



# LAB MASTER LGD5000 SERIES

5.0 Purity Two Stage Nickel Plated **Brass Barstock Diaphragm Differential Autochange Gas Control Panel** 

The Lab Master LGD5000 series two stage differential autochange control panels are designed for primary pressure gas control of non-corrosive or toxic, high purity gases up to grade 5.0 purity (99.999%), on gas distribution systems where constant delivery pressure is required.

- LGD5041 Series | Two Stage Twin Cylinder Diaphragm Differential Autochange Gas Control Panel, FKM Seal, FKM Pressure Relief Valve
- LGD5042 Series | Two Stage Twin Cylinder Diaphragm Differential Autochange Gas Control Panel, EPDM Seal, EPDM Pressure Relief Valve



### **FEATURES**

High pressure isolation valves

High pressure purge facility

Two stage pressure regulation

Process line isolation valve

Encapsulated seat design

Twin cylinder configuration



## **MATERIALS**

Body	Nickel Plated Brass Barstock			
Bonnet	High Strength Alloy			
Diaphragm	316L Stainless Steel			
Seal	PTFE			
Seat	Polyamide (Nylon®)			
Filter	10 Micron 316L Stainless Steel			

<sup>\*</sup> Subject to cylinder connection. \*\*\*\* Subject to final configuration.

## **SPECIFICATION**

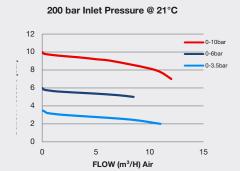
Maximum Inlet Pressure	60 bar (870 PSI) / 300 bar (4350 PSI)*
Delivery Pressure Range	3.5 bar (50 PSI) / 6 bar (90 PSI) / 10 bar (150 PSI)
Gauge	50mm (2") Diameter
Ports	1/4" NPT Female
Temperature Range	-20° C to +60° C (-4° F to +140° F)
Flow Coefficient (Cv)	0.078
Weight	8 NOka (17 64 lhs)****

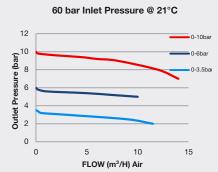


## **FLOW PERFORMANCE**

### 12 0-10bar 10 0-6bar 0-3.5ba Outlet Pressure (bar) 8 6 4 2 0 0 10 15 FLOW (m3/H) Air

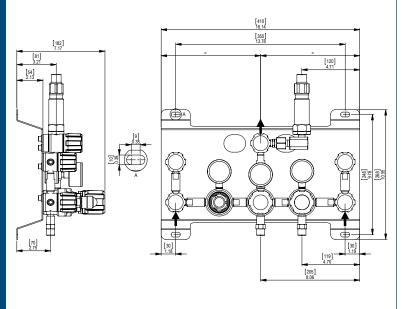
300 bar Inlet Pressure @ 21°C

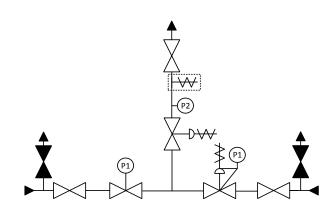






## **PROCESS & INSTRUMENTATION**





- Isolation Valve (Closed )

- Isolation Valve

Adjustable Pressure Regulator with Pressure Relief Valve

- Fixed Pressure Regulator with P 1 Pressure Gauge

—№ - P2 Pressure Gauge



- Pressure Relief Valve
- Denotes a Configurable Option

- Adjustable Pressure Regulator with P 1 Pressure Gauge and Pressure Relief Valve

Model No. Selector Guide										
Product Type	Inlet Pressure	Outlet Pressure	Inlet Pressure Gauge	Outlet Pressure Gauge	Inlet Connection	Outlet Connection	Options			
LGD5041	<b>02</b> 60 bar / 870 PSI	<b>03</b> -1 - 3.5 bar / 50 PSIG	00 No Gauge Fitted	00 No Gauge Fitted	000 No Inlet Fitted	00 No Outlet Fitted	A No Options Selected			
LGD5042	<b>04</b> 300 bar / 4350 PSI	<b>04</b> -1 - 6 bar / 90 PSIG	01 bar/PSI	01 bar/PSI	001 1/8 Stainless Steel Compression	01 1/8 Stainless Steel Compression	K Certificate of Conformity			
		<b>05</b> -1 - 10 bar / 150 PSIG	02 bar/PSI Contact Gauge		002 1/4 Stainless Steel Compression	02 1/4 Stainless Steel Compression	M CO2 Burst Disc			
					003 6mm Stainless Steel Compression	03 6mm Stainless Steel Compression	P Calibration / Pressure Test Certificate			
					<b>004</b> 1/4 NPT Male	<b>04</b> 1/4 NPT Male	R Fitted Pipeline Pressure Relief Valve, FKM Seal			
					007 G3/8 BSP R/H Brass Male	06 G1/2 BSP R/H Brass Male	S Fitted Pipeline Pressure Relief Valve, EPDM Seal			
					008 G3/8 BSP L/H Brass Male	07 G3/8 BSP R/H Brass Male	X Special Instruction			
						08 G3/8 BSP L/H Brass Male				