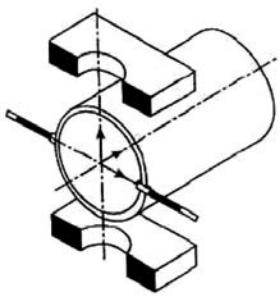
PM Series Mag Meter



According to Faraday electromagnetism principte, the induced tension, in a conductor moving in a magnetic field, is directly proportional to the conductor speed.

FEATURES

- **Competitive on the Market**
- **6 Models**
- **From 0.25 to 250 L/min**
- **Pulse Output, Calibrated Range**
- **Stainless Steel 316 L Electrodes**
- **Easy Fitting, Small Instrument**
- **Independent of Fluid Density, Temperature or Pressure**
- **Pressure Loss Insignificant**

GENERAL DATA

SPECIFICATION	DESCRIPTION
Power supply	24V DC / + 3V DC
Consumption	20 mA / 0.65 W
Protection	Against polarity inversion
Output signal	NPN Type
Status indicators	Red LED = powered Green LED = output (pulses)
Wiring:	DIN 43650-A Plug
Process connection	½", ¾", 1" or ¼ " (vs. model)
Nominal diameter	8 mm, 14 mm, 18 mm, 25 mm (vs. model)
Pipe material	PVDF, red color excepted 1 ¼ " model, POM (Delrin) blue color
Tube and electrodes	Stainless steel 316 L
Mass	250...090 g
Minimal conductivity	20
Maximal pressure	10 bar /20°C - 8 bar /40°C - 6 bar 160°C
Operating temperature	-10°C to +60°C

ACCURACY / PRINCIPLE

Those flow meters are calibrated on a test bench with a precision better than + 5 pulses /1000. Tests are carrying out at room temperature with water.

In an electromagnetic flow meter, the fluid section is in a magnetic field originated by toroidal spools. Electrodes, fitted at 90° from the fluid movement and in contact with the conductive liquid measure the generated potential. This potential is proportional to the speed flow (Faraday law) and to the flow rate if the pipe section is constant.

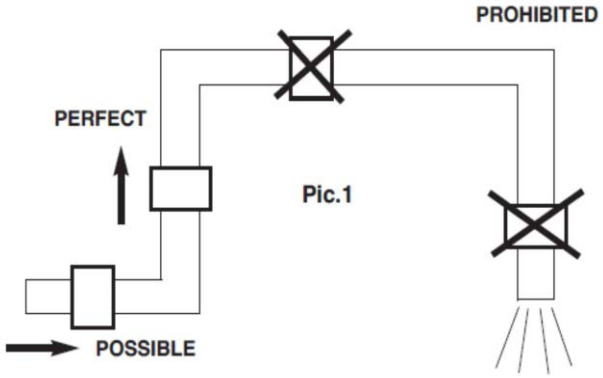
CE

CODE NUMBERS AND REFERENCES

Power supply 24 V DC			Pulse output			
POM pipe	PVDF pipe	Range L/min	Ø	Hz/Limin	Range Hz	Pulse/ L
-	775 301	0,25 to 5	½"	16,6667	1,6 to 83	1000
-	775 302	1 to 20	½"	13,3333	13 to 267	800
-	775 303	2.5 to 50	¾"	2,6666	5 to 134	160
-	775 304	5 to 100	1"	2,6666	13 to 267	160
-	775 305	10 to 150	1"	1,3333	13 to 200	80
775 006	-	12.5 to 250	1¼"	1,6666	19 to 383	100

CAUTION

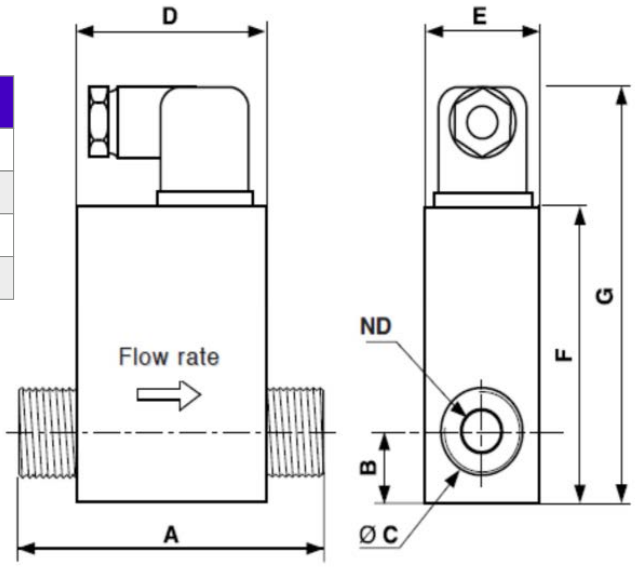
The mounting on site of a PM Series should strictly follow these recommendations.
The 2 flow meter electrodes have to be imperatively in a permanent contact with the fluid.
According to Pic. 1 here under, the upward and downward lengths of the pipe (respectively upstream and downstream) should be as long as possible; the pipe diameter should corresponds to the connection diameter.
Avoid elbows, valves and obstruction close to the flow meter.
Non respect of those conditions may originate lowest performance.
It is not convenient to install a PM Series close to a heating device and/or a powerful magnetic field.



