FLOWSENSOR BAMOFLU 100



- **Sensor body: PPH - PVDF - S.Steel**
- **Flow velocity range: 0,8 to 10 m/s**
- **Supply votage: 24 Vcc**
- **No pressure drop installation with:**
  T-fittings PVC - PPH - PVDF
  Weld-On adaptor in Stainless Steel
  Pipe saddle
- **Output: Square pulse**
- **For fluids without particle**
- **DN 15 to DN 600**

PRINCIPE

The flow discharge induce the rotation of the five bladed rotor with a permanent magnet integrated into each blade. The magnetic field variation produce pulses. The frequency is directly proportional to the flow velocity. Our sensor deliver about 38 to 45 Hz/m/s following the installation. This measure proceeding ensures excellent low flow velocity charactéristics (the minimum flow velocity is 0,8 m/s). The flow should not countain particles and the viscosity might be understood between 0,5 to 20 cts, otherwise a calibration on site will be suitable.

INSTALLATION

Flow sensor and installation fittings are available for pipes from DN 15 to DN 600, S. Steel 316 L, PVC, PPH and PVDF.
T-Fittings are available from DN 15 to DN 50, Pipes saddle for DN 40 to DN 300 and weld-on adaptors for DN 50 to DN 600. The sensor can work in any positions, in both directions.
This system requires to respect lenghts of straight pipes upstream and downstream to obtain a flow without perturbation.

TECHNICAL SPECIFICATION

Output frequency	: 38 to 45 Hz following the installation. Square signal 5 to 24 Vcc
Supply	: 24 Vcc - 30 mA regulate Sensor protect against polarity reverse
Flow velocity range	: 0,8 to 10 m/s
Accuracy	: +/- 1 % of calibrated flow rate range
Repeatability	: +/- 0,5 %
linearity	: +/- 1 %
Max. pressure	: 10 bar/ 20°C (PPH/PVDF) 25 bar (S. Stainless 316) (Fixation nut S. Steel)
Temperature max	: 100°C PPH / PVDF / S. Steel 316
Body sensor	: PPH - PVDF - S. Steel 316
Rotor	: 5 bladed E-CTFE (Halar)
Rotor bearings	: Ceramic (AL2O3)
0-Ring	: FPM (Standard) - EPDM (on request)
Electrical connections	: 3-pole DIN 43650 IP 65

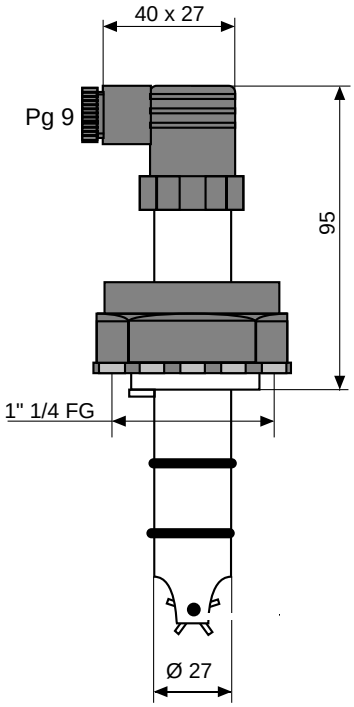


Ratemeter / Totaliser BIF 6040

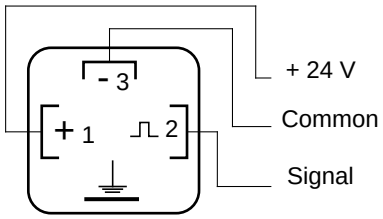
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ORDERING CODES

Code	Ref	Body
780 125	BAMOFLU 100 PPH	PPH
780 150	BAMOFLU 100 PVDF	PVDF
780 175	BAMOFLU 100 INOX	S.St 316



ELECTRICAL CONNECTION



BAMOFLU

PANEL MOUNTING INSTRUMENTATION

All our electronic are delivered calibrated with the parameters communicated on your order (Flow maxi requires and internal diameter). About programmable equipment, configuration is saved on a not volatile intern memory type EEPROM.

