FLOWSTAT ES TURBINE FLOW SENSOR

Ideal for monitoring various fluids in applications such as 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

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.

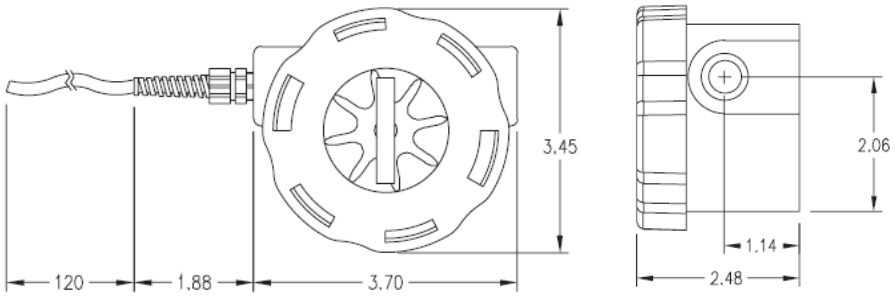
Low Cost Accuracy
Mid-scale measuring accuracy within ±2.5%. Full-scale accuracy within ±4%.

MATERIALS OF CONSTRUCTION

Wetted Components	
Component	Materials
Casing	Glass-Filled Polypropylene
Cover	Clear Polycarbonate
Seal	Buna-N® (Other options available)
Impeller	Acetal Copolymer
Bearing	PEEK (Polyetheretherketone)
Shaft	Stainless Steel

Non-Wetted Components	
Component	Materials
Encapsulant	Epoxy
Strain Relief	Nylon
Lock Ring	Glass-Filled Polypropylene
Wire Insulation	High-Temperature PVC

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



Measurements shown in inches.

AW-LAKE
PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

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PART NUMBER GUIDE

[ ] C B — [ ] [ ] — [ ] — E S — [ ] [ ] (OPTIONAL)

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

ECONOMY SERIES

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.*

ELECTRONIC SPECIFICATIONS

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

0-5 VDC (regulated) version	
Power Requirements	12-24 VDC, Regulated
Maximum Current	25 mA DC, Regulated
Minimum Load resistance	1000 Ohms
Maximum Transmission Distance	200 feet recommended
Resolution	Infinite
Response time	< 5 seconds to 90% (step change)

Relay Output	
Power Requirements	12-24 VDC, Regulated
Maximum Transmission Distance	200 feet recommended
Switch Contact	Form C, 5A max 120 or 240 VAC
Set Point Repeatability	1% of full scale

Pulse Output Version	
Power Requirements	12-24 VDC, Regulated
Response Time	<100 mS
Maximum Current	25 mA DC, Regulated
Maximum Transmission Distance	200 feet recommended
Minimum Load Resistance	1000 Ohms
Protection	Short circuit & reverse polarity

Products may be subject to change without notice - Contact factory for the most up-to-date product information.

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