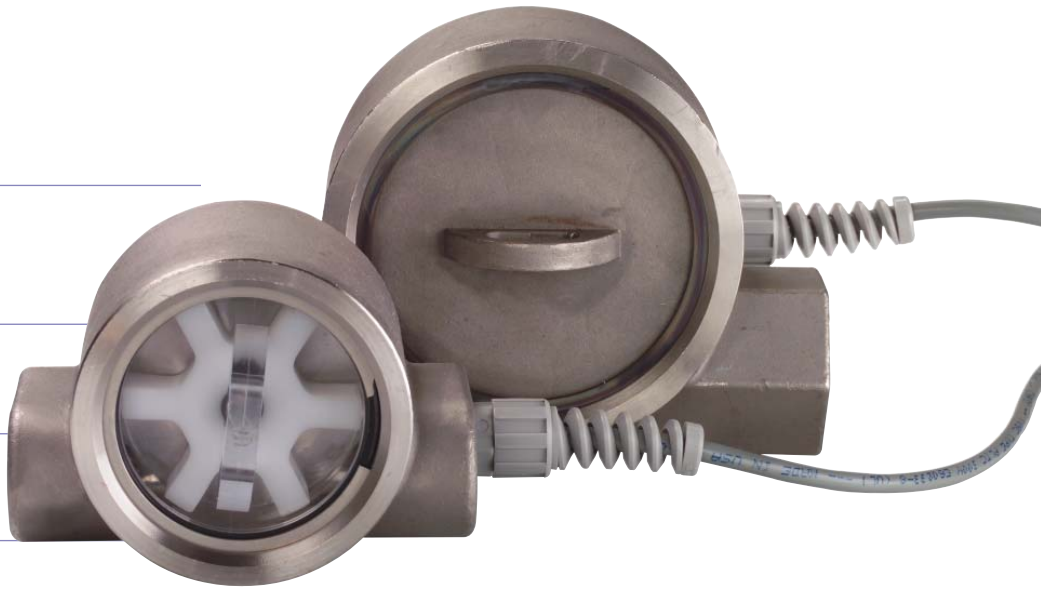
STANDARD PADDLE WHEEL SENSOR (KW SERIES)

SABRE FLOW TURBINES
from AW-Lake Company

Technical Specifications:



FLOW RANGES
0.5 - 15 GPM (gal/min)
1.5 - 50 GPM

PRESSURE
Working pressure up to 500 psi
(up to 200 psi w/ optional clear cover)

ACCURACY
± 2% of full scale or better

REPEATABILITY
± 0.5% of full scale or better

LINEAR TURN DOWN RATIO
10:1

TEMPERATURE
Fluid temperature of 20° to 225°F

FILTRATION
150 microns

END CONNECTIONS
NPT(F)

MATERIALS OF CONSTRUCTION

Wetted Components:
- Body: 316 Stainless Steel
- Cover: 316 Stainless Steel (optional clear polycarbonate)
- Rotor: Acetal Copolymer
- Rotor Shaft: 316 Stainless Steel
- Bearing: PEEK
- Seal: Buna-N (others avail.)

Non-Wetted Components:
- Encapsulant: Epoxy
- Strain Relief: Nylon
- Lock Ring: Stainless Steel
- Wire Insulation: High-Temperature PVC

Benefits:

CHOICE OF THREE PORT SIZES
Select from 1/2" , 3/4" or 1" NPT(F) porting to meet system requirements.

EASY MAINTENANCE AND CLEANING
Has only one moving component, the impeller. Cleaning and maintenance may be performed without removing the sensor from the piping.

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 and 0-5 VDC are also available.

HERMETICALLY ENCAPSULATED CIRCUITRY
Withstands the harshest environments.

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.

