Gas Delivery Equipment

Gas Containment & Distribution



PAN-5000 Series Analytical Grade **Gas Distribution Panels**



5-valve panel with optional venturi, excess flow switch, ESO, GSM-4

Matheson introduces its new PAN-5000 Series of analytical grade stainless steel gas panels that are designed to safely control and dispense gases, while providing a high level of process purity. . .all at a reasonable cost. The PAN-5000 Series panels feature Matheson components that have a proven track record in analytical laboratories and chemical process industries worldwide. Use of these analytical distribution panels with a Matheson gas cabinet enclosure provides the high level of safety required when handling corrosive, flammable or toxic gases.

PAN-5000 Features

- 1, 3, 5-valve designs meet your purging requirements
- 5-valve panel provides full purging of corrosive, flammable and toxic gases
- Optional venturi provides vacuum evacuation of 5-valve panel during purging
- Front removable components simplify maintenance
- Excess flow, emergency shutoffs and GSM-4 alarm monitor / controller available

Gas Panel Component Descriptions

Valves: 316 stainless steel body and diaphragm

with Kel-F seats for positive shut-off. All valves are mounted firmly to the backplate but are easily removable from

the front for maintenance.

Check Valves: 316 stainless steel body and poppet with

Viton o-rings. Check valves are provided on all vent lines and purge gas inlet lines. **Pressure Regulators:** 316 stainless steel body and diaphragm

> with Kel-F seat. Available in standard 0-30 and 0-100 psig pressure ranges to safely reduce cylinder pressure to your system. Other optional pressure ranges are available. Matheson Model 3610A Series stainless steel single stage tied-diapragm regulators are used.

Gauges: 316 stainless steel socket and bourdon tube with dual scale showing pressure in both English and international units.

All major panel components are fitted Fittings:

with compression or pipe thread connections. Welded microfit joints are used to minimize the number of connections and to ensure high purity.

Backplate: Constructed of carbon steel and coated with corrosion resistant paint, the panel has mounting holes for easy installation in your gas cabinet. Mounting hole spacing is

consistent with all Matheson LabGas System® products. Panel also has labeling of all panel components to aid in operation

of the controls.

Pigtail / Flexhose Connection to the Cylinder Valve:

Three foot stainless steel braided flexible hose with the appropriate CGA connection for all CGAs except 330 and 660 which come with a rigid stainless steel

pigtail.

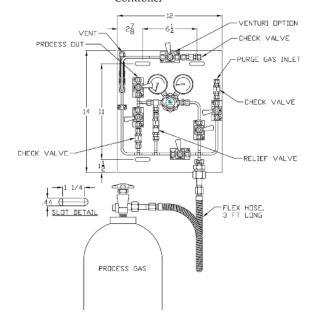
CGA Fittings: 1-valve and 3-valve panels provide an

integral check valve in the CGA fittings. The CGA fittings in the 5-valve panels do

not have check valves.

Optional Equipment:

Excess Flow Switch (EFS), Excess Flow Valve (EFV), Emergency Shut Off (ESO), Venturi, GSM-4 Alarm Monitor / Controller



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PAN-5000 Series Analytical Grade Gas Distribution Panels (continued)

1-Valve Panel Model PAN-5100



This most basic panel design offers a pressure regulator and process on/off control valve. Connection to the gas supply is conveniently made using a standard stainless steel flexible hose. This panel is recommended when using inert gases with processes that do not require purge capability. Available with CGA 320, 326, 346, 540, 580 or 590. Each CGA contains an integral check valve.

3-Valve Panel Model PAN-5300



The 3-valve panel provides a pressure regulator with both a process on / off control valve and a high pressure vent valve, allowing total isolation of the regulator, as well as the ability to purge contaminants that may have been introduced by changing cylinders. The vent line is protected from back flow by a check valve downstream of the vent valve. This panel is recommended when using non-toxic, non-corrosive, and non-pyrophoric gases with processes that require the additional purity that a high pressure purge is capable of supplying. Available with CGA 320, 326, 350, 510, 540, 580 or 590. Each CGA contains an integral check valve.

5-Valve Panel Model PAN-5500



The 5-valve panel provides all the same features as a 3-valve panel with the addition of a low-pressure vent valve, and adds the safety feature of being able to cycle purge the panel with an inert gas prior to disconnecting the cylinder. This panel provides the safety needed to handle toxic, semi-corrosive and flammable gases. The 5-valve panel is available with an optional venturi for vacuum evacuation of the panel during purging. The 5-valve panel is available with CGA 320, 326, 330, 350, 510, 540, 580, 590 or 660. Unlike the 1- and 3valve designs, CGA's do not contain integral check valves.

Ordering Information

	Model Series	Number of Valves	Delivery Pressure	Venturi Option		CGA	Option Package
PAN —					[

MODEL SERIES

5 = PAN-5000 Series

NUMBER OF VALVES

- 1 = 1-Valve Panel
- 3 = 3-Valve Panel
- 5 = 5-Valve Panel

DELIVERY PRESSURE

- 0 = 30 psig
- 1 = 100 psig

VENTURI OPTION

- 1 = Yes (Available on 5-valve panel only)

CGA - Select from the following available

CGAs 1-Valve Panel: 320, 326, 346, 540, 580, 590 3-Valve Panel: 320, 326, 350, 510, 540, 580,

590

5-Valve Panel: 320, 326, 330, 350, 510, 540,

580, 590, 660

NOTES: 510 CGA NOT for acetylene service 660 CGA NOT for ammonia service CGA's for 1-valve and 3-valve panels come

with integral check valve

No integral check valve in CGA for 5-valve

OPTION PACKAGE

0 = None

A= Auto Shutdown (EFS, ESO, GSM-4)

V = Excess Flow Valve

X = Excess Flow Switch