EQUFLOW
PFAD Disposable PFA Turbine Flow Sensor

PFA wetted parts, F.S. ranges of 2, 20 & 40 lpm, Frequency Output

DESCRIPTION

The PFAD flow sensor has been developed to perform a fast exchange of the flowtube to accomodate hygienic applications in the pharmaceutical industry and other applications where a field replaceable sensor is desirable. It is suitable for clear, opaque, neutral, corrosive and aggressive liquids.

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. Two housing styles, "clip" and "click" types are offered.

Aggressive media can be accommodated as the only wetted materials are PFA and a ruby bearing.

K-factors (pulses per liter) are factory determined and provided for each flow tube. Customer specified K-factors can be accommodated and are programmed at the factory.

External optional electronic packages include model PD6300 flow rate indicator and totalizer and PD6310 batch controllers. Rich in features, these products provide complete solutions for monitoring and batching applications.

Clip Type

Click Type

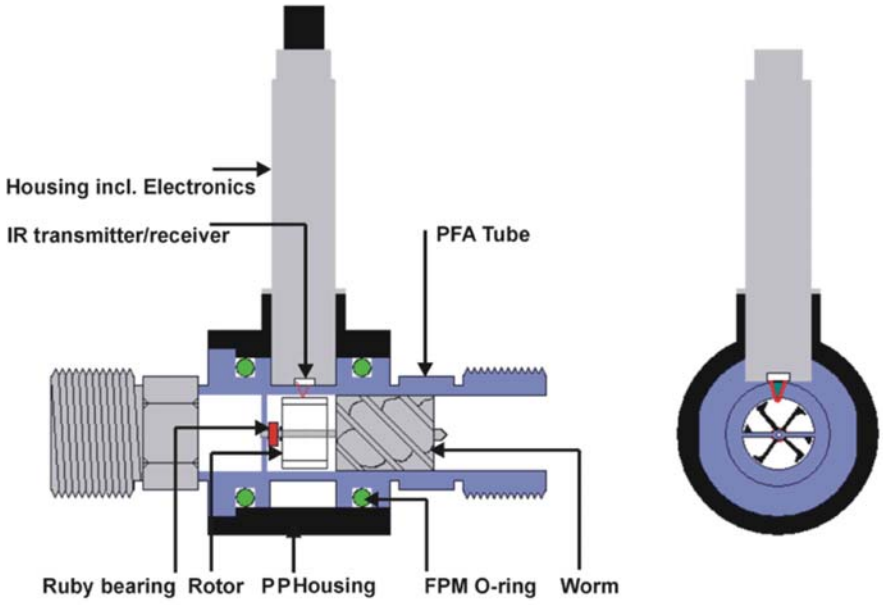
Features
-Turbine flowsensor with high resolution output
-Flow measuring by revolutionary IR turbine reflection.
-PFA for high chemical and corrosion resistance
-High accuracy and repeatability
-Suitable for opaque liquids
-PFA meets all the requirements of the US Pharmacopeia Class VI
-Programmable K-factor (at factory)
-All wetted parts are made of PFA with ruby bearing

