

# USER MANUAL

## — PM SERIES —

### Electromagnetic Flowmeter

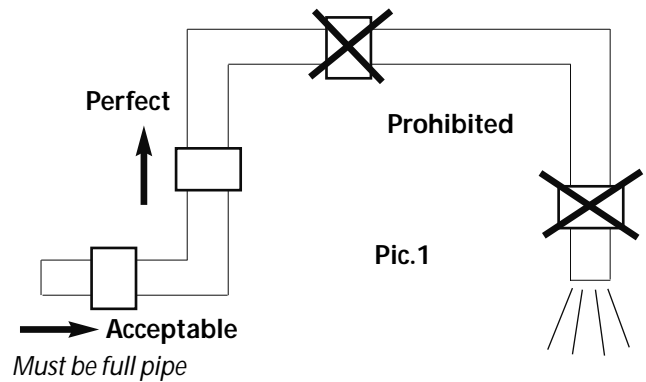


Read the user's manual carefully before starting to use the unit or software.  
Producer reserves the right to implement changes without prior notice.

## 1. CAUTION

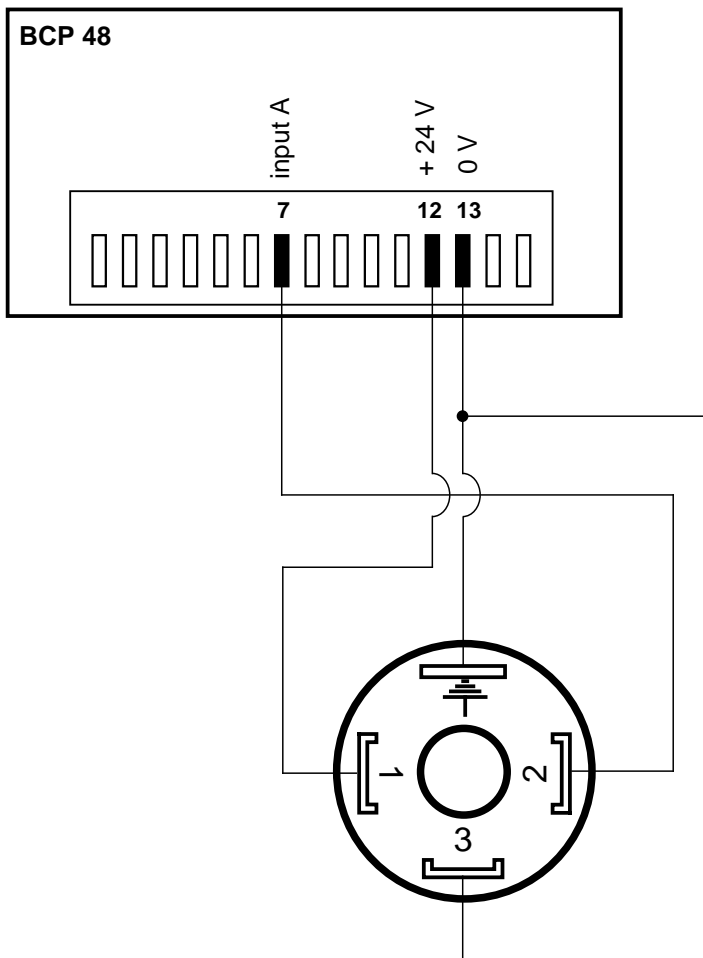
The mounting on site of a PM SERIES should strictly follow these recommendations.

In order for the PM Series flow meter to function properly the electrodes must be in contact with the fluid. According to pic. 1, the upward and downward lengths of the pipe (respectively upstream and downstream) should be as long as possible; the pipe diameter should correspond to the connection diameter. Avoid elbows, valves and obstructions close to the flow meter. Do Not install the PM SERIES close to a heating device and/or a powerful magnetic field.



## 2. WIRING WITH ELECTRONIC DEVICES

### Wiring to BCP 48 device

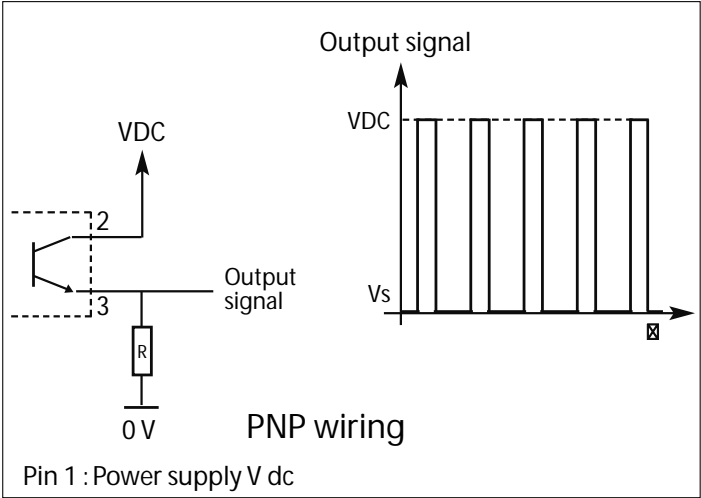
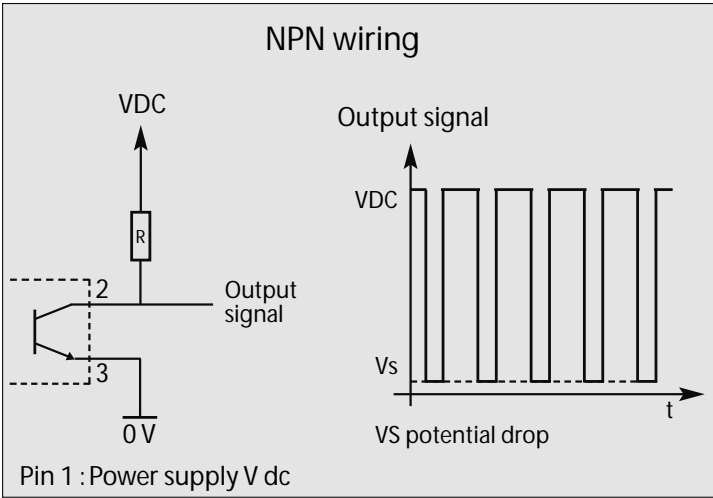


