

SOLENOID DOSING PUMP— series BT**TECHNICAL FEATURES**

- Maximum Flow Rate: up to 80 l/h
- Maximum Pressure: up to 20 bar
- Power Supply Range: 230/240Vac - 50/60Hz (*)
- Stroke Rate:
 - 160 strokes/min (1-20L)
 - 180 strokes/min (30-50-80L)
- Pump Head:
 - PP (*) – 1-15L (15 bar)
 - PVC (*) – 30-50-80L and 20 bar
- Air Bleed: Manual (*) – up to 15 l/h and 15 bar
- Valves:
 - FPM (*) up to 30L
 - Ceramic ball – 50-80L
- O-Rings: FPM (*)
- Diaphragm: PTFE
- External Casing: Aluminum protected with two coats of epoxy paint – IP65 protection
- Installation Kit: Included



(*) Upon request: different configurations.

BT is a wall mounted solenoid dosing pump.

Standard voltage that the pump can receive is 230/240Vac at 50/60Hz, upon request: 110V.

The standard 1-20L BT pump has a PP pump head with FPM lip valves and FPM o-rings.

While 30L and 20 Bar BT pumps have PVC pump head with FPM lip valves and FPM o-rings.

50-80L BT pumps have PVC pump head with ceramic ball valves and FPM o-rings.

Upon request:

- PP pump head with EPDM or NBR lip valves and o-rings.
- PP pump head with ceramic ball valves and FPM, EPDM or NBR o-rings.
- PVDF pump head with ceramic ball valves and FPM or TFE/P o-rings.

Standard pumps, up to 15 l/h and up to 15 bar, are equipped with manual air bleed pump

head, upon request: automatic air bleed PVDF pump head with ceramic ball valves and FPM or TFE/P o-rings.



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PP pump head 1-15L



PP pump head 20L



PVC pump head 20 Bar



PVC 30-50-80L head



PVDF pump head



Automatic Air Bleed head



Plexiglas pump head



oversized connections head

Standard pumps are supplied with a standard PP-FPM installation kit, composed of 2m discharge polyethylene tube (4x6mm), 2m suction + 2m bleeding PVC crystal tube (4x6mm), standard PP-FPM foot filter, PP-FPM injection valve. Upon request: EPDM, NBR or TFE/P version, PVDF accessories, PVDF tube.



PP standard installation



PVDF installation kit

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BT TYPES

- 1- **BT MA/AD:** Analogic dosing pump with manual flow rate adjustment, double regulation scale 2÷20% - 2÷100%, with Level control setting (supplied without probe).
- 2- **BT MA/M:** Digital dosing pump with manual flow rate adjustment, 0÷100%, with Level control setting (supplied without probe), flow sensor input.
- 3- **BT VFT:** Volumetric dosing pump having the following modes:
 - a- Manual function.
 - b- 1xn function: at each received signal from the water meter corresponds “n” injections of the pump.
 - c- 1xn(M) function: at each received signal from the water meter corresponds “n” injections of the pump, during the injections, the following pulses from the meter are memorized and the pump modifies “n” in proportional to the pulses received from the meter during the dosing).
 - d- 1:n function: at each received signal from the water meter corresponds dosing product injection. With Level control setting (supplied without probe).
- 4- **BT MF/M:** Multifunction dosing pump. Operating functions are:
 - a- Manual function.
 - b- 1xn function: at each received signal from the water meter corresponds “n” injections of the pump.
 - c- 1xn(M) function: at each received signal from the water meter corresponds “n” injections of the pump, during the injections, the following pulses from the meter are memorized and the pump modifies “n” in proportional to the pulses received from the meter during the dosing.
 - d- 1:n function: at each received signal from the water meter corresponds dosing product injection.
 - e- ppm function: the dosing pump makes the necessary calculations and dose the exact amount of ppm (part per million) set during the programming phase.
 - f- mA function: the pump doses in proportionally to an external current signal (0/4-20mA).Additional features are: Flow Alarm, Relay Output, clock, timer.
- 5- **BT pH-Rx-Cl/M:** Integrated Instrumental dosing pump for control and regulation of pH, Rx and free Chlorine. ON/OFF proportional operating modes, 4÷20mA output, relay alarm output,

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manual/automatic temperature compensation 0÷100°C, proximity switch input, level input.

