# **Tekna** Evo

**SOLENOID DOSING METERING PUMPS** 







### The **Evo...lution** of solenoid dosing pumps

A new concept of programming menu. Once a function is selected, the pump displays only the parameters that are associated with the specific function

PVDF pump head and ceramic ball valve as standard

Stabilized Multi Power Supply 100÷240 Vac 50/60 Hz with reduced consumption



### Compatible

PVDF pump head and ceramic ball valve as standard

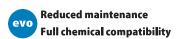
- **PVDF** is suitable for almost all chemical used in the Industrial, Waste Water Treatment and potable Water applications
- The use of **Ceramic balls** as standard improves the pumping reliability and the chemical compatibility of the whole liquid end
- evo Full chemical compatibility



### Reliable

Long life diaphragm tested to give 5 years working life

- The advanced design and manufacturing process allows the diaphragm to have a unique life expectancy
- Made of pure solid PTFE, the diaphragm is compatible with most chemicals
- The diaphragm has been tested over a period of 5 years giving superior results
- Routine diaphragm replacement is no longer a requirement





### Clever

Just 5 Models, Just PVDF, All functions in one pump

- **5 models** that cover 0,4 to 54 l/h with an output pressure up to 20 Bar
- **1 Casing** allows skids to be pre-constructed, as the fixing points remain constant, and the pumps can be selected on confirmation of the dosing flow
- **Inventory Reduction** Reduce spares stock holding



## Steady Dosing Performance

Stabilized Multi Power Supply 100÷240 Vac 50/60 Hz with reduced consumption

- Reduced power consumption as the solenoid only draws the required power to activate the pump, based on the working conditions
- **Stable dosing performance:** improve pump efficiency as performance is not affected by power supply fluctuations Reduce inventory holding

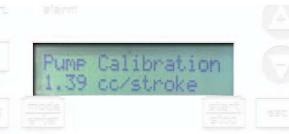


### Intuitive programming

A new concept of programming menu

- Programming menu are self explanatory and available in 5 languages
- Intelligent Display, once a function is selected the pump will only display the parameters to set, which are linked to the selected function





## Analogue Version









#### AKL

Costant dosage

Analogue dosing pump with constant flow rate manually adjustable by control dial on the front panel, two frequency range ( $0 \div 20\%$  or  $0 \div 100\%$ ), Power-ON led indicator and level control input.



APG Proportional dosage

Analogue dosing pump with constant flow rate manually adjustable, proportional flow rate according to an external analogue (4÷20 mA) or digital pulse signal (e.g. from water meter).

- Control dial (percentage and "n" value in multiplication mode)
- 6 position adjustable switch:
- 3 in division mode (1, 4, 10 = n)
- 1 in multiplication mode (n=1)
- 1 for proportional 4÷20 mA signal
- 1 for constant functionality
- "pacing" function adjustable by dip switch



Timed dosage

Analogue dosing pump with constant flow rate manually adjustable and timed dosage with T on-T off double regulation.

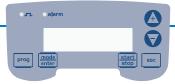
■ 3 control dials (flow rate percentage - T on regulation - T off regulation)

## Digital Version









### TPG Proportional dosage

Digital dosing pump with constant flow rate manually adjustable, proportional flow rate according to an external analog (4÷20 mA) or digital pulse signal (e.g. from water meter).

■ Timer function, ppm dosing, statistics, password and On/Off input (remote switch).



#### Proportional dosage

Digital dosing pump with pH/Redox control meter built in.

- Digital interface for constant or proportional dosing, depending on the measured pH or Rx value
- PT100 probe input for thermal compensation
- Repetition alarm relay
- Input On-Off for remote control
- 4÷20 mA output for measure transmission



#### **TMP** Proportional dosage

Digital dosing pump with Chlorine, Hydrogen Peroxide or Per-Acetic Acid control meter built in.

- Instrument on board set via Software
- PT100 probe input for thermal compensation
- Repetition alarm relay
- Input On-Off for remote control
- 4÷20 mA output for measure transmission



#### TCK Timed dosage

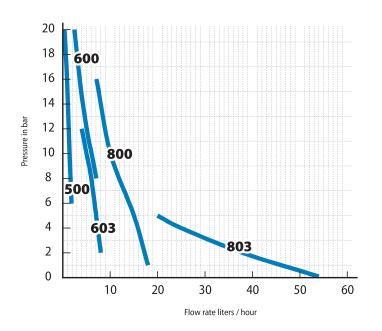
Digital dosing pump with constant flow rate manually adjustable, or timer control.

