

FLOWSTAT ES TURBINE FLOW SENSOR

Perfect monitoring solution for chillers/cooling circuits, HVAC, batching and industrial process control applications.



TECHNICAL SPECIFICATIONS

Measuring Accuracy
2% of full-scale

Repeatability
±0.5% of full-scale

Flow Measuring Range
0.5-15 GPM (2-60 LPM)
With optional low-flow adapter:
.25-4.5 GPM (1-17 LPM)

Turn Down Ratio
10:1

Maximum Operating Pressure
150 PSIG

Maximum Operating Temperature
20-150°F

Standard Calibration Fluid
Tap water @ 70°F Temperature (21°C),
1.0 sg

Filtration Requirement
150 Micron Filter recommended

MATERIALS OF CONSTRUCTION

Wetted Components		Non-Wetted Components	
Component	Materials	Component	Materials
Casing	Glass-Filled Polypropylene	Encapsulant	Epoxy
Cover	Clear Polycarbonate	Strain Relief	Nylon
Seal	Buna-N® (Other options available)	Lock Ring	Glass-Filled Polypropylene
Impeller	Acetal Copolymer	Wire Insulation	High-Temperature PVC
Bearing	PEEK (Polyetheretherketone)		
Shaft	Stainless Steel		

Buna-N is a registered trademark of Chemische Werke Huls.

BENEFITS

Value Pricing

Low cost operation combined with low cost maintenance, equals better bottom line savings for your operation.

Encapsulated Circuitry

Withstands the harshest environments.

Several Outputs Available

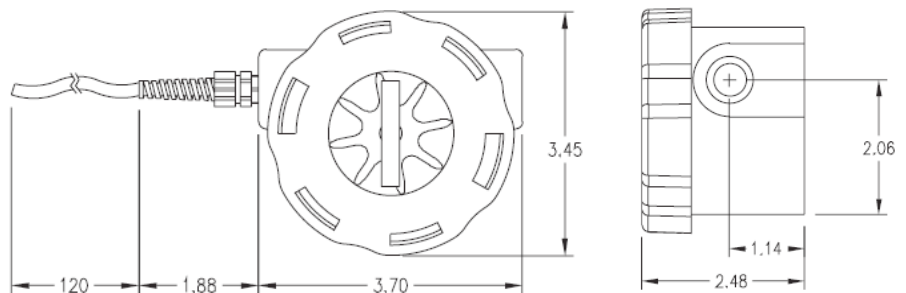
The standard interface is a 2-wire, 4-20mA current loop. Sensor signal may be transmitted on a low cost wire without degradation. Pulse, relay and 0-5 VDC (regulated) are also available.

Connects Directly to your Flow Monitoring Instruments

Can be connected directly to analog acquisition cards, chart recorders or other monitoring instruments, without external signal conditioning.

Simply Plumb and Apply Power

Comes factory calibrated to your flow range specifications.



Measurements shown in inches.

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OUTPUT*

Current = C

Pulse = P

Relay = R

Voltage = V

ROTOR COVER

Clear Polycarbonate = C

PORT SIZE RANGE

1/2" NPT = B

MAX. FLOW RATE: GPM

1/2" NPT:

5 GPM up to 15 GPM Max. =

flow rates available

Important: Choose a maximum flow rate. 5-15 maximum GPM. Minimum flow rate will be 10% of maximum flow rate. Example: If your maximum flow rate is 8 GPM, the minimum flow rate would be .8 (8 x .1 = .8) Thus, the correct flow range would be .8-8.0 GPM.

COVER SEAL

Buna-N (Standard) = B

EPR (Optional) = E

FKM (Optional) = V

(OPTIONAL)

OPTIONS (If no options desired, leave blank)

Electronic Disconnect = D

Low Flow Adapter** = L F

** The low flow adapter will accommodate full-scale flow rates from 2.5 - 4.5 GPM for 1/2" only. For full-scale flow rates below 2.5 GPM, consult the Lake factory.

ECONOMY SERIES

4-20 mA version		0-5 VDC (regulated) version	
Power Requirements	12-24 VDC, Regulated, Loop powered	Power Requirements	12-24 VDC, Regulated
Load driving capacity	Use the following equation to calculate maximum load resistance: Max Loop Load (Ω) = 50 (Power supply volts - 12).	Maximum Current	25 mA DC, Regulated
Maximum Transmission Distance	Limited only by wire resistance & supply voltage	Minimum Load resistance	1000 Ohms
Response time	2 seconds to 90% (step change)	Maximum Transmission Distance	200 feet recommended
Resolution	Infinite	Resolution	Infinite
Over-current limit	Self limiting at 35 mA	Response time	< 5 seconds to 90% (step change)
Other protection	Reverse polarity		

Relay Output		Pulse Output Version	
Power Requirements	12-24 VDC, Regulated	Power Requirements	12-24 VDC, Regulated
Maximum Transmission Distance	200 feet recommended	Response Time	<100 mS
Switch Contact	Form C, 5A max 120 or 240 VAC	Maximum Current	25 mA DC, Regulated
Set Point Repeatability	1% of full scale	Maximum Transmission Distance	200 feet recommended
		Minimum Load Resistance	1000 Ohms
		Protection	Short circuit & reverse polarity