PFA Turbine flowmeter

The PFA flow sensor of Equflow has low flow sensing capabilities in a wide range of applications, including corrosive aqueous liquids. An ultra light-weight turbine follows the fluctuation of flow very accurate and generates a high resolution IR reflected digital output signal.
This flowmeter offers an accurate, economical and flexible design to meet customer requirements.
In either flow controlled or monitoring applications, the PFA flowsensor can measure flow rates and totalize.

Characteristics:
High accurate Turbine Flowsensor for neutral and corrosive liquids with low viscosity
Measuring by revolutionary IR turbine reflection, proportional to the flow.
High chemical resistance
High accuracy and repeatability ("swiss made")
Suitable for opaque liquids
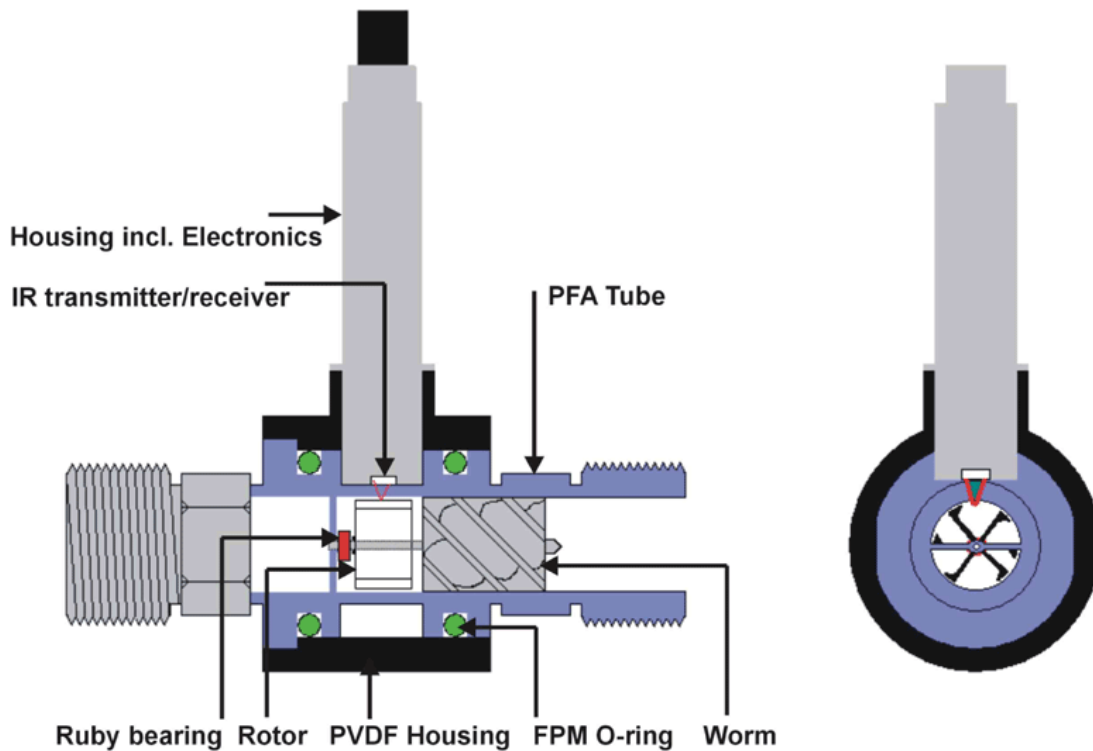Programmable pulse output

All wetted parts are made of PFA with ruby bearing.
The 0045 and 0085 flow tubes are available with threaded and hose barb connections.

Type	0045	0085	0125
Inner diameter in mm	4,5	8,5	12,5
Flow range	0,06 - 2 L/min	1 - 20 L/min	2 - 38 L/min
Accuracy	appr. 1% of reading	appr. 2% of reading	appr. 3% of reading
Repeatability	< 0,15 %	< 0,15 %	< 0,15 %
Materials	PVDF / PFA / Ruby	PVDF / PFA / Ruby	PVDF / PFA / Ruby
Tube connection in	⅛ "NPT	¼ "NPT	½ "BSP
Tube connection in mm hose	7 hose barb	12 hose barb	not available
Tube dim. incl. housing in mm	L. 52, Ø 17	L. 60, Ø 22	L72, Ø 26
Liquid temperature in °C	-20 tot +80	-20 tot +80	-20 tot +80
Max. pressure at 20° C in MPa	2 (20 Bar)	1,5 (15 Bar)	1 (10 Bar)
Viscosity in cSt.	0,8 - 10	0,8 - 10	0,8 - 10
Resolution in microL/puls	9	158	488
K factor (water) in pulse/Litre	110.000	6.350	2.050
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

Other Specs on request

Additional models: Click version with removable housing for easy exchange of the tube (hygienic)
Stainless steel version

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Housing incl. Electronics

IR transmitter/receiver

PFA Tube

Ruby bearing Rotor PVDF Housing FPM O-ring Worm

Working principal:

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

Standard

Disposable

Stainless Steel

Electronics