

# Tekna Solenoid driven dosing pumps



Your Choice, Our Commitment

# Five times the Flexibility

A single outer casing contains 5 different models with flow rates ranging from 0.4 to 110 l/h at up to 20 bar. The single casing's fixing points remain the same, making the pump idea for the assembly of preconstructed skids

Tekna Series is the range of innovative **wall mounted** solenoid driven dosing pumps that SEKO has designed following many years of experience working with its customers worldwide. These multifunctional solenoid driven dosing pumps maintain outstanding precision and reliability, critical to any customer, characteristics synonymous with the SEKO name.

### PVDF pump head and ceramic ball valve as standard

Using only premium materials in its manufacture, Tekna's **pump head comes as standard in PVDF** and with a **ceramic ball valve.** These features assure high performance for the chosen applications and improve the **reliability** of the pump assuring the **chemical compatibility of the wetted parts**.

### Long life diaphragm tested to give "Five Year" working life

SEKO's diaphragms are solid PTFE offering superior life expectancy and are guaranteed by SEKO for 5 years, making routine replacement no longer necessary.

### Steady dosing performance

Tekna features reduced energy consumption thanks to a **Stabilized Multi Power Supply** 100 - 240 Vac 50/60 Hz.

### Intuitive programming

A new concept of programming menu. Once a function is selected, the pump displays only the parameters that are associated with the specific function to reduced programming time. Programming menu are self explanatory and available in 5 languages.

### Also available ATEX Version

Tekna is also available in **ATEX standard compliant versions**. This pump offers digital dosing with a constant or proportional flow rate, that is manually adjustable from 0 - 100% and has a level control input. Tekna ATEX comes as standard with **a pump head in AISI 316**. Optionally available are heads in PVDF, outer casing made in aluminium and with a manual priming valve.





# 500

### Model

with flow rate from **0.4 to 1.5 l/h** and pressures **up to 20 bar** 

600

### Model

with flow rate from **2.5 to 4.2 l/h** and pressures **up to 20 bar** 

603

Model with flow rate from 4 to 8 l/h and pressures up to 12 bar

800

Model with flow rate from 7 to 18 l/h and pressures up to 16 bar

803

Model with flow rate from 20 to 110 l/h and pressures up to 5 bar



# Overview Analogue and Digital Version



### Analogue dosing pump with constant dosage **Tekna AKS**

Analogue dosing pump with constant flow rate, with manual adjustment by control dial on the front panel

- 2 frequency range (0 20% or 0 100%)
- Power-ON led indicator



## Analogue dosing pump with constant dosage **Tekna AKL**

Analogue dosing pump with constant flow rate, with manual adjustment by control dial on the front panel

- 2 frequency range (0 20% or 0 100%)
- Power-ON led indicator and level control input



## Analogue dosing pump with proportional dosage **Tekna APG**

Analogue dosing pump with constant flow rate, with manual adjustment; 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
- "pacing" function adjustable by dip switch



## Analogue dosing pump with timed dosage **Tekna ATL**

Analogue dosing pump with constant flow rate, with manual adjustment and timed dosage with T ON - T OFF double regulation.

3 control dials (flow rate % - T ON regulation - T OFF regulation)



### Digital dosing pump with proportional dosage **Tekna TPG**

Digital dosing pump with constant flow rate with manual adjustment; proportional flow rate according to an external analogue (4 – 20 mA) or digital pulse signal (e.g. from water meter).

- Timer function, ppm dosing, statistics, password and On/Off input (remote switch)
- Available also in ATEX version



### Digital dosing pump with proportional dosage **Tekna TMP**

Digital dosing pump with Chlorine, Hydrogen Peroxide or Peracetic 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



### Digital dosing pump with proportional dosage **Tekna TPR**

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



## Digital dosing pump with timed dosage **Tekna TCK**

Digital dosing pump with constant flow rate with manual adjustment, or timer control.

- Programmable timed relay
- Available also in ATEX version

## Overview Accessories



#### Threaded water meters TC1 - TH1 - TC0 Series

Single-jet water meters with pulse sender, dry dial and roller reading. Suitable for cold water up to 30 ° C.