Measuring range: 0÷14 pH; -1000÷+1400 mV; 0÷2, 20, 200 ppm.

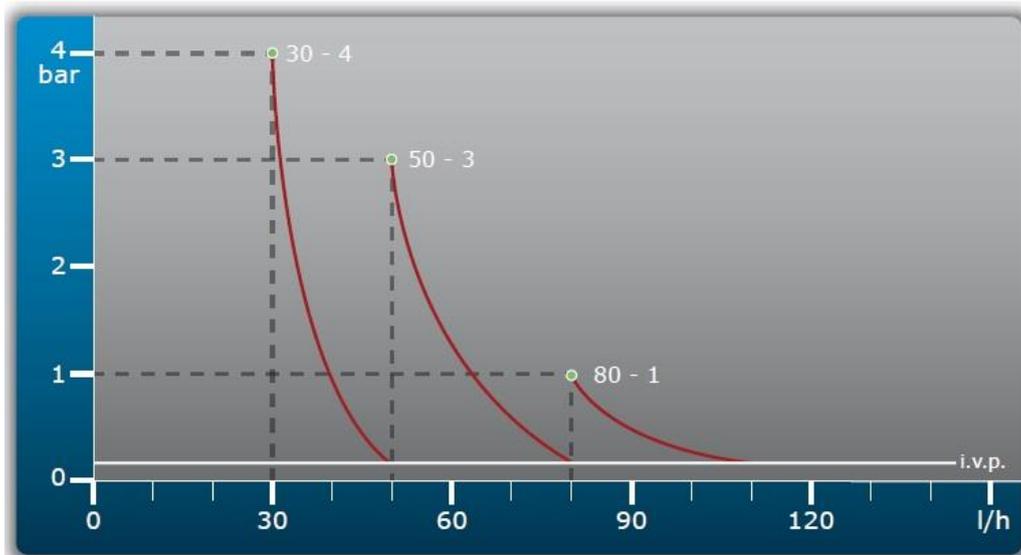
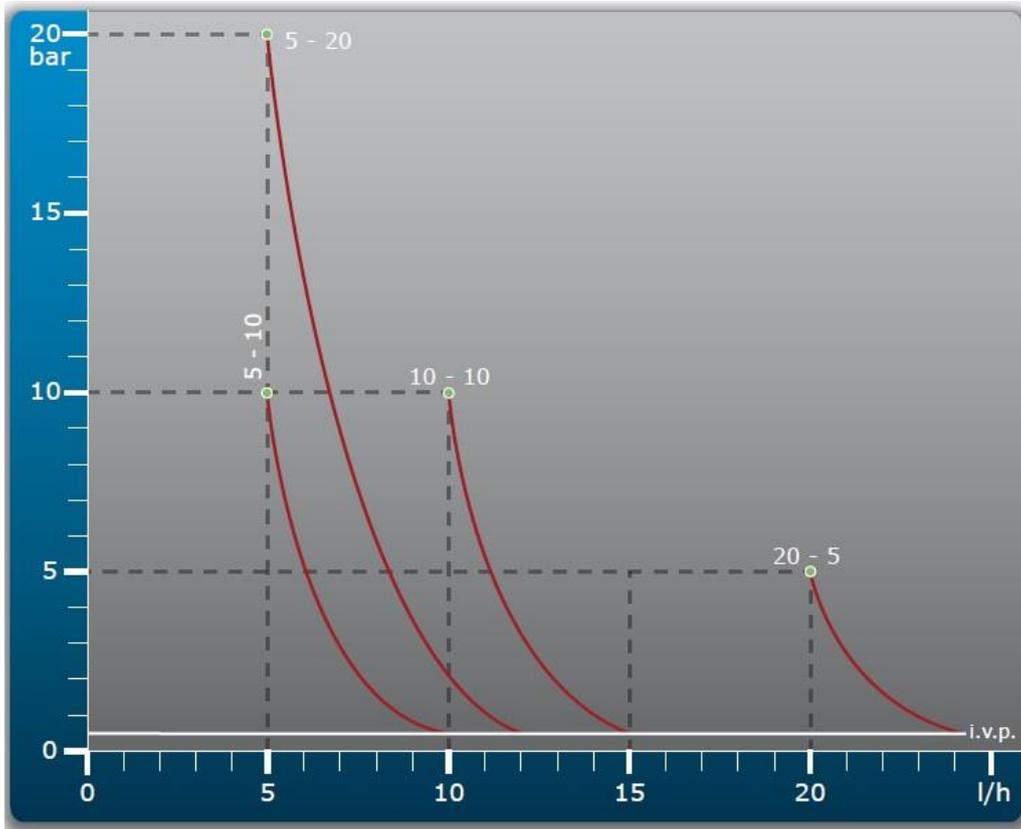
INPUTS / OUTPUTS

