

Tekna Series

SOLENOID DIAPHRAGM METERING PUMP



seko

innovation > technology > future

Five in to One



CE  II 3GD
Ex ic nA IIB T4 Gc
Ex tc III CT120°C Dc IP65

Tekna Series is the range of innovative electronic metering pumps that SEKO has designed following many years of experience working with its customers world wide. These multifunctional metering pumps maintain outstanding precision and reliability, critical to any customer, characteristics synonymous with the SEKO name.

Five Models that cover 0,4 to 110 l/h with an output pressure up to 20 Bar

One 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

PVDF Pump Head and ceramic ball valve as standard

- PVDF is suitable for almost all chemicals used in Industrial, Waste Water Treatment and potable Water applications.
- Ceramic balls are used to ensure chemical compatibility and pump reliability.

The parts that make contact with the injected chemicals have been chosen to provide precise compatibility with most chemicals used in industry.

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 entirely of PTFE, the diaphragm is compatible with most chemicals.
- Routine diaphragm replacement is no longer a requirement

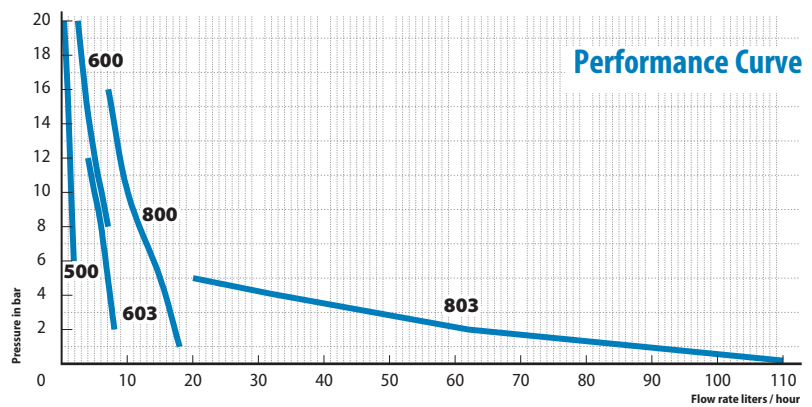
Steady Dosing Performance

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: improved pump efficiency as performance is not affected by power supply fluctuations

ATEX Version

- Digital dosing pump with constant or proportional flow rate, manually adjustable 0-100%, level control input
- PTFE diaphragm. Standard pump head in AISI 316. Also available in PVDF
- Case made in Aluminium
- Manual priming valve



Model	Pressure (Bar)	Flow rate (l/h)	Stroke capacity (cc/stroke)	Int. / Ext. connect. (Ø mm)	Max. frequency (stroke/min)
500	20	0,4	0,06	4 / 7	120
	16	0,8	0,11		
	10	1,2	0,16		
	6	1,5	0,21		
600	20	2,5	0,35	4 / 6 in suction 4 / 7 in discharge	120
	18	3	0,42		
	14	4,2	0,58		
	8	3	0,97		
603	12	4	0,42	4 / 6	160
	10	5	0,52		
	8	6	0,63		
	2	8	0,83		
800	16	7	0,38	4 / 6	300
	10	10	0,55		
	5	15	0,83		
	1	18	1		
803	5	20	1,11	8 / 12	300
	4	32	1,78		
	2	62	3,44		
	0,1	110	6,11		

Overview

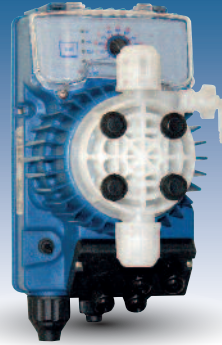
Analogue and Digital Version



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

- Two 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 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: 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



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 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 proportional dosage Tekna TMP

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



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 m³/h
- Min flow (accuracy ±5%) from 30 to 450 l/h



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.

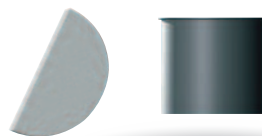
- Storage capacity (L) : 50 - 100 - 250-300 - 500 - 1000



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 m³/h
- Min flow (accuracy ±5%) from 0,55 to 3 m³/h



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.



