Purge Assemblies

FPV-1 Series

Technical Data

◎ Maximum working pressure: 4500 psig
◎ Material of the main components:
Seat: PCTFE (diaphragm valve)
Diaphragm: cobalt alloy (diaphragm valve)
◎ Temperature: -10 °F ~ 150 °F (-23 °C ~ 65 °C)
◎ Leak rates (helium):
Internal: $\leqslant 1x10^{-9}$ std cm^3/s
External: $\leqslant 1x10^{-9}$ std cm^3/s
◎ Minimum orifice: Φ0.13" (3.2 mm)

Product Types

◎ Straight Purge Assemblies
Consisting of a diaphragm valve and a check valve (see Fig. 1-1).
Connecting the auxiliary inlet port (see Fig. 1-2) of the regulator or in between the regulator and the cylinder (see Fig. 1-3) to allow the corrosive or toxic gas to be vented through to a safe location.

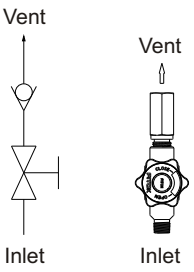

Fig. 1-1

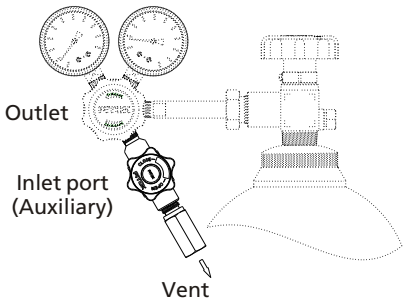

Fig. 1-2

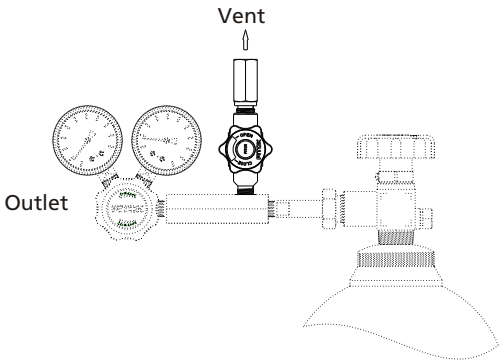

Fig. 1-3

◎ Tee Purge Assemblies
Consisting of a diaphragm valve, check valve, tee, and cylinder connections (see Fig. 2-1).
Connecting the cylinder with the regulator. Before installing a new cylinder, open the diaphragm valve, and the remaining gas is vented safely; or after a new cylinder is installed, close the regulator and open the diaphragm valve, enabling the process gas inside the cylinder to purge the atmospheric contamination between the cylinder and the regulator (see Fig. 2-2).

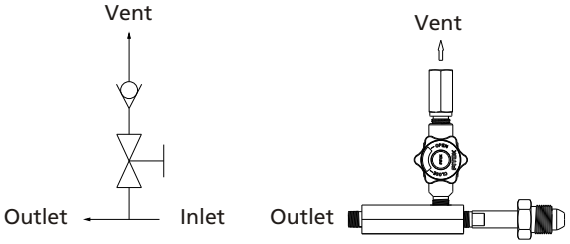

Fig. 2-1

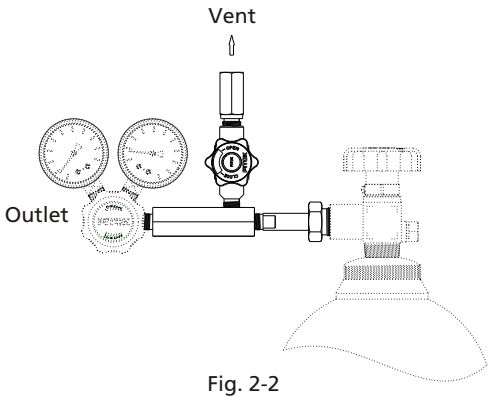

Fig. 2-2

◎ Cross Purge Assemblies

Consisting of a tee purge assembly and two additional diaphragm valves (see Fig. 3-1).

Except for process gas, purging is also made possible with inert gas from outside (see Fig. 3-2). The steps are as follows:

Before installing a new cylinder, close the diaphragm valve beside the regulator, and open the shutoff diaphragm valve on the vent line to release the residual pressure.

After installing a new cylinder, open the diaphragm valve on the bottom, allowing the inert gas from outside to purge the atmospheric contaminations between the cylinder and the diaphragm valve.

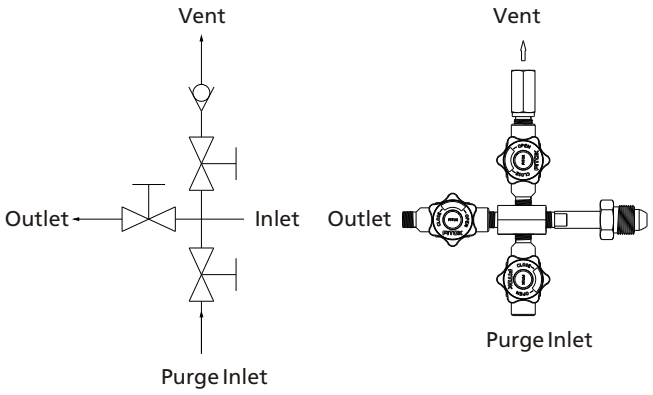

Fig. 3-1

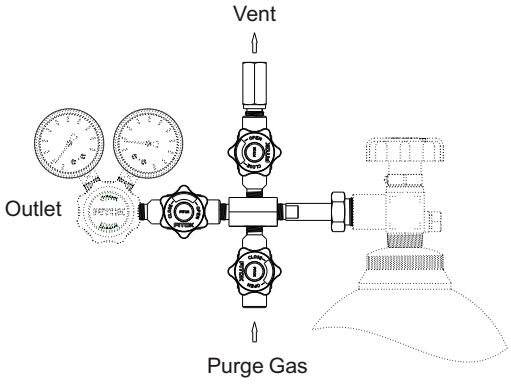

Fig. 3-2

Part Number Description

FPV − 1C | 6L | − | DIN1 | − | 00 | − | 00 | − | 00

Product Type	
S	Straight Purge Assemblies
T	Tee Purge Assemblies
C	Cross Purge Assemblies

Body Material	
6L	316L SS
SS	316 SS

Inlet Port	
00	1/4" Female NPT
01	1/4" Male NPT
C_ _ _	CGA Number (USA)
DIN_	DIN Number (Germany)

Refer to page B-30 for cylinder connections based on specific gas type. Cylinder connections compliant to other standards are available upon request. Please contact FITOK Group for details.

Vent Port	
00	1/4" Female NPT
01	1/4" Male NPT
10	1/4" Tube Fitting
20	6 mm Tube Fitting
21	8 mm Tube Fitting

Other connections are available upon request

Outlet Port
Same as Vent Port

Purge Inlet
Same as Vent Port