

DTK OEM PELTON WHEEL FLOW SENSOR



Flow
Pressure
Level
Temperature
measurement
monitoring
control



- Low Flows 0.65 to 9.5 GPH Water
- Measures Clear or Opaque Liquids
- Stainless Steel Body
- Pelton Wheel Design Requires No Inlet or Outlet Straight Run
- $\pm 2\%$ of Full Scale Accuracy
- High Volume OEM Discounts Available

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Model:
DTK

Features

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The DTK series pelton wheel flow sensor was designed for the high volume OEM market. This compact pelton wheel design requires no inlet or outlet straight piping runs, allowing the device to be installed in locations where space is at a premium. The DTK employs a very simple design. A nozzle built into the inlet fitting directs flow into an impeller with imbedded permanent magnets. Impeller rotation is detected by a Hall effect sensor as liquid flow causes the paddle to rotate. The sensor generates a pulse each time a magnet passes. The pulse frequency is directly proportional to flowrate. The pelton wheel design provides a very repeatable and linear output. The DTK is available with a stainless steel body allowing it to be used with a wide variety of aggressive liquids. The simple reliable design of the KOBOLD DTK series makes it an economical choice for OEM applications.



DTK Series OEM Pelton Wheel Flow Sensor

Flow Range LPM Water	Freq. @ Max. Flow	Max. dP (PSI)	Base Model	Fitting	Output
0.05-0.6	21 Hz	14.5	DTK-1206..	..G2.. = G1/4"	..0000 = NPN, Pulse 1.5 m PVC Cable
0.1-1.3	30 Hz	14.5	DTK-1213..	..N2.. = 1/4" NPT	
0.2-2.0	36 Hz	16	DTK-1220..		
0.3-3.5	41 Hz	13	DTK-1235..		
0.3-5.0	47 Hz	13	DTK-1250..		
0.5-7.0	56 Hz	14.5	DTK-1299..		

Specifications

Measuring Principle: Pelton turbine with Hall effect sensor

Accuracy: ±2% of full scale

Linearity: ±1% of full scale

Repeatability: ±0.25% of measured value

Max. Pressure: 430 PSIG

Process Temperature Range: -40 to +176°F

Ambient Temperature Range: -20 to +140°F

Wetted Parts

Body: 304 stainless steel

Orifice & Axle: 316L stainless steel

Impeller: PVDF

O-ring: Viton

Fittings: 1/4" NPT or 1/4" BSP female

Power Requirement: 4-24 VDC @ 5 mA max.

Output: NPN open collector, 20 mA Max.

Protection: NEMA 4X/IP65

DIMENSIONS