Mixers

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

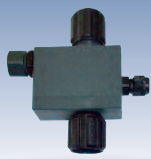
- Material : PVC - AISI 316
- Shaft length : 600 - 800 - 900 - 1100 mm
- Propeller diameter: Slow 150 - 220 mm / Fast 50 mm
- Motor : 0,12 kW



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
- Seals FPM
- 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 - 8/12
- 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 PVC - 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 PVC - PVDF
- Diaphragm PTFE
- Backpressure 1,5 bar
- Overpressure 6 bar - 12 bar
- Connections 4/6 tube



Fixed / Adjustable backpressure valves

- Body PVC - 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

A Worldwide Group at your service

seko is an International Group, developing, manufacturing and delivering its products in more than 50 countries, through its subsidiaries and an extended network of distributors, agents and authorized dealers.

seko is a leading manufacturer of dosing pumps and dosing systems with more than 40 years experience. This long activity allowed **seko** to acquire a vast experience in diversified applications and to confirm its international success in many industrial fields through the supply of reliable solutions for the dosing, injection and transfer of liquids.



BRAZIL

■ **Seko do Brasil Comercio de Sistemas de Dosagem Limitada**
03170-050 São Paulo (SP)
sekobrasil@sekobrasil.com.br
www.sekobrasil.com.br

BENELUX

■ **Seko Benelux B.V.**
7532 SK Enschede
(The Netherlands)
info@sekobenelux.com

CHINA

■ **Seko China Ltd**
072750 Hebei
china@seko.com
www.sekochina.com

DENMARK

■ **Seko Denmark**
4600 Køge
info@seko.com

FRANCE

■ **Seko Lefranc-Bosi S.A.**
77435 Marne La Vallee Cedex 2
service.commercial@seko.fr

GERMANY

■ **Seko Deutschland GmbH**
55252 Mainz - Kastel
info@seko-messtechnik.de
www.seko-germany.com

HONG KONG

■ **Seko Hong Kong Ltd**
Discovery Bay Plaza, Discovery Bay
City - Lantau Island N.T.
info@sekohk.com

ITALY

■ **Seko Spa**
02010 S.Rufina (Rieti)
sales@seko.com

■ Seko Spa [Process & Sytems]

20068 Peschiera Borromeo
(Milano)
info.psd@seko.com
info@seko.com

MEXICO

■ **Sistemas de dosificacion de Mexico Seko**
C.P. 11560 México D.F.
info@seko.com

ROMANIA

■ **Seko Sieta S.r.l.**
400393 Cluj (Napoca)
info.dpro@seko.com

RUSSIA

■ **OOO Seko**
129347 Moscow
sekorussia@seko.com
www.sekorussia.ru

SINGAPORE

■ **Seko Dosing Systems Asia Pacific Pte Ltd**
608838 Singapore
asiapacific@seko.com

SOUTH AFRICA

■ **Seko Southern Africa (PTY) Ltd**
Kyasand - Johannesburg - Gauteng
sales@sekosa.co.za

SPAIN

■ **Seko Ibérica Sistemas de Dosificación S.A.**
08960 Sant Just Desvern
(Barcelona)
sekoiberica@sekoiberica.com

SWEDEN

■ **Seko Sweden**
26123 Landskrona
info@seko.com

TURKEY

■ **Seko Endüstriyel Pompalar ve Proses Sistemleri San. ve Tic. Ltd. Şti.**
Kartal (Istanbul)
info@seko.com.tr
www.seko.com.tr

UNITED ARAB EMIRATES

■ **Seko Middle East FZE**
P.O. Box 42090 Hamriyah Free Zone
(Sharjah)
info@seko.ae
sales@seko.ae

UNITED KINGDOM

■ **Seko UK Chemical Controls Ltd**
Harlow, Essex - CM19 5JH
seko.uk@seko.com
www.sekouk.com

USA

■ **Seko Dosing Systems Corporation**
Tullytown - PA 19007
sales@sekousa.com
www.sekousa.com



For more information
www.seko.com