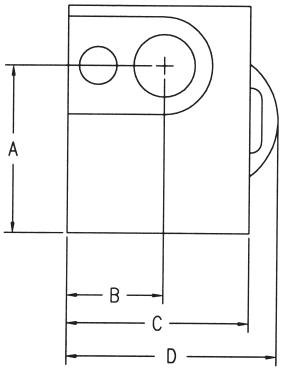
VALUE PRICING
Combined with low cost operation and maintenance, equals better bottom line savings for your operation.

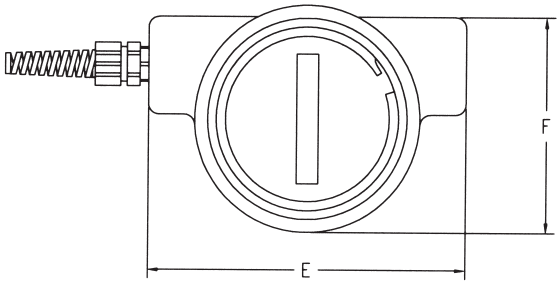
STANDARD PADDLE WHEEL SENSOR (KW SERIES)

SABRE FLOW TURBINES
from AW-Lake Company

Meter Dimensions

DIM	1/2" NPTF	3/4" - 1" NPTF
A	1.94" (49mm)	3.06" (78mm)
B	1.13" (29mm)	1.33" (34mm)
C	2.00" (51mm)	2.46" (62mm)
D	2.60" (66mm)	2.88" (73mm)
E	3.70" (94mm)	5.25" (133mm)
F	2.63" (67mm)	3.80" (97mm)

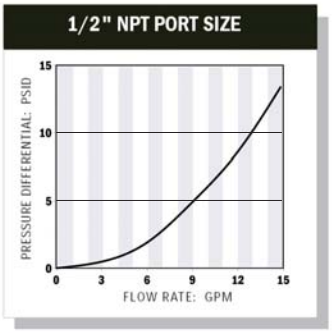


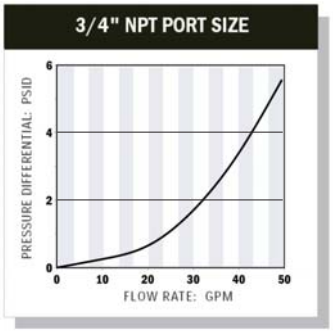


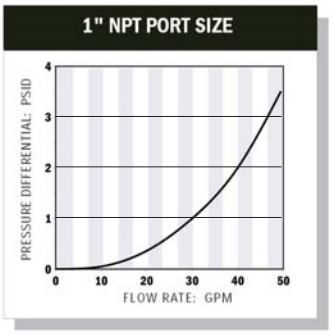
Electronic Specifications

4-20 mA Version:	
Power requirements:	12-35 VDC, loop powered
Load driving capacity:	1150 Ohms maximum
Maximum transmitting 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 Version:	
Power requirements:	12-35 VDC
Maximum current:	25 mA DC
Minimum load resistance:	1000 Ohms
Maximum transmission distance:	200 feet recommended
Response time:	> 5 seconds to 90% (step change)
Resolution:	Infinite
Pulse Output Version:	
Power requirements:	5-24 VDC
Maximum current:	25 mA DC
Minimum load resistance:	1000 Ohms
Maximum transmission distance:	200 feet recommended
Response time:	< 100 mS
Protection:	Short circuit & reverse polarity
K-Factor:	1/2" port ≈ 200 pulses/gallon 3/4" & 1" ports ≈ 60 pulses/gallon
Relay Output Version:	
Power requirements:	12-35 VDC
Maximum transmission distance:	200 feet recommended
Switch contact:	Form C, 5A max @ 120 or 240 VAC
Hysteresis:	5% of set point maximum
Set point repeatability:	1% of full scale

Typical Pressure Differentials







Contact Sabre Turbine Meters:

toll-free: **800-850-6110**

fax: **262-884-9810**

email: **sabreinfo@aw-lake.com**

website: **www.sabreflow.com**