SPECIFICATIONS

Patent No. US5388466

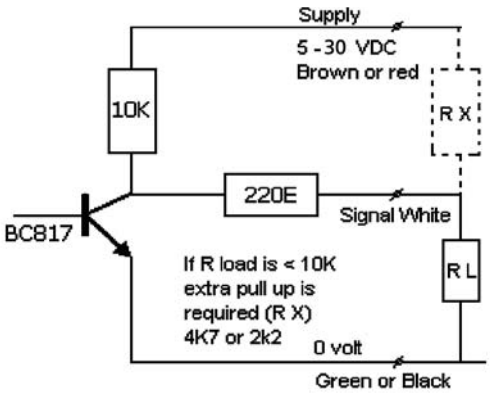
GENERAL

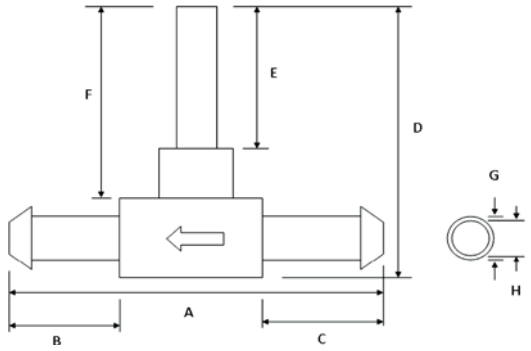
Model	**PFAD0045**	**PFAD0085**	**PFAD0125**
Inner diameter in mm	4.6	9.1	14
Flow range	0.1 - 2 L/min	0.5 - 20 L/min	1.5-40 L/min
Accuracy	1% of reading	1% of reading	1% of reading
Repeatability	< 0.15 %	< 0.15 %	< 0.15 %
Wetted parts	PFA / Ruby	PFA / Ruby	PFA / Ruby
Tube connection thread/hosebarb	1/8 " NPT / 7 mm	¼ " NPT/ 12 mm	1/2" NPT
Tube length in mm	52	60	72
Liquid temperature in °C	-20 to +80	-20 to +80	-20 to +80
Max. pressure at 20° C in bar (psi)	20 (284)	15 (213)	10 (145)
Viscosity in cSt.	0.8 - 10	0.8 - 10	0.8 - 10
K factor (water) in pulse/Liter (nominal)	120,000	5,500	2,000
Power supply	5 - 30 Vdc	5 - 30 Vdc	5 - 30 Vdc
Output signal	5 - 30 V sq. wave	5 - 30 V sq. wave	5 - 30 V sq. wave
Power consumption	34 mA at 5 V	34 mA at 5 V	34 mA at 5 V
Electrical lead	PVC 1 meter	PVC 1 meter	PVC 1 meter
Recommended Line filter	100 µm	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
Output All Sensors: NPN square wave





Dim. (MM)	0045- Barb	0045- NPT	0085- Barb	0085-NPT	0125 NPT
A	50.8	51.5	60.3	60.3	71.5
B	14.7	15.8	19.4	19.2	22.3
C	16.6	15.8	19.1	19.2	26.3
D	60.6	60.6	66.8	66.8	71.2
E	36.7	36.7	36.7	36.7	36.7
F	46.5	46.5	44.4	44.4	45.6
G	7.8	9.8	13.3	13.2	14.0
H	4.6	4.7	9.0	9.0	20.3

ORDERING INFORMATION

ABCDEFGH
PFAD0045TNP01DA

A Model	B Tube Dia./Range	C Wetted Material	D Connection	E Cable Type	F Cable Length	G Version	H Power
PFAD	0045= 4.6 mm/0.1-2 l/min 0085= 9.1 mm/1.0-20 l/min 0125= 14 mm/1.50-40 l/min	T=PFA & Ruby	H= Hose Barb N= NPT	P= PVC	01= 1 meter (Standard) 02= 2 meters	D= Click Housing C= Clip Housing	A= 5-30 VDC

Replacement Flow Tubes (DX-Click, CX-Clip Housing)
PFAD0045TH000**(D,C)**X- Replacement flow tube, 4.6 mm tube, 7 mm hose barb
PFAD0045TN000**(D,C)**X- Replacement flow tube, 4.6 mm tube, 1/8" NPT
PFAD0085TH000**(D,C)**- Replacement flow tube, 9.1 mm tube, 12 mm hose barb
PFAD0085TNH000**(D,C)**X- Replacement flow tube, 9.1 mm tube, 1/4" NPT
PFAD0125TN000**(D,C)**X- Replacement flow tube, 14 mm tube, 1/2" NPT

Replacement Electronics
0045PXP01DA- Click Housing Replacement Electronics, 4.6 mm tube
0085PXP01DA- Click Housing Replacement Electronics, 9.1 mm tube
000PXP01CA-Clip Housing Replacement Electronics, 4.6 & 9.1 mm tubes

Ask About Our Other Equflow Products.....
-Standard Flow Sensor
-Stainless Flow Sensor
-Electronic packages for use with Flow Meters
-PD6300 Flow rate indicator and totalizer
-PD6310 batch controllers

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