

EQUFLOW**PFAD Disposable Teflon Turbine Flow Sensor**

PFA wetted parts, F.S. ranges of 2 & 20 lpm, Frequency/Analog Output

DESCRIPTION

The PFAD flow sensor has been developed to perform a fast exchange of the flowtube to accommodate hygienic applications in the pharmaceutical industry. It is suitable for clear, opaque, neutral, corrosive and aggressive liquids including fuel.

A field replaceable ultra light-weight turbine assembly follows the fluctuation of flow very accurately and generates a high resolution IR reflected digital output signal.

In either flow controlled or monitoring applications, the PFAD flowsensor can measure flow rates and totalize. Optional elements built into the circuit include a programmable K factor, flow switch and a programmable batch feedback function for pump control.

External optional electronic packages include model 6100 digital to analog (4-20 mA) converter. Also model S601, a professional, solid batch and flow controller that can be used as a monitor and/or totalizer and model 6300 switch module for use with optional built-in flow switch and batch functions.

Features

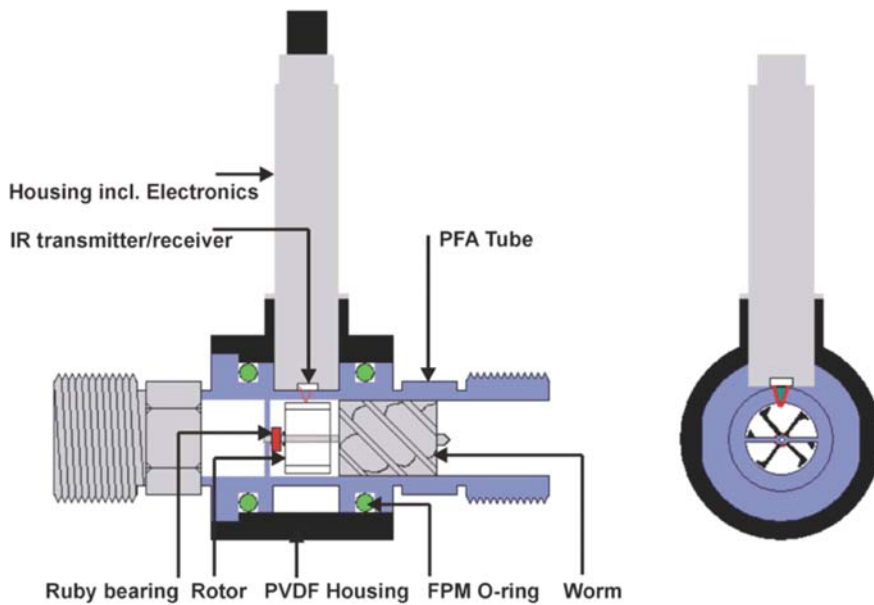
- Turbine flowsensor with high resolution output
- Flow measuring by revolutionary IR turbine reflection.
- PFA / Teflon for high chemical and corrosion resistance
- High accuracy and repeatability
- Suitable for opaque liquids
- PFA meets all the requirements of the US Pharmacopeia Class VI
- BSE/TSE certificate available
- All wetted parts are made of Teflon®PFA with ruby bearing

**SPECIFICATIONS**

Patent No. US5388466

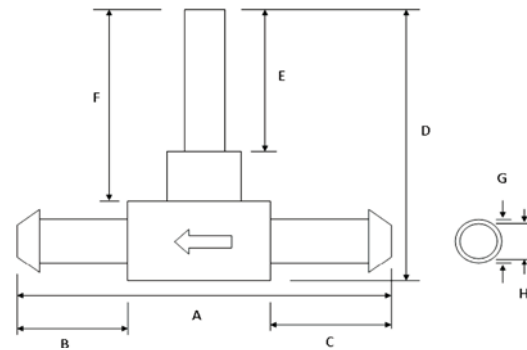
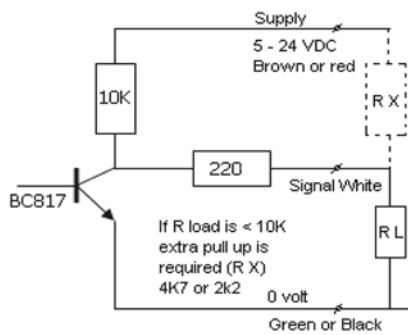
GENERAL

