated)

Inlet Pressure P1	
30	3000 psig
45	4500 psig

Outlet Pressure Range P2	
25	0~25 psig
50	0~50 psig
100	0~100 psig
250	0~250 psig
500	0~500 psig

Connection 1	
00	1/4" Female NPT
01	1/4" Male NPT
10	1/4" Tube Fitting
11	3/8" Tube Fitting
20	6 mm Tube Fitting
21	8 mm Tube Fitting
Other connections are available upon request	

Connection 2	
B	With Gauge (psi/bar)
M	With Gauge (MPa)
P	Plug
00	1/4" Female NPT

Connection 3	
Same as Connection 2	

Connection 4	
00	1/4" Female NPT
01	1/4" Male NPT
10	1/4" Tube Fitting
11	3/8" Tube Fitting
20	6 mm Tube Fitting
21	8 mm Tube Fitting
Other connections are available upon request	

Connection 6	
R	Relief Valve
P	Plug
00	1/4" Female NPT

Connection 5	
Same as Connection 1	