Programmable timed relay

# Pumps Identification

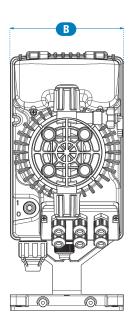
Version AKL		Analogue	e dosing nump wit	h constant flow rate n	nanually adjustable				
APG	Analogue dosing pump with constant flow rate manually adjustable  Analogue dosing pump with constant flow rate manually adjustable, with proportional flow rate accounts an external analog (4 : 20 mA) or digital signal (water mater)						w rate according		
ATL	Analogu	Analogue	to an external analog (4÷20 mA) or digital signal (water meter)  Analogue dosing pump with constant flow rate manually adjustable and timed dosage with						
TPG	T on-T off double regolation  Digital dosing pump with constant flow rate manually adjustable, with proportional flow rate according to the constant flow rate manually adjustable.						ate according to		
TPR	D: '/		an external analog (4÷20 mA) or digital signal (water meter)						
TMP	Digital		Digital dosing pump with pH/Redox control meter built in Digital dosing pump with Chlorine, Hydrogen Peroxide or Per-Acetic Acid control meter built in						
TCK			Digital dosing pump with constant flow rate or timed						
	Model	Pressure [bar]	Flow rate [L/h]	Stroke capacity [cc/stroke]	Ø Connections IN / OUT [mm]	Fequency max [stroke/min]	Consumptio		
					IN 7 OOT [IIIIII]	[Stroke/IIIII]	[VVVV]		
		20	0,4	0,06					
	500	16	0,8	0,11	4/7	120	12,2		
		10 6	1,2	0,16					
		20	2,5	0,35					
	600	18 14	3	0,42	4 / 6 suc. 4 / 7 dis.	120	12,0		
		8	4,2	0,58					
						]	12,2		
		12 10	4	0,42					
	603	8	5		4/6	160			
		2	8	0,63					
		16	7	0,38	4/6	300	23,9		
	800	10 5	10	0,55 0,83					
		1	18	1,00					
					]	]			
		5 4	20	1,11 1,39		300	22,9		
	803	2		2,22	8 / 12				
		0,1	40 54	3,00					
				3,00					
		Power supply				Vac			
	N 100 ÷ 240 Vac O 24 ÷ 48 Vac (For <b>AKL 603</b> series only. For <b>APG 603</b> : 30-48Vac/Vo				Vac/Vdc)	50-60 Hz			
	Liquid end material								
			H Pump	head : PVDF	Balls : Ceramic	Diaph	ragm : PTFE		
			Installa	tion Kit					
			Н		PVDI	F			
				Seals					
				0		FPM			
				1		EPDM			
				Optio	ons				
				000		Standard			
<b>•</b>	•	•	• •	• •					
AKL	600	N	н   н	0 00	U				

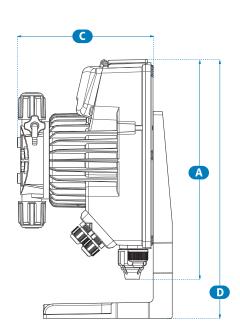
# Flow Rate and Dimensional Drawings



#### PERFORMANCE CURVE

Model	Pressure	Flow rate	
500	20 ÷ 6 bar	0,4 ÷ 1,5 <b>l</b> /h	
600	20 ÷ 8 bar	2,5 ÷ 3,0 <b>l</b> /h	
603	12 ÷ 2 bar	4 ÷ 8,0 <b>l</b> /h	
800	16 ÷ 1 bar	7 ÷ 18 <b>l</b> /h	
803	5 ÷ 0,1 bar	25 ÷ 54 <b>l</b> /h	

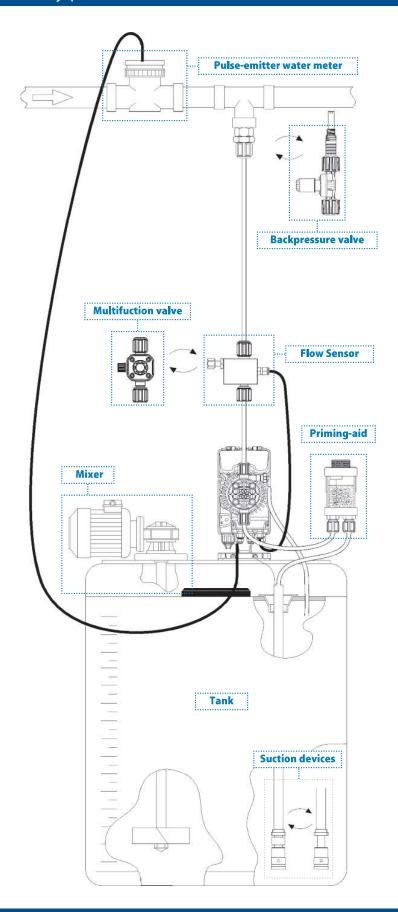




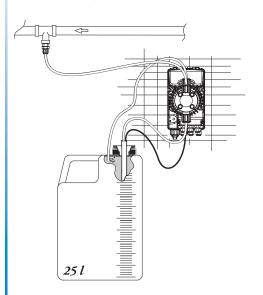
### DIMENSIONS [mm]

Model	500 600 603 800	803	
A (Height)	231		
<b>B</b> (Width)	119		
<b>C</b> (Depth)	145	149	
<b>D</b> (Max Height)	257		

# Typical Installation



### **Degassing head installation**



### With control instrument

