

seko

Peristaltic Pumps



Your Choice,
Our Commitment

Peristaltic Pumps operating principles and advantages

Peristaltic Pumps were introduced in the mid 50's of last century. In the first years after their introduction, these products didn't encounter a big success because the hoses used at that time were subject to quick damages and ruptures. When alternative and high performance plastic materials used for tubes were found, the peristaltic pumps began to have a huge diffusion in many kind of processes.

Their operating principle is very simple: a fluid is pumped up through the suction action created by the alternate compression and relaxation of a flexible hose, executed by apposite rollers. Upon restitution of the hose or tube a strong vacuum is formed drawing product into the pump. The medium to be pumped does not come into contact with any moving part and is totally contained within a flexible hose.

Benefits

Peristaltic pumps provide excellent solutions to solve pumping problems, especially when the product being pumped is particularly abrasive, corrosive or viscous.

Low maintenance costs

Their lack of valves, seals and glands makes them inexpensive to maintain; the only maintenance item is the hose or tube, a relatively low cost item that can be easily changed in a short time.

Dry running and self-priming

Peristaltic pumps do not require pumped fluid to be continually present.

The recovery of the hose or tube creates a powerful self-priming action and allows the pumps to move liquids containing entrapped air or that can off gas.

Reversible

Peristaltic pumps are reversible if driven by apposite programmed circuits.

Accurate dosing

The pumps are accurate in dosing; they have a repeatability of $\pm 3\%$ and metering capabilities of $\pm 5\%$.

No slip

The pumps have no internal backflow giving accurate dosing without slip.

Hygienic

The pumps, if provided with specific hose FDA compliant, can be used in food, beverages and pharmaceutical industry, because the dosed medium doesn't come in contact with parts different from the hose.

Low cost of ownership

Their cost of ownership is definitely lower than the one of other kind of pumps.

Peristaltic Pumps fields of application

The typical fields of application of the peristaltic pumps are in the Cleaning & Hygiene world, particularly in the ware washing and in the laundries, where these pumps are used as single systems or integrated in combined systems to dose the chemicals used for Glass/Dish or clothing cleaning. Seko is already a leading company in these fields with its wide range of pumps born for these purposes.

This catalogue shows the range of Seko's single pumps that can be used (and already are) in the Water Treatment field and in many other Industrial Processes.

Here following some examples of Water treatment and Industrial processes where Seko's peristaltic pumps are already widely used:

Swimming Pools

The quality of the water from a health, aesthetic, and safety point of view is the main characteristic in dealing with swimming pools.

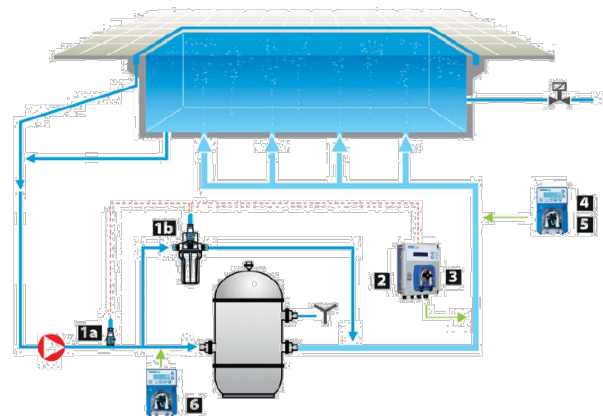
In this application peristaltic pumps are mainly used to dose pH inhibitors, chlorine inhibitors, algae inhibitors or flocculants inhibitors. The pumps we can offer for this application vary from the basic PE pumps to the Analogue or digital DYNAMIC pumps (these two mainly for residential pools), to the very high range KRONOS 50 and 65 pumps, equipped with stepper motors for total speed regulation (used also in public swimming pools or in waterparks).

Key

1 Probe holder **a** standard - **b** on demand

2 Measuring Instruments

3 Dosing pump for pH inhibitor



4 Dosing pump for chlorine inhibitor

5 Dosing pump for algae inhibitor

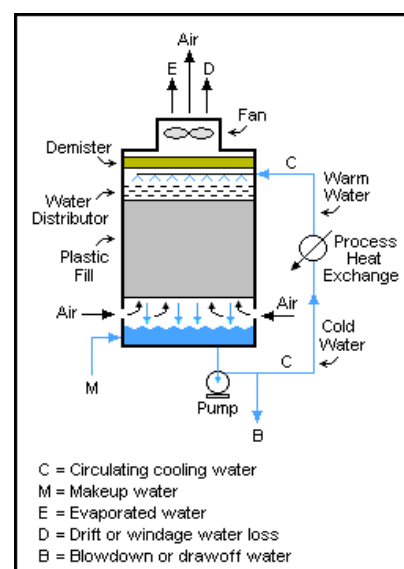
6 Dosing pump for flocculant inhibitor

Cooling Towers

Cooling towers are heat removal devices used to transfer process waste heat to the atmosphere, using cold water as heat removal medium. The cool water absorbs heat from the hot process streams which need to be cooled or condensed, and the absorbed heat warms the circulating water (C).