#### Wiring DIN 43650 plug

- Pin 1 : Power supply +24 V dc
- Pin 2 : Output collector opto-isolated
- Pin 3 : Output transmitter opto-isolated
- Pin Earth : 0 V dc
- Correct load resistance integrated in the electronic device

### 3. WIRING TO PLC OR SPECIFIC DEVICES

Never use the instrument without a load resistance. Check the load resistance "R" before connecting the power.

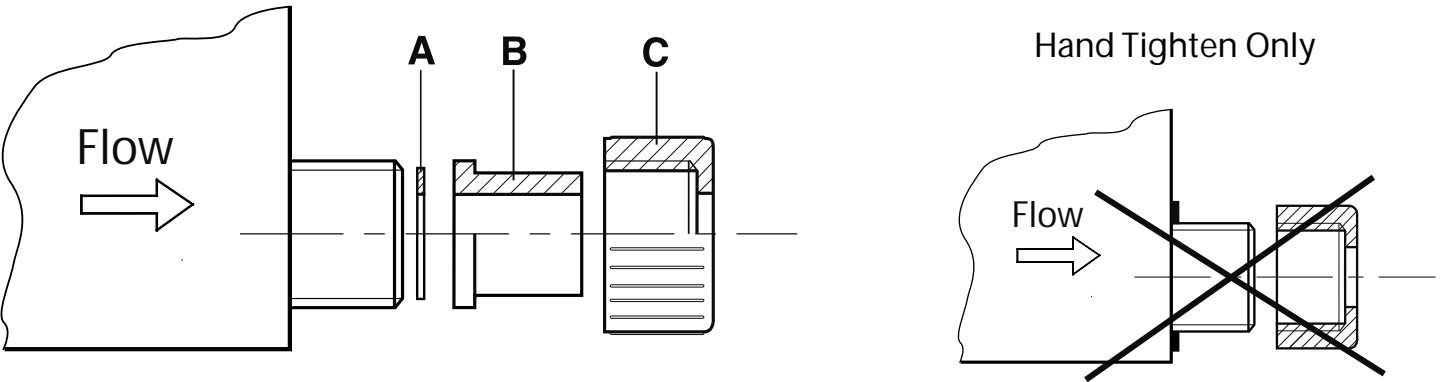


**Standard model 24 V DC power supply :** Resistance value R for V dc = 24 V **R = 2000Ω**  
**Transistor features :** Type NPN – V DC max. = 28 V – I max. = 50 mA  
**Diode and poly-switch protected**

### 4. PROCESS CONNECTIONS

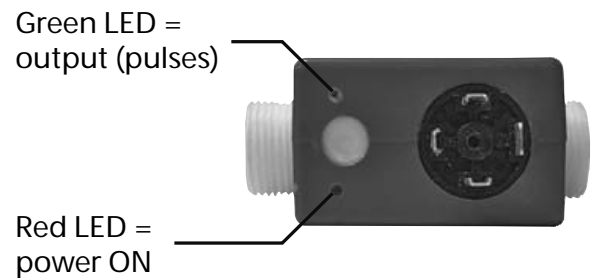
A water tightness connection may be realized with the 3 components A, B and C.  
 (These components are not delivered with the PM Series)

The material of the seal "A" may be chemically compatible with the fluid! .

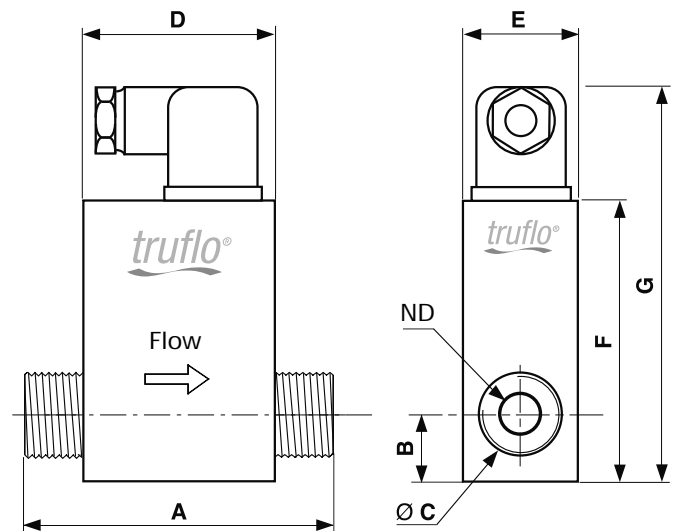


## 5. TECHNICAL FEATURES

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"
Nominal diameter	½", ¾", 1"
Pipe material	PVDF, Red color
Tube and electrodes	Stainless steel 316 L
Mass	250...090 g
Minimal conductivity	20 µS
Maximal pressure	10 bar /20°C - 8 bar /40°C - 6 bar 160°C
Operating temperature	-10°C to +60°C



Size	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



## 6. 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