

PNEUMATIC FLOW RATE MONITORS

FOR 1/4 – 2 INCH PIPE SIZES

CHOICE OF THREE MATERIALS OF CONSTRUCTION

Select from aluminum, brass or stainless steel to meet system and media requirements.

UNRESTRICTED MOUNTING

Allows the designer to install the monitor in any orientation – horizontal, vertical or inverted.

SUPERIOR EXTERIOR DESIGN

Weather-tight for use outdoors and/or on systems where wash downs are required.

MULTI-USE

These versatile monitors are used to verify air compressor outputs and to test pneumatic machinery and tools for proper air consumption.

RUGGED AND RELIABLE

These monitors are constructed with all metal pressure vessels, allowing safe, permanent, installation in industrial systems.

HIGH PRESSURE OPERATION

The magnetically coupled follower design allows operation to 1000 PSIG.

TWENTY-THREE DIFFERENT PORTS AVAILABLE

Standard selection of NPT, SAE and BSP ports reduces the amount of adapters required for installation.

LOW COST PRECISION

Mid-scale measuring accuracy: within $\pm 2.5\%$. Full-scale accuracy: within $\pm 4\%$.



ENGINEERING SPECIFICATION

THE PNEUMATIC IN-LINE FLOW RATE MONITOR SHALL:

- use the variable annular orifice technique with compression spring recovery.
- not require inlet or outlet straight plumbing, or require vertical pipe mounting.
- have a measuring accuracy of $\pm 2.5\%$ of full scale in the center third of the measuring range, and $\pm 4\%$ of full scale accuracy over the entire flow measuring range.
- have a stainless steel sharp-edged orifice.
- have a weather-tight external construction.
- be Lake Monitors No. G ___ - ___ - ___.

PRESSURE DIFFERENTIAL VS FLOW RATE

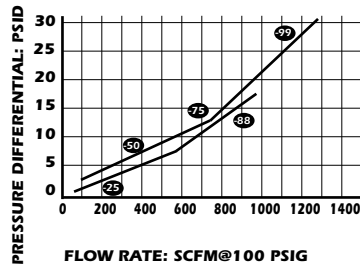
Lake Monitors Order Number:
(see guide to standard monitor numbers)

G3A - 4AB - 05

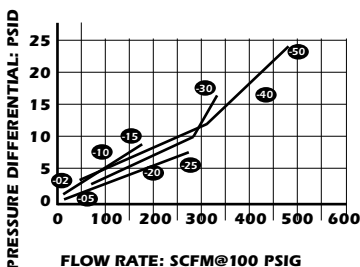
Series 3

Flow rate: 5-50 SCFM

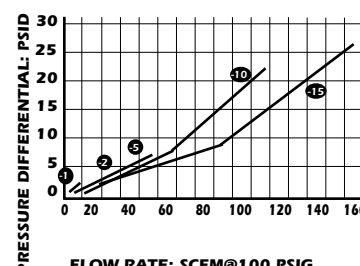
SERIES 5 MONITORS (1-1/4" - 2")



SERIES 4 MONITORS (3/4" - 1")



SERIES 3 MONITORS (1/4" - 1/2")



PNEUMATIC FLOW RATE MONITORS

MATERIALS OF CONSTRUCTION (WETTED COMPONENTS)

	ALUMINUM	BRASS	STAINLESS STEEL
High-pressure casing, end ports and tapered shaft	Aluminum	Brass	#304 Stainless Steel
Seals	Buna-N (STD), EPR, Viton® or Kalrez®	Buna-N (STD), EPR, Viton® or Kalrez®	Viton® with Teflon backup (STD), Buna-N, EPR or Kalrez®
Transfer Magnet	Teflon coated Alnico	Teflon coated Alnico	Teflon coated Alnico
Floating Orifice Disk	Stainless Steel	Stainless Steel	Stainless Steel
All other internal parts	Stainless Steel	Stainless Steel	Stainless Steel

MATERIALS OF CONSTRUCTION (NON-WETTED COMPONENTS)

	ALUMINUM	BRASS	STAINLESS STEEL
Window Tube	Polycarbonate (STD), Pyrex	Polycarbonate (STD), Pyrex	Polycarbonate (STD), Pyrex
Window Seals	Buna-N (STD), Teflon	Buna-N (STD), Teflon	Buna-N (STD), Teflon

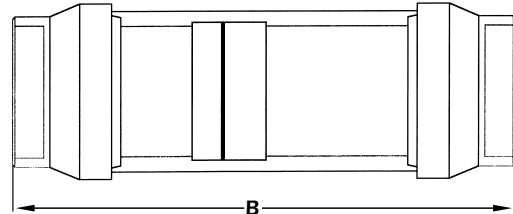
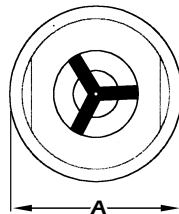
Teflon is a registered trademark of duPont de Nemours & Co.

Viton and Kalrez are registered trademarks of Dow DuPont Elastomers.

PERFORMANCE

Measuring accuracy:	±2.5% of full-scale in the center third of the measuring range; ±4% of full-scale over the entire scale range
Repeatability:	±1% of full-scale
Flow measuring range:	2.0-1000 SCFM (1.0-470 LPS)
Pressure differential:	see graphs
Maximum operating pressure:	aluminum and brass monitors: 600 PSIG (40 Bar) stainless steel monitors: 1000 PSIG (70 Bar)
Maximum operating temperature:	240°F (116°C) Note: for operation to 600°F (316°C), see our High Temperature Data sheet.
Standard calibration fluids:	air @ 70°F (21°C), 1.0 sg and 100 PSIG (6.8 Bar)

MECHANICAL



SIZE CODE

DIM	SERIES 3	SERIES 4	SERIES 5	SERIES 5
A	1-7/8" (48mm)	2-3/8" (60mm)	3-1/2" (90mm)	3-1/2" (90mm)
B	6-9/16" (167MM)	7-5/32" (182mm)	10-1/8" (258mm)	12-5/8" (322mm)
PORT SIZES	NPTF: 1/4", 3/8", 1/2" SAE: #6, #8, #10 BSP: 3/8", 1/2"	NPTF: 3/4", 1" SAE: #12, #16 BSP: 3/4", 1"	NPTF: 1-1/4", 1-1/2" SAE: #20 BSP: 1-1/4"	NPTF: 2" SAE: #32 BSP: 2"

Note: Consult factory for SAE brass monitor requirements.

For specific pneumatic application information, please see our "Pneumatic Sizing Guide".