Pic.1

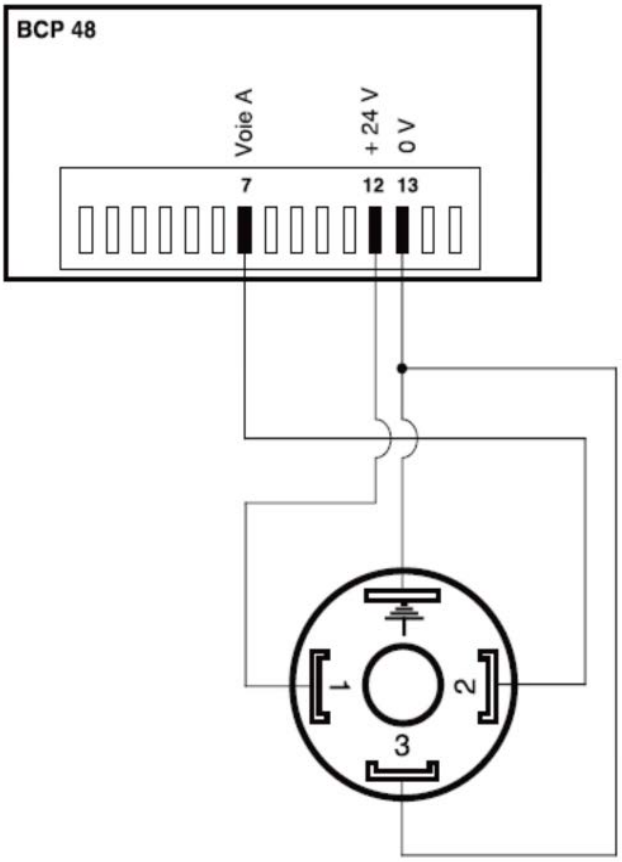
DIMENSIONS

Model	A	B	Ø A	D	E	F	G	ND
½"	84.5	18,5	½" MG	80	36	88	100	8
¾"	90	20	¾" MG	80	36	88	100	14
1"	90	22	1" MG	80	36	88	100	18
1¼"	115	36.5	1¼" MG	64	60	130	155	25

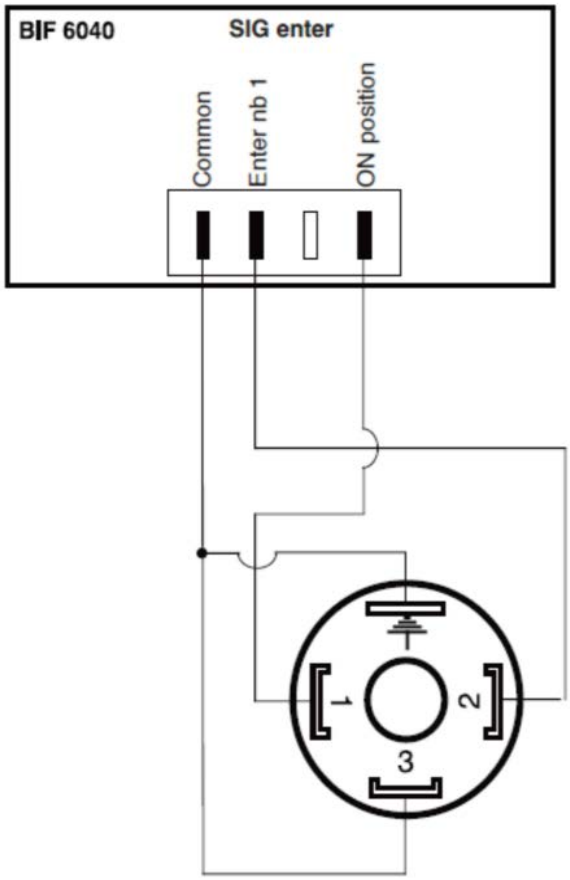


ASSOCIATED Display and/or Totalizer

Wiring to BCP 48 device



Wiring to device



Wiring DIN 43650 Plug

Pin 1 : Power supply +24 VDC
Pin 2 : Output collector opto-isolated
Pin 3 : Output transmitter opto-isolated
Pin 4 : 0 Vdc