Model	PFAD0045	PFAD0085
Inner diameter in mm	4.5	8.5
Flow range	0.06 - 2 L/min	0.5 - 20 L/min
Accuracy	1% of reading	1% of reading
Repeatability	< 0.15 %	< 0.15 %
Wetted parts	PFA / Ruby	PFA / Ruby
Tube connection thread/hosebarb	1/8 " NPT / 7 mm	1/4 " NPT/ 12 mm
Tube length in mm	52	60
Liquid temperature in °C	-20 to +80	-20 to +80
Max. pressure at 20° C in bar (psi)	20 (284)	15 (213)
Viscosity in cSt.	0.8 - 10	0.8 - 10
K factor (water) in pulse/Liter	110,000	6,100
Power supply	5 - 24 Vdc	5 - 24 Vdc
Output signal	5 - 24 V sq. wave	5 - 24 V sq. wave
Power consumption	34 mA at 5 V	34 mA at 5 V
Electrical lead	PVC 1 meter	PVC 1 meter
Recommended Line filter	100 µm	100 µm



Working Principal:
 A static worm forces the passing fluid to spin. The spinning fluid drives a rotor with reflectors into a frictionless rotation. A high resolution infrared sensor determines the rate of flow by counting the passing reflections. The set up even allows the flow of opaque liquids to be determined accurately. The ultra low mass of the rotor guarantees a quick response to changes in the rate of flow

Wiring:
Power Supply 5-30 Vdc or 5 Vdc (low voltage option)
Output All Sensors: NPN square wave



Dim. (MM)	0045- Barb	0045- NPT	0085- Barb	0085- NPT
A	50.8	51.5	60.3	60.3
B	14.7	15.8	19.2	19.2
C	16.6	15.8	19.2	19.2
D	60.6	60.6	66.8	66.8
E	36.7	36.7	36.7	36.7
F	46.5	45.5	44.4	44.4
G	7.8	9.8	13.2	13.2
H	4.6	4.7	9.0	9.0

ORDERING INFORMATION

ABCDEFGH
PFAD0045TNP01DX

A Model	B Tube Dia./Range	C Wetted Material	D Connection	E Cable Type	F Cable Length	G Power	H Options
PFAD	0045= 4.5 mm/0.1-2 l/min 0085= 8.5 mm/1.0-20 l/min	T=Teflon & Ruby	H= Hose Barb N= NPT	P= PVC	01= Standard 02= 2 meters	DX= 5-30 VDC DL= 5 VDC	Built-in to Housing Electronics PD= Pulse Divider *F= Flow Switch *B= Batch Function *Requires model 6300 switch
Replacement Flow Tubes				Replacement Electronics			
PFAD0045TH000DX- Replacement flow tube, 4.5 mm tube, 7 mm hose barb				PFAD0045PXP01DX- Replacement electronics, 1m cable, 4.5 mm tube			
PFAD0045TN000DX- replacement flow tube, 4.5 mm tube, 1/8" NPT				PFAD0045PXP01DX- Replacement electronics, 1m cable, 8.5 mm tube			
PFAD0085TH000DX- Replacement flow tube, 8.5 mm tube, 12 mm hose barb							
PFAD0085TNH000DX- Replacement flow tube, 8.5 mm tube, 1/4" NPT							

Ask About Our Other Equiflow Products.....

- Standard Flow Sensor
- Stainless Steel Flow Sensor
- Electronic packages for use with Flow Meters
 - 6100 digital to analog (4-20 mA) converter
 - S601 solid batch and flow controller
 - 6300 switching module for flow switch and batch option