The warm water returns to the top of the cooling tower and trickles downward over the fill material inside the tower.

The cooling water has to be anyway treated and the Dosing Pumps in this case are used for Biocide, Algaecides, Chlorine chemical products and for Anti Scale Products, in combination with Seko's control instruments for pH, ORP, EC measuring.



Peristaltic Pumps fields of application

Drinking Water

The quality of the water coming from surface sources or from ground has to be checked and consequently adapted to National public health ministers requirements before coming to public fountains and houses.

In this application peristaltic pumps are mainly used to dose chlorine inhibitors, algae inhibitors to make water potable as for law requirements. DYNAMIC and KRONOS pumps are suitable for this job if activated by water meter pulse senders or chlorine measuring instruments.



Other Possible Applications In Industrial Processes

Oenology: Wine Additives/Wine Filtration Tanks Cleaning Systems

Dosage of enzymes and additives in the wine treatment process.

Dosage of chemicals for wine filtration tanks cleaning.

Car Washing Equipment

Dosage of detergents and other washing additives.

Printing Industry

Dosage of UV and water based inks into flexographic machines; The adjustability of the flow rate, the possibility of pumping also inks with solids pigments, the low speed handling of the peristaltic pump make it the ideal solution for this application.

Aquariums

Dosage of salt water into calcium reactors, dosage of enzymes and nutrients for fishes, dosage of additives to maintain the pure water quality necessary for aquariums' life.

Agriculture

Dosage of disinfectants, enzymes and fertilizers in agricultural business.

Laboratories

Dosage of cleaning agents for medical equipment.

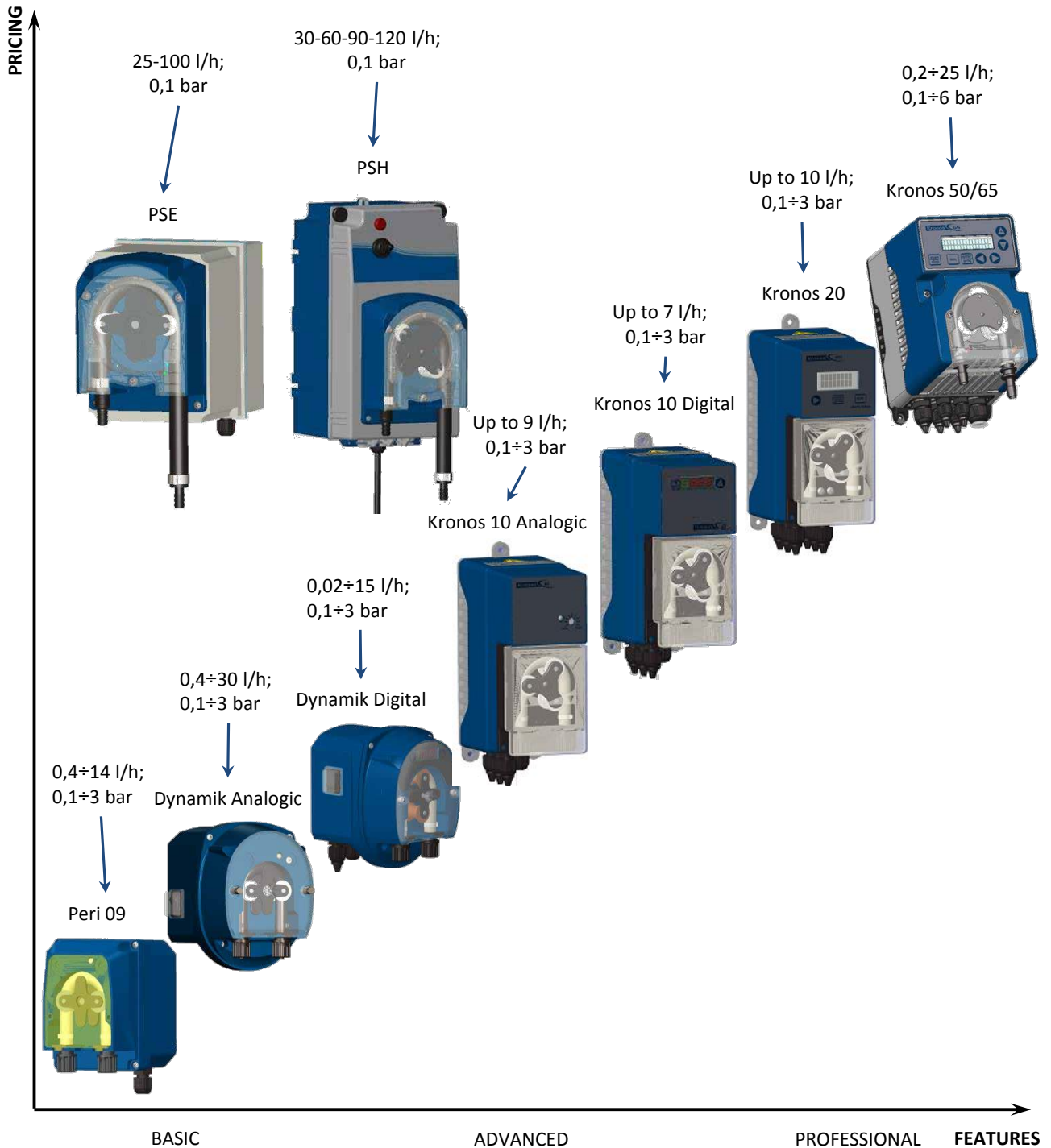
Waste Water Treatment On Board Of Vessels

