Priority Panels

Introduction

CNG priority panels are designed around the Priority Valve which is extremely reliable and requires minimal maintenance.

All materials used in the priority panels are of the highest quality and made of stainless steel for the best corrosion resistance.

The complete Priority Panel is tested before being dispatched. No on site adjustments required.

Standard Priority Panel Features

- Full stainless steel construction. This includes all valves, fittings, tubing, mounting plate, hardware and brackets
- · Panel is assembled and tested in our factory
- Working pressure 275 bar (350 bar optional)
- Flow rate in excess of 3000m³/hr
- All valves stainless steel with ¾" SAE ports
- High flow Priority Valve set to sequence at 230 bar (adjustable). Metal to metal seat with teflon seal. Seal can be replaced without removing any pipework. Model PCI12-SS
- check valves on all banks. Metal to metal seat with ¼" gauge port on outlet. Model CVCl12-SS
- Dual scale pressure gauges Ø63mm 0-400 bar and psi on inlet and outlets
- Manual isolating valve on inlet and outlets
- Bleed valve on inlet and each priority valve
- All inlet and outlet ports are ¾" SAE female

Priority Panel Models

- One bank with compressor top up. CTU1B-PFP
- Two bank, 2B-PFP
- Two bank with compressor top up. CTU2B-PFP
- Three bank, 3B-PFF
- Three bank with compressor top up. CTU3B-PFP
- Two bank with compressor top up with daughter station option. CTU2B-PFP-DTR

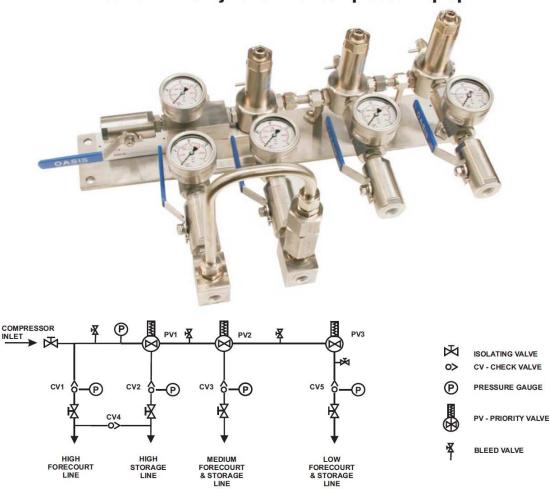
Options

- · Different sequencing pressure (stand 230 bar)
- Emergency solenoids shutoff to automatically prevent flow of gas when 240V power
- Relief valve on every bank to prevent an over pressure situation
- Option of tube fittings or thread adaptors installed in inlet and outlets

Operation

- Gas flow through the priority is from left to right, with the outlets to storage and forecourt on the bottom of the panel
- The Priority Valve opens when the inlet pressure reaches 230 bar. Gas is then allowed to flow to the common outlets on the bottom and right hand side of the valve
- When all the banks reach 230 bar they all fill up together until the compressor shuts off
- The check valves on each line prevent reservse flow throug the priority panel
- For the CTU panel an additional check valve allows oneway flow from high pressure storage to forecourt
- The station can be kept running while the manual isolation valves are shut for maintenance work. The bleed valves are used to remove the gas trapped by the check valves

Three Bank Priority Panel with Compressor Top Up



The Compressor Top Up Three Bank Priority Fill Panel directs gas to the high forecourt line.

When the high forecourt line reaches 230 bar the priority valve PV1 opens to let gas flow into the high storage bank. Back flow from the high forecourt line is prevented by check valves CV1 and CV4. When the high storage bank reaches 230bar the priority valve PV2 opens to let gas flow into the medium storage bank. Back flow from the high storage bank is prevented by check valve CV2. When the medium storage bank reaches 230 bar the priority valve PV3 opens to let gas flow into the low storage bank. Back flow from the medium storage bank is prevented by check valve CV3.

If the medium storage bank falls below 230 bar the priority valve PV3 shuts so the compressor must top up the medium storage bank. If the high storage bank falls below 230 bar the priority valve PV2 shuts so the compressor must top up the high storage bank. If the high storage bank falls below 230 bar the priority valve PV1 shuts so the compressor must top up the high forecourt line.

Gas flows through a check valve CV4 from the high storage bank to the high forecourt line.

When all the banks reach 230 bar they all fill up together until the compressor shuts off.