BT	MA/AD	MA/M	VFT	MF/M	pH-Rx-CI/M
Analogic Manual Mode	x	-	-	-	-
Digital Manual Mode	-	x	x	x	x
Level input	x	x	x	x	x
Flow Sensor input	-	x	-	x	-
Adjustible 0/4-20mA input	-	-	-	x	-
Reed Water Meter input	-	-	x	x	-
pH input	-	-	-	-	x
Rx input	-	-	-	-	x
CI input	-	-	-	-	x
CD input	-	-	-	-	-
PT100 input	-	-	-	-	x
Relay output	-	-	-	x	x
mA output	-	-	-	-	x
Proximity Switch input	-	-	-	-	x

Flow rate Portata	Pressure Pressione	Max imp./min.	Output for stroke Dosaggio per impulsi	Stroke Corsa	Suction height Altezza aspirazione	Standard power supply Alim. elettr. standard	Power comp. Potenza ass.	Current comp. Corrente ass.	Net weight Peso netto
l/h - GPH	Bar - PSI		ml	mm	m	Volts - Hz	Watts	Ampere	Kg
5 - 1,32	10 - 145	160	0,52	1,00	2,0	230 V 50-60 Hz	60	0,26	4,2
5 - 1,32	20 - 290		0,52	1,50			110	0,48	5,2
10 - 2,64	10 - 145		1,04	1,10			90	0,39	5,4
20 - 5,26	5 - 72		2,08	2,20			110	0,48	5,7
30 - 7,92	4 - 58	180	2,80	1,40	1,5		124	0,54	5,7
50 - 13,20	3 - 43		4,60	1,70	1,5		124	0,54	5,7
80 - 21,12	1 - 14		7,40	2,40	1,5		124	0,54	5,7

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CURVES FLOW RATE VS. PRESSURE



We reserve the right to make changes at any time without notice to colors, materials, specifications and models

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CODE

Model	Type	Version	Liquidend
PBT = BT	04 = VFT/MBB	037 = 0510 (230V)	01 = PP-FPM
	17 = MF/M	087 = 0510 (120V)	05 = PP-EPDM
	18 = MA/M		
	23 = MA/AD	198 = 0520 (230V)	V8 = PVDF-FPM, PP kit
	27 = pH-Rx-Cl/M	204 = 0520 (120V)	5E = PVDF-FPM, PVDF kit
			4I = PVDF-TFE/P, PVDF kit
		043 = 1010 (230V)	5P = PVDF-FPM, PVDF kit & tube
		092 = 1010 (120V)	
			8B = PVDF-FPM automatic air bleed, PP kit
		046 = 2005 (230V)	8R = PVDF-FPM automatic air bleed, PVDF kit
		096 = 2005 (120V)	5Q = PVDF-TFE/P automatic air bleed, PVDF kit
		184 = 3004 (230V)	
		205 = 3004 (120V)	
		190 = 5003 (230V)	
		206 = 5003 (120V)	
	193 = 8001 (230V)		
	207 = 8001 (120V)		