Dosage of chemicals to treat the waste waters generated on board of small vessels.

The previous are only some examples of application fields between the many possibilities to use Seko peristaltic pumps in industrial processes.

Seko Full Range of Pumps

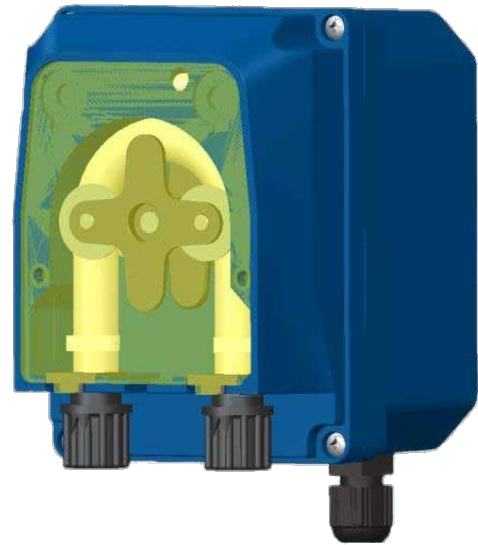
Here following an overview on Seko range of Peristaltic Pumps that can be used in Water Treatment and Industrial Applications:



Peri 09 Pumps

Family of Pumps with the following General Features:

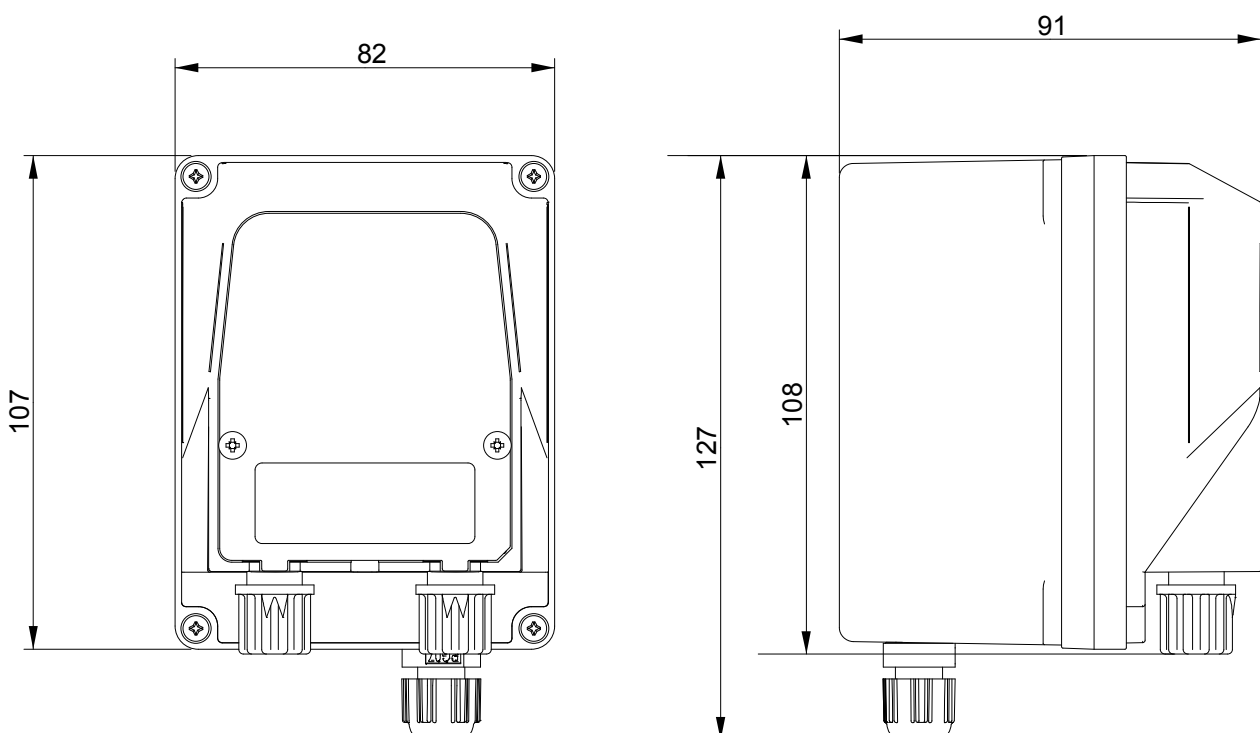
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.



