

## Chemical Dosing Pumps – BT-MA Series

### Etatron BT Series Multifunctional Solenoid Metering Pump Model Selection



Model		BT-MA/AD	BT-MA/M	BT-MF-M	BT-PH/RX-CL/M	BT-PH/RX/MBB	BT-VFT	BT-MF/M
<b>Model Features</b> S = Standard O = Optional - = Not available	Analogic manual mode	S	-	-	-	-	-	-
	Digital manual mode	-	S	S	S	S	S	S
	Level sensor input	O	S	S	S	S	S	S
	Flow sensor	-	S	S	-	-	-	S
	Adjustable 4-20mA input	-	-	S	-	-	-	S
	Reed water meter input	-	-	S	-	-	S	S
	pH input	-	-	-	S	S	-	-
	RX input	-	-	-	S	S	-	-
	CL input	-	-	-	S	-	-	-
	CD input	-	-	-	-	-	-	-
	Pt100 input	-	-	-	S	-	-	-
	Relay output	-	-	S	S	-	-	S
	mA output	-	-	-	S	-	-	-
Proximity switch	-	-	-	S	S	-	-	

### Etatron BT MA/AD Manual Dosing Pump

The BT MA/AD series are Analogic-type manual solenoid driven dosing pumps with a range of flow rate and injection pressure capabilities. The BT MA/AD offers a dual range selector for very precise adjustment below 20% of design flowrates. The simple and intuitive design makes it an ideal pump for use in a wide range of applications.



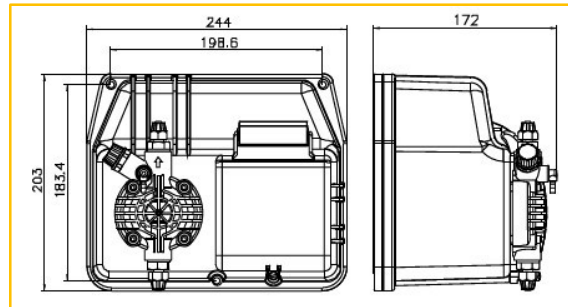
#### Features

- Epoxy coated aluminum case. IP65 rated
- Manual air bleed pump head - standard
- Level control input (supplied without probe): - optional
- Standard power supplies: 230 VAC 50/60Hz
- Optional power supplies: 24VAC 50/60Hz, 24VDC, 12Vdc
- Wall mounted

#### Principle of Operation

Pump operation uses a solid PTFE (teflon®) diaphragm mounted on the piston of an electromagnet/solenoid actuator. When the coil is energised (power applied), the piston/diaphragm moves to force liquid from the pump head. When the coil is de-energised, a spring returns the piston/diaphragm to the rest position drawing liquid into the pump head. Due to this simple operation of the pump, no lubrication is required, and maintenance minimised. Wetted surface materials make the pump fit for use with most particularly liquids.

## Chemical Dosing Pumps – BT-MA Series



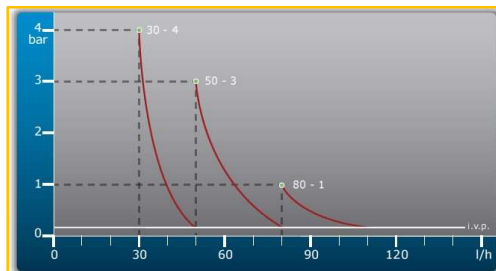
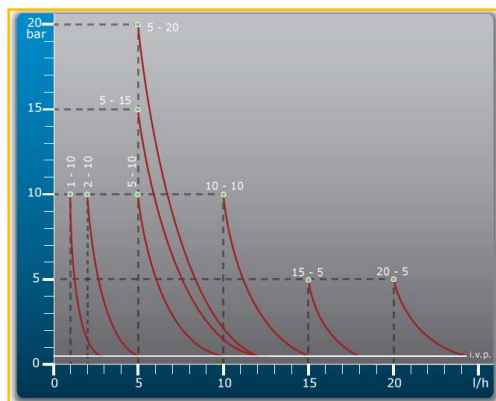
### Model Selection Guide

Select the appropriate size of pump from the chart below

*i.e. BT MA AD 5-10 (240) 5 liters/hour, max 10 bar, voltage 240 VAC*

Model	Flow rate (lph)	Pressure (Bar)
BT-MA-AD 2-10	2	10
BT-MA-AD 10-10	10	10
BT-MA-AD 15-5	15	5
BT-MA-AD 20-5	20	5
BT-MA-AD 30-4	30	4
BT-MA-AD 50-3	50	3
BT-MA-AD 80-1	80	1

### Flow vs Injection Pressure Characteristics



### Typical Pump Installation

- A – Main Pipeline
- B – Injection Valve
- C – Backpressure Valve
- D – Pressure Gauge
- E – Relief Valve
- F – Dosing Pump
- G – Tank
- H – Foot Filter
- I – Level Switch