- Size (4 or 1 pulse/l) from ½"(13 mm) to 2" (50 mm)
- Max flow (short period) from 3 to 30 m<sup>3</sup>/h
- Min flow (accuracy ±5%) from 30 to 450 l/h



#### Flanged water meters FC Series

A high capacity helical vane (Woltmann) type water meter with dry dial reading and pulse sender. Suitable for cold water up to 50 ° C.

- Size from 2" (DN50) to 6" (DN 150)Max flow (short period) from 30 to
- 300 m<sup>3</sup>/h • Min flow (accuracy ±5%) from 0,55
- Min flow (accuracy  $\pm$ 5%) from 0,55 to 3 m<sup>3</sup>/h



#### Mixers

Electric mixers, three-phases or single-phase, slow (200 rpm) or fast (1400 rpm) and flange attachment, for SER series tanks..

- Material : PVC AISI 316
- Shaft length : 600 800 900 -1100 mm
- Propeller diameter: Slow 150 -220 mm / Fast 90 mm
- Motor: 0,12 kW



#### Polyethylene tanks SER Series

Our tanks are designed to be integrated into dosing system assemblies using mixers and either motor driven or solenoid dosing pumps. All are made from food safe polyethylene and are resistant to most commonly found chemicals.

 Storage capacity (L): 50 - 100 -250-300 - 500 - 1000



### Reinforcement and Uncovered tanks

Tank reinforcement made of PVC (20 mm thick) to be used to install mixers and motor driven pumps or solenoid dosing pumps on SER series tanks .



### **Suction Devices**

A suction filter is provided to protect pump valves from debris or particles that could obstruct the pump valve. Suction devices can also be supplied with integral level controls. These allow the use of alarms, and protect against the system running dry.

 Easy installation; standard FPM seals (EPDM on request); made of PVC with transparent PVC suction; foot filter and non-return valve



#### **Flow Sensor**

In order to assess the actual dosing phase, the flow sensor can be used to detect the pump's pulsations during the delivery phase. The sensor can also be used to determine the actual dosing flow rate. This flow sensor is fitted directly on the delivery valve on the dosing pump.

- Body PVC PMMA PVDF
- Seals FPM EPDM
- Pressure max. 10 bar



#### Priming-aid

Priming issues may occur with dosing pumps with low flow rates and extreme suction lifts compared to the pump capacity. This accessory can eliminate such problems.

- Body PVC
- Seals FPM
- Connections IN/OUT 4/6 or 8/12 tube
- Model 300 ml



#### Pump head with automatic degassing valve

Where gases are metered, this accessory allows resumption of correct dosing without any intervention from the user.

- Body PVDF Seals FPM Balls Ceramic
- Flow rate reduction max. 20%
- Connections 4/6 tube
- Should be used combined with 603 and 800 models



#### Adjustables valves HY Series

- Body PVC
- Diaphragm FPM (standard) or EPDM (upon request)
- Flow rate max. 50 l/h Pressure max. 10 bar
- Connections 1/2"Gm, 4/6 and 8/12 tube

#### Injection valves

- Body PVC
- Diaphragm FPM (standard) or EPDM (upon request)
- Flow rate max. 50 l/h Pressure max. 10 bar
- IN connections 1/2" Gm, 4/6 and 8/12 tube
- OUT connections 1/2" Gm



### Multifunction valve

- Body PVDF
- Diaphragm PTFE
- Seals FPM EPDM
- Backpressure max 5 bar
- Overpressure max 18 bar
- Connections IN/OUT 4/6 or 8/12 tube



#### Fixed / Adjustable backpressure valves

- Body PVDF
- Diaphragm / Seals
  FPM EPDM
- Backpressure
  Fixed 1,5 bar
  Adjustable
  0,5 ÷ 5 bar
- Connections IN 4/6 tube OUT 3/8"G - 1/2"G

### Your Choice, Our Commitment

In the modern Globalised world, being a privately owned Company has significant benefits especially for our Customers, our Partners. For over 40 years, SEKO has developed a Global organisation able to take the longer view, manage the pressure of the now, and to plan for the long term, delivering true Partnership for our Customers, with transparency and mutual respect for each other.



Whether it's for our reknown flexibility, our attention to detail, the high-quality products, or just the way we do business, we understand that it's Your Choice to do business with us. It is Our Commitment to fulfill your needs wherever you, our Customers are.



For more information about our portfolio, worldwide locations, approvals, certifications, and local representatives, please visit www.seko.com



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