

Product Data Sheet
118DS-4d
12/19/03

Series 5453

Indicating Pneumatic Flow, Differential Pressure and Liquid Level Controllers

General

The 624-II control unit is designed for performance and durability under rigorous operating conditions. The body is of rugged, precision die cast aluminum, and all working parts are of stainless steel. Diaphragms are made of Neoprene; feedback bellows are Ni-Span-C.

Features

Fast response and highly stable control action are key features of the 624-II controller is especially suitable for field-mounting and other types of installations where a control record is not required.

- Gain Control: 50-.25 or 100 2.5; easily adjustable
- Integral (Reset) model: Adjustable from less than .01 to 30 repeats per minute
- Derivative control: Action adjustable from 0 to 30 minutes (derivative by – pass standard)
- Easily reversible control action: just turn a cover plate.
- High capacity pilot: Flow is well over 3 scfm at 1 psi drop, both exhaust and delivery
- Push button restriction cleaner (standard)
- No plastic tubing

Specifications

- Case: Weatherproof, die-cast aluminum case with gasketed aluminum door and gray epoxy finish standard
- Case dimensions: 7 23/32" wide x 7 15/16" high. 2" horizontal and 5" vertical clearance required between adjacent panel mounted units.
- Mounting: Interchangeable flush or surface mounting. Optional brackets and U-clamps available for 2" pipe mounting.
- Scales: Segmental, 3 1/4" calibrated length. Black numerals on white background. Fluorescent pointers for measured variable and setpoint.



- Output: 3-15 psig standard. Other ranges available. Direct or reverse acting.
- Air supply: 20 psig standard for 3-15 output range
30 psig for 3-27 psig output range
35 psig for 6-30 psig output range
- Connections: Supply and output, 1/4" NPT female at bottom of case
- Top case vent with plug, 1/2" NPT standard
- Measuring elements: meter bodies available for differential pressure ranges from 0-10" of water to 0-400" of water, 50 and 100 psi
- Calibrated accuracy:
Differential liquid level: $\pm 0.5\%$ of span.
Flow: $\pm 0.5\%$ of full scale value (from 20% to 100% of range)
- Control modes: Gain (proportional), gain + integral (reset), gain + integral + derivative (3-15 psig output)
- Mode adjustments:
Gain: 100-2.5 or 50-.25
Integral: .01 to 30 repeat per minute
Derivative time: 0 to 30 minutes
- Response level: 0.006% of span.
- Frequency response: Response curve flat to 400 cpm with gain control unit, to 300 cpm with gain + integral unit
- Pilot capacity: 3 scfm, exhaust or delivery, for 1 psi change in output pressure
- Air consumption: 0.05 scfm at balance with 20 psig

Model No. 5453-31G **A B - C - D - E - F - G - H**

5453-31G

SELECT	DESCRIPTION	CODE
	BASIC 545331GBAS	
A, B	PRESSURE RANGE	A B
10	None 10 inch Water 20 inch Water 50 inch Water 75 inch Water 100 inch Water 150 inch Water 200 inch Water 250 inch Water 300 inch Water 350 inch Water 400 inch Water 0 - 50 PSI 0 - 100 PSI	00 01 02 03 04 05 06 07 08 09 10 11 12 13
C	APPLICATION	
20	Flow or closed tank L.L. w/dry leg Closed tank L.L. w/wet leg	1 2
D	CALIBRATION	
30	Direct Standard Reverse Standard Direct Full Scale Reverse Full Scale	1 2 3 4
E	CONTROL X624CONTRL	
40	20 PSI Supply, Gain only 20 PSI Supply, Gain & Integral 20 PSI Supply, 3 mode 30 PSI Supply, Gain & Integral 35 PSI Supply, Gain only 35 PSI Supply, Gain & Intergral 60 PSI Supply, Differential Gap 20 PSI Supply, Transmitter 30 PSI Supply, Transmitter	1 2 3 4 5 6 7 8 9
F	EXTERNAL FEEDBACK XEXFEED	
50	Without With (20 PSI supply)	0 1
G	PNEUMATIC SET POINT X5453SP	
60	Without With (3-15 PSI Set Point signal)	0 1
H	MANUAL-AUTOMATIC STATION XMAN-AUTO	
70	Without With (Note 2)	0 1
J	MOUNTING	
80	Pipe	3
Note: 2	Not for model with Selection E7 (Specify scale in line text.)	