RATEMETER / TOTALISER BIF 6040

The BIF 6040 allows an indication by red LEDs for the flow-rate, the totalizer in any volumetric units. Programming the indicator can be done on location without any tools. The flowsensor supply 24 Vcc is provide from this equipment.
Housing: Panel monting DIN 48 x 96



BCP 48

PROGRAMMABLE COUNTER BCP 48

BCP 48 allows a simple counting or a programmation in any units. Programming the indicator can be done on location without any tools. The flowsensor supply 12 Vcc is provided from this equipment.
Housing: Panel mounting DIn 45 x45

TRANSMITTER BAMOTOP 281

This blind converter receives the frequency signal from the BAMOFLU and convertes it in an analogical signal 4-20 mA. This transmitter is delivered calibrated by our technical service with an very high resolution frequency generator. The flowsensor supply 12 Vcc is provided from this equipment.
Housing: rail box DIN 35
Supply: 230 V / 50-60 Hz standard



BAMOTOP 281

780

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SENSOR INSTALLATION

To obtain a reliable measure, it is essential to respect the following conditions:

- Pipe has to be always full.
- It mustn't have any alternation liquid - gas
- Flow velocity should be includes between 0,8 and 10 m/s

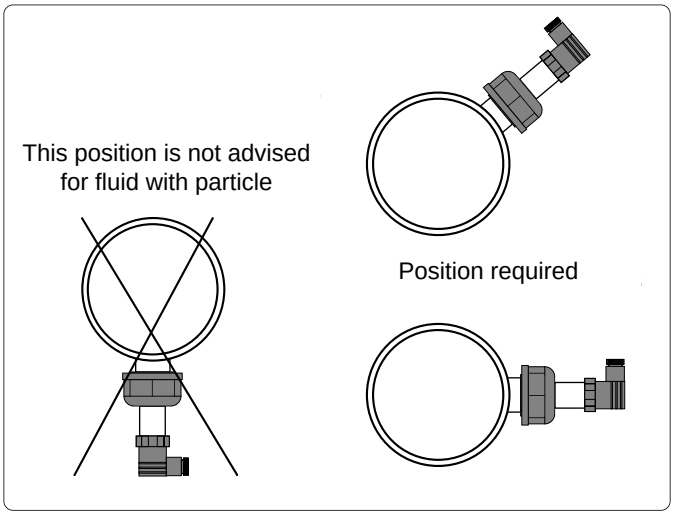
STRAIGHT LENGHTS REQUIRES

Adjustment valve	upstream 50 (25) x d — downstream 5 (3) x d
2 elbows at 90° in the same draft	25 (15) x d — 5 (3) x d
2 elbows in 2 different drafts	40 (20) x d — 5 (3) x d
simple elbow or derivation Te	20 (10) x d — 5 (3) x d
Wide mounth or reduction	15 (10) x d — 5 (3) x d
Direct line	12 (10) x d — 5 (3) x d

(lenght following norm NF 10-102)

MOUNTING POSITION

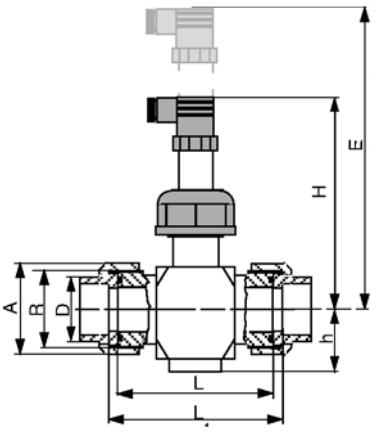
It is important to respect straight lenghts upstream and downstream to avoid perturbation. Sensor can be mounting in almost all the position. However, it is required to install the sensor with a light inclination as it is indicated on the following scheme.
In evry case, avoid bubbles and particles.



T-FITTINGS

T-Fitting PVC, PPH, PVDF ou S. Steel are delivered complete for pipes DN 15 to DN 50 with 1/2 socket unions and FPM O Rings.
(Flange connection or socket ends for solvent welding /on request).
For diameters DN 15 to DN 300, we can supply 250 mm long coupling sleeve with flanges,
(all materials on request).