TYPICAL INSTALLATION

- A- Main Pipeline.
- B- Injection Valve: PP or PVDF body – FPM, EPDM, or TFE/P seals.
- C- Backpressure Valve: PVC body.
- D- Pressure Gauge.
- E- Relief Valve: PVC body.
- F- Dosing Pump
- G- Tank: in Polyethylene, from 60L and on, Open Safety Bund and/or Tank Support upon request.
- H- Foot Filter: PP or PVDF body – FPM, EPDM or TFE/P seals.
- I- Floating Level Switch.



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ACCESSORIES

FLOATING LEVEL SWITCH:

Floating Level Switch complete with plastic support to be linked to heavy foot filter. The foot filter weight allows to adjust the floating switch to the desired height inside the chemical tank. You can use this with all models except for MA/AD.



SUCTION LANCE:

Adjustable height PVC Suction Lance with foot valve/filter and float switch. From 35 to 130cm with 4x6 connections and 100cm with 10x14 connections. You can use this with all models except for MA/AD.



EXTRACTABLE INJECTION LANCE

The Injection Lance allows the injection of the additive to a maximum distance of 20cm from the attachment point on the main pipe, 1/2" Gm connections, for 4x6 tube, maximum flow rate 20 l/h, maximum pressure 10 bar.



FLOW SENSOR

Flow Sensor with PVC or PVDF body, PTFE stir bar, minimum flow 4 l/h, maximum flow 20 l/h. You can use this for only MF/M model.



RELIEF VALVE

Threaded Relief Valve with PVC or PVDF body, PTFE membrane. Manual opening backpressure adjustment.



SUPPORT BRACKET

Stainless Steel or PE Support Brackets for wall or foot mounting.



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WATER METER

Threaded or Flanged Water Meters, connections from ½" and more, for cold or warm water. You can use this with only VFT/MBB and MF/M models.



DOUBLE CONNECTING CALBE

It allows to connect one water meter with reed contact with two volumetric pumps. You can choose between 2m + 2m, 5m + 5m and 15m + 15m. You can use this with only VFT/MBB and MF/M models.



pH & Rx ELECTRODES

pH and Rx Electrodes, plastic or glass body, with cable or with screw connector, measuring ranges: pH 0÷14pH; Rx ±1000mV. Maximum pressure 6 bar for plastic electrodes and up to 16 bar for glass electrode, maximum temperature 60°C for plastic electrodes and up to 130°C bar for glass electrode. You can use this with only pH-Rx-CI/M and pH-Rx/MBB models.



ACCESSORIES FOR ELECTRODES

Accessories to use with pH and Rx electrodes, such as:

Buffer Solutions: pH 4; pH 7; pH 9; Rx 475mV, Rx 475mV.

Coaxial Cables: from 0.5m to 15m.

Inline Electrode Holders with PP, PVC or Stainless Steel body.

Plexiglas/PP Electrode Holders.

Clamp Saddles for electrode holders.

Submersible Electrodes Holders: from 0.45m to 3m.



