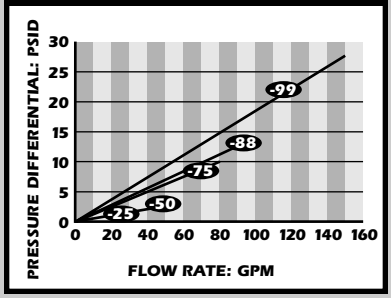
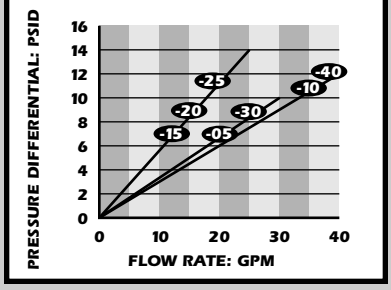
FLOW RATE ALARMS

PRESSURE DIFFERENTIAL VS FLOW RATE

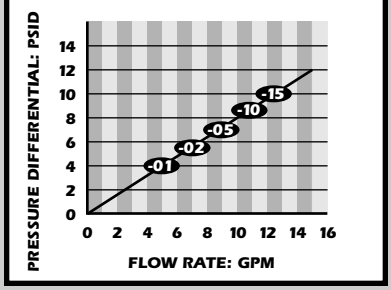
SERIES 5 MONITORS (1-1/4" - 2")



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



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



LAKE 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

Teflon is a registered trademark of DuPont de Nemours & Co.
Viton and Kalrez are registered trademarks of Dow DuPont Elastomers

MATERIALS OF CONSTRUCTION (NON-WETTED COMPONENTS)

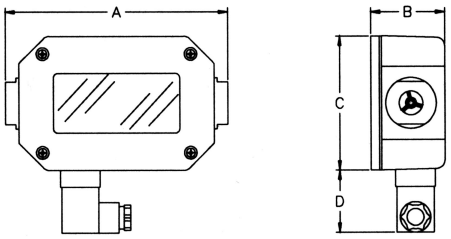
	ALUMINUM	BRASS	STAINLESS STEEL
Enclosure & Cover	Aluminum	Aluminum	Aluminum
Seals	Buna-N	Buna-N	Buna-N
Window	Pyrex	Pyrex	Pyrex
Din Connector	Polyamide	Polyamide	Polyamide

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:	0.05-150 GPM (0.2-560 LPM); 1.5-1300 SCFM (0.75-610 SLPS)
Maximum operating pressure:	aluminum and brass monitors: 3500 PSIG (240 Bar) stainless steel monitors: 6000 PSIG (410 Bar)
Maximum operating temperature:	media: 240°F (116°C), ambient: 180°F (82°C)
Pressure differential:	Liquid: see graphs. Gases: see Pneumatic data sheet
Standard calibration media:	Oil monitors: DTE 25® @ 110°F (43°C), 0.873 sg Water monitors: tap water @ 70°F (21°C), 1.0 sg Air monitors: air @ 70°F (21°C), 1.0 sg and 100 PSIG (6.8 Bar)
Enclosure:	NEMA type 4X (UL Approved)
Alarm switch dead-band:	4% of full scale
Alarm switch contacts:	SPDT (dry contact), UL/CSA rating: 10 amps and 1/4 hp, 125 or 250 VAC. 1/2 amp, 125 VDC; 1/4 amp, 250 VDC; 3 amps, 125 VAC "L" (lamp load)

DTE 25 is a registered trademark of Exxon Mobil

MECHANICAL



DIM	SERIES 3	SERIES 4	SERIES 5	SERIES 5
A	6-9/16" (167mm)	7-5/32" (182mm)	10-1/8" (258mm)	12-5/8" (322mm)
B	2-3/16" (56mm)	2-15/16" (75mm)	3-13/16" (97mm)	3-13/16" (97mm)
C	4" (101mm)	4-1/2" (114mm)	5-5/16" (135 mm)	5-5/16" (135mm)
D	1-7/8" (47mm)	1-7/8" (47mm)	1-7/8" (47mm)	1-7/8" (47mm)
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, #24 BSP: 1-1/4", 1-1/2"	NPTF: 2" SAE: #32 BSP: 2"

Note: Consult factory for SAE brass monitor requirements.

LAKE MONITORS

FLOW ALARM

Data Sheet No. A-502

FLOW RATE ALARMS

FOR 1/4 – 2 INCH PIPE SIZES

FIELD ADJUSTABLE ALARM SETTING

Only a screwdriver is required to change the flow alarm setting.

WEATHER-TIGHT CONSTRUCTION

The rugged cast aluminum NEMA type 4X enclosure allows installation in outdoor applications and in environments where liquid tight seals are required.

SIMPLE ON/OFF LOGIC

Positive alarm points using 10 A., dry-contact, SPDT switches, reduce the complexity found in standard rotameter OFF/ON/OFF circuits.

PRE-WIRED WITH CABLE DISCONNECT

The standard Hirschmann inter-connection provides easy installation and maintenance of the FLOW ALARM and the system it is a part of.

UNRESTRICTED MOUNTING

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

ECONOMICAL PROTECTION

This monitor rapidly pays for itself as it "sounds the alarm" on incorrect pneumatic, lubrication or cooling volumes, protecting expensive equipment and reducing downtime.

QUALITY ASSURANCE

Can be an integral part of a quality control system, yielding consistent system operation.



ENGINEERING SPECIFICATION

THE IN-LINE FLOW RATE MONITOR/ALARM SHALL:

- have field adjustable, dry-contact, alarm setting(s).
- 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 ±2.5% of full scale in the center third of the measuring range, and ±4% of full scale accuracy over the entire flow measuring range.
- have a stainless steel sharp-edged orifice.
- have a working pressure rating of 3500 or 6000 PSIG for liquids.
- have a working pressure rating of 600 or 1000 PSIG for gasses.
- have a weather-tight NEMA type 4X external construction.
- be Lake Monitors No. M _ _ – _ _ _ – _ _ for single alarm applications, or N _ _ – _ _ _ – _ _ for dual alarm applications.