Connection: DN 15 to DN 50
Max. pressure: 10 bar / 20 Bar
Max. temperature: Following sensor and material.
1/2 union: Female solvent sockets - PVC
Female welding sockets PPH - PVDF



DN	D	R	A	L	L1	h	H*	E*	Ordering code		
mm									PVC	PPH	PVDF
15	20	1"	40.5	120	124	37	168	243	780 205	780 240	780 260
20	25	1" 1/4	50	120	126	35	170	245	780 207	780 242	780 262
25	32	1" 1/2	57.5	120	128	32	173	248	780 209	780 244	780 264
32	40	2"	71.5	120	128	48	177	252	780 211	780 246	780 266
40	50	2" 1/4	79	120	124	42	181	256	780 213	780 248	780 268
50	63	2" 3/4	98	120**	124**	49	180	255	780 215	780 250	780 270

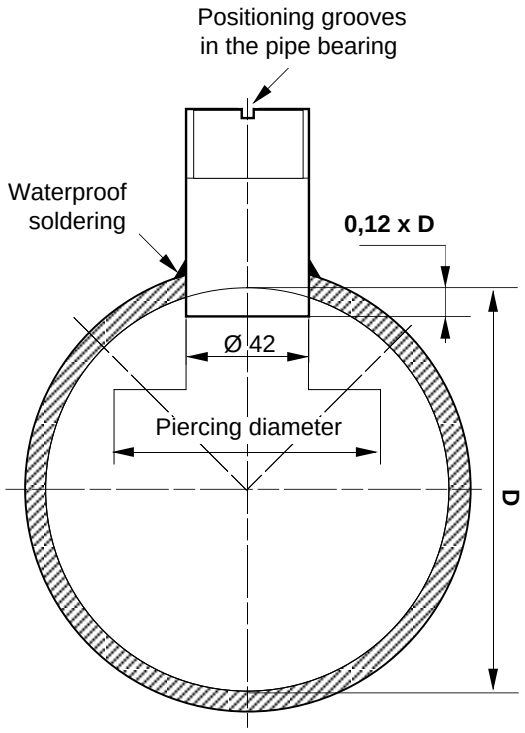
*Add 60 mn for BAMOFLU
** Size not valid for PVDF support

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PIPES SADDLE

Only for mounting on plastic pipes (PVC, PE or PPH), we propose pipes saddles in PPH with O-ring NRB standard (EPDM or FPM on request). Screew in galvanized steel. Plastic pipes are considered as PN 10 if any other specification. The pipes saddles are delivered with special union to adapt BAMOFLU on threated socket. The totality of the installation have to respect the mounting position (0,12 xD) and the direction for use give all the details for installation.

Connectio: DN 40 to DN 300
Pressure max: 10 bar/ 20``°C
Temperature max: 55°C



DN	Ø d	L	H*	E*	Ref.	Code
40	50	104	236	346	COL 50	780 901
50	63	116	240	350	COL 63	780 906
65	75	134	244	354	COL 75	780 911
80	90	152	249	359	COL 90	780 916
100	110	176	255	365	COL 110	780 921
125	125	190	260	370	COL 125	780 926
125	140	214	265	375	COL 140	780 931
150	160	238	272	382	COL 160	780 936
200	200	300	288	398	COL 200	780 941
200	225	333	297	407	COL 225	780 943
225	250	318	337	447	COL 250	780 946
300	315	380	355	465	COL 315	780 951

*** For BAMOFLU 100 take away 60 mm.**

WELD-ON ADAPTATOR BF 150

Available for pipes DN 50 minimum S.Steel 316 L, PVC, PPH or PVDF, it allows sensor mounting on direct flow.
For mounting with Weld-on, It is important to respect imperatively the distance between the intern generator and weld-on base. This standard size is conform with the norm ISO 7145-1982 if the distance 0,12 x D is respected.

Ref.	Ordering code	Designation
BF 150-I	780 200	Weld-on adaptator in Stainless Steel
BF 150-PVC	780 201	Weld-on adaptator in PVC
BF 150-PPH	780 202	Weld-on adaptator in PPH
BF 150-PVDF	780 203	Weld-on adaptator in PVDF

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