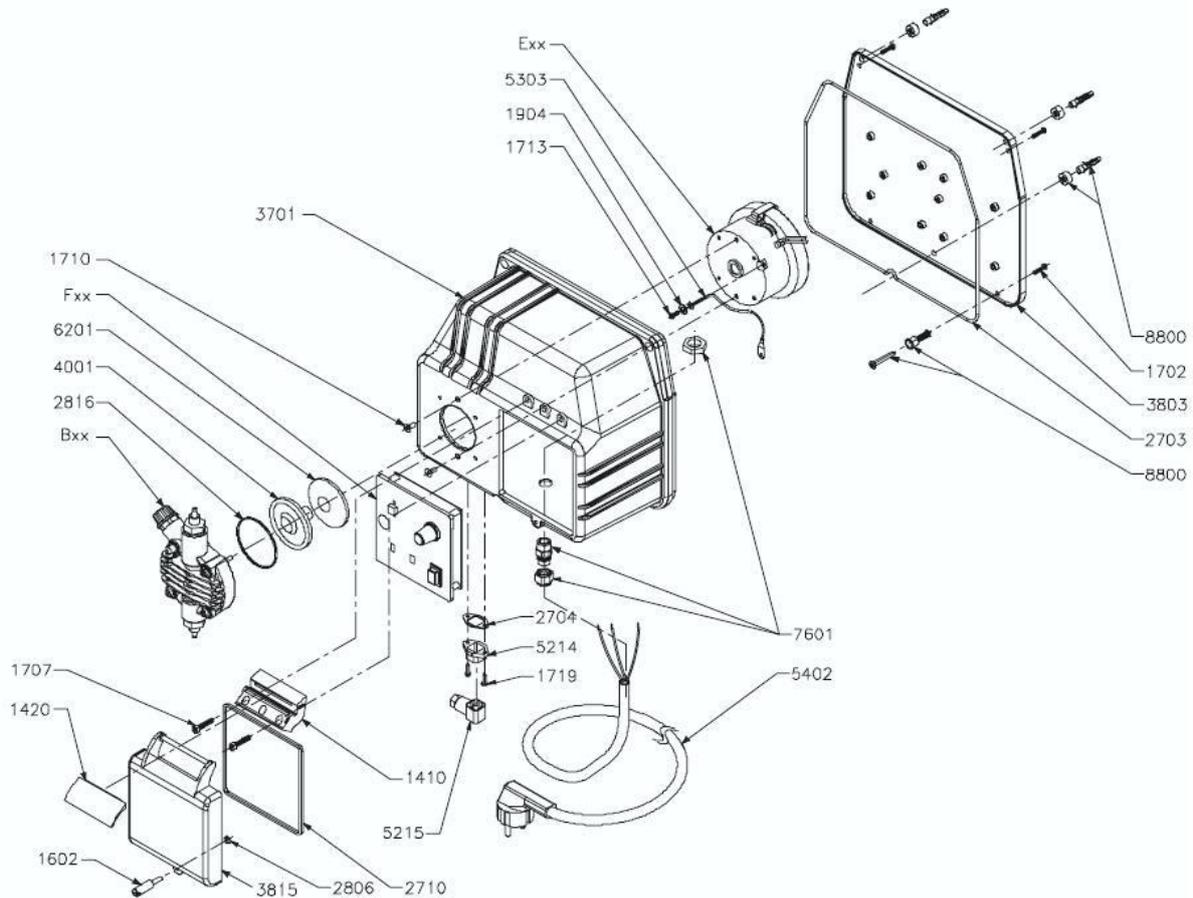
AMPEROMETRIC PROBES

Amperometric Probes for Chlorine, Hydrogen Peroxide, Peracetic Acid, Chlorine Dioxide, Ozone and else. You can use this with only pH-Rx-CI/M model.

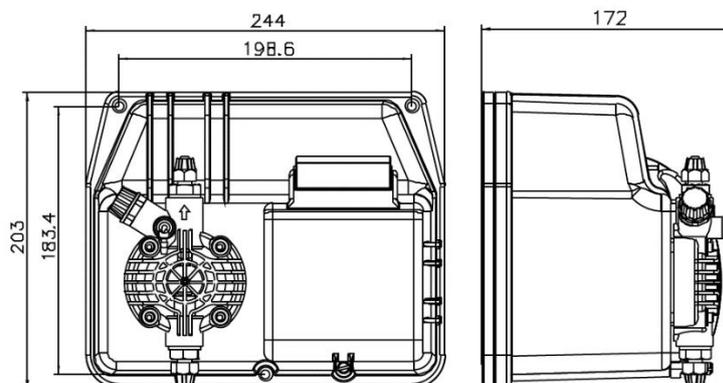


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EXPLODED VIEW



DIMENSIONS



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