

## ECONOMIC PADDLE WHEEL SENSOR (KW-ES SERIES)

### Technical Specifications:

#### FLOW RANGES

0.5 - 15 GPM (gal/min)  
0.25 - 4.5 GPM (low-flow version - LF)

#### PRESSURE

Working pressure up to 150 psi

#### 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 150°F

#### FILTRATION

150 microns

#### END CONNECTIONS

1/2" NPT(F)



#### MATERIALS OF CONSTRUCTION

##### Wetted Components:

- Body: Glass-Filled Polypropylene
- Cover: Clear Polycarbonate
- Rotor: Acetal Copolymer
- Rotor Shaft: Stainless Steel
- Bearing: PEEK
- Seal: Buna-N (others avail.)

##### Non-Wetted Components:

- Encapsulant: Epoxy
- Strain Relief: Nylon
- Lock Ring: Glass-Filled Polypropylene
- Wire Insulation: High-Temperature PVC

### Benefits:

#### CHOICE OF OUTPUTS

Select from 4-20 mA, 0-5 Vdc, pulse or relay outputs to meet system requirements.

#### EASY MAINTENANCE & CLEANING

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

#### SIMPLE INSTALLATION

Comes factory calibrated to your flow range specifications.

#### HERMETICALLY ENCAPSULATED CIRCUITRY

Withstands the harshest environments.

#### COMPATIBLE

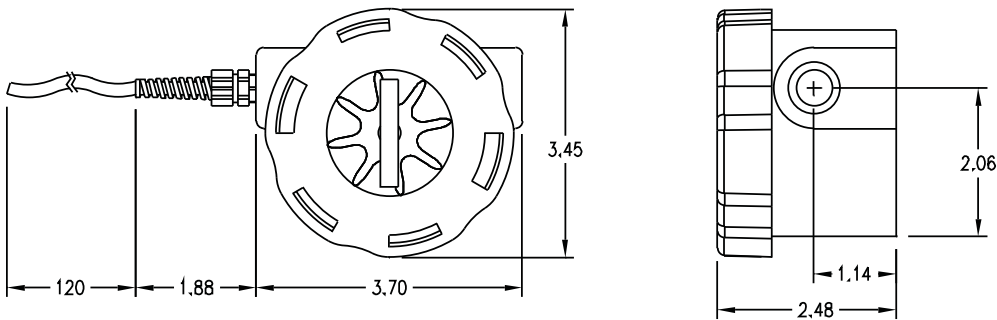
Can be connected directly to analog acquisition cards, chart recorders or other monitoring instruments, without external signal conditioning.

#### VALUE PRICING

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

## ECONOMIC PADDLE WHEEL SENSOR (KW-ES SERIES)

### Meter Dimensions



### 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:

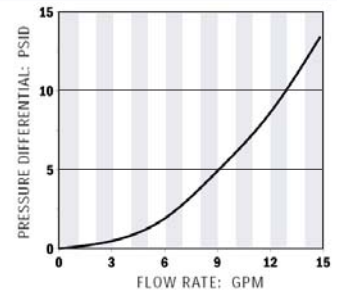
Power requirements:	5-24 VDC
Maximum current:	25 mA DC
Minimum load resistance:	1000 Ohms
Maximum transmission distance:	200 feet recommended
Response time:	< 100 mS
Protection:	Short circuite & reverse polarity
Average K-Factor:	≈ 200 pulses/gallon -LF version (low flow) ≈ 330 pulses/gallon

#### Relay Output Version:

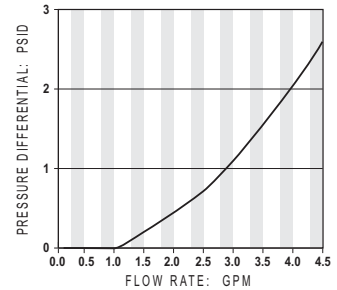
Power requirements:	12-35 VDC
Maximum transmission distance:	200 feet recommended
Switch contact:	Form C, 5A max @ 120 or 240 VAC
Hysteresis:	5% of set point maximum
Set point repeatability:	1% of full scale

### Typical Pressure Drop

#### 1/2" NPT PORT SIZE



#### ES-LF Version 1/2" NPT PORT SIZE



### Contact Sabre Turbine Meters:

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