Applications:

Often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).

DIMENSIONAL DRAWING



Peri 09 Pumps

KEY CODE

1, 2, 3		Family, Function			
PPE		Peri09 peristaltic pumps, Fixed Flow rate			
PPR		Peri09 peristaltic pumps, Speed Regulation			
PPM		Peri09 peristaltic pumps, Timed Dosing			
		4, 5	Back pressure		
		00	0,1 bar		
		0H	0,5 bar		
		1H	1,5 bar		
		03	3 bar		
		6, 7	Flow Rate		
		0H	0,4 l/h (6,6 ml/min)		
		1H	1,5 l/h (25 ml/min)		
		2H	2,5 l/h (41,6 ml/min)		
		03	3 l/h (50 ml/min)		
		04	4 l/h (67 ml/min)		
		05	5 l/h (83,3 ml/min)		
		06	6 l/h (100 ml/min)		
		07	7 l/h (116,7 ml/min)		
		10	10 l/h (166,6 ml/min)		
		14	14 l/h (233,3 ml/min)		
		18	18 l/h (300 ml/min)		
		8	Power Supply		
		A	230 Vac		
		B	24 Vac		
		D	24 VDC		
		M	100÷240 Vac		
		9	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		3	Sekoflex		
		5	Sekoextra		
		6	Sekomed		
		8	Sekofort		
		9	Sekolast		
		10, 11, 12	Customization		
		000	No customization		
PPM	03	1H	A	1	000

Peri 09 Pumps

Available Models

PPE

Models with Fixed Flow Rate.

2 Rollers.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 14 l/h.

Tubes: Santoprene or Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPE	00	0H	A	1	0,1 (1,5)	0,4 (6,6)	230 Vac	Santoprene
PPE	00	1H	A	1	0,1 (1,5)	1,5 (25)	230 Vac	Santoprene
PPE	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPE	00	04	D	1	0,1 (1,5)	4 (67)	24 VDC	Santoprene
PPE	00	05	A	1	0,1 (1,5)	5 (83,3)	230 Vac	Santoprene
PPE	00	06	A	1	0,1 (1,5)	6 (100)	230 Vac	Santoprene
PPE	00	07	D	1	0,1 (1,5)	7 (116,7)	24 VDC	Santoprene
PPE	00	14	D	1	0,1 (1,5)	14 (233,3)	24 VDC	Santoprene
PPE	1H	1H	A	2	1,5 (22)	1,5 (25)	230 Vac	Sekobriill
PPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPE	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill

PPM

Models with Dosing Time Adjustable through a potentiometer from 0s to 30s.

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,4 l/h up to 10 l/h.

Tubes: Santoprene, Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz or 24 Vac.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPM	00	0H	A	2	0,1 (1,5)	0,7 (11,7)	230 Vac	Sekobriill
PPM	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPM	00	10	A	1	0,1 (1,5)	10 (166,7)	230 Vac	Santoprene
PPM	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPM	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill
PPM	03	2H	A	2	3 (45)	2,6 (43)	230 Vac	Sekobriill

Peri 09 Pumps

PPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1 l/h up to 18 l/h.

Tubes: Santoprene, Sekobrill, Sekolast, Sekoextra (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Max Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPR	00	04	A	1	0,1 (1,5)	4 (67)	230 Vac	Santoprene
PPR	00	04	M	1	0,1 (1,5)	4 (67)	24÷240 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	230 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	24÷240 Vac	Santoprene
PPR	00	18	A	1	0,1 (1,5)	18 (300)	230 Vac	Santoprene
PPR	00	18	M	1	0,1 (1,5)	18 (300)	24÷240 Vac	Santoprene
PPR	0H	01	M	2	3 (45)	1 (16,67)	100÷240 Vac	Sekobrill
PPR	03	01	A	2	3 (45)	1 (16,67)	230 Vac	Sekobrill
PPR	03	01	M	2	3 (45)	1 (16,67)	24÷240 Vac	Sekobrill
PPR	03	03	A	9	3 (45)	3 (50)	230 Vac	Sekolast
PPR	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill

PSE Pumps

Family of Pumps with the following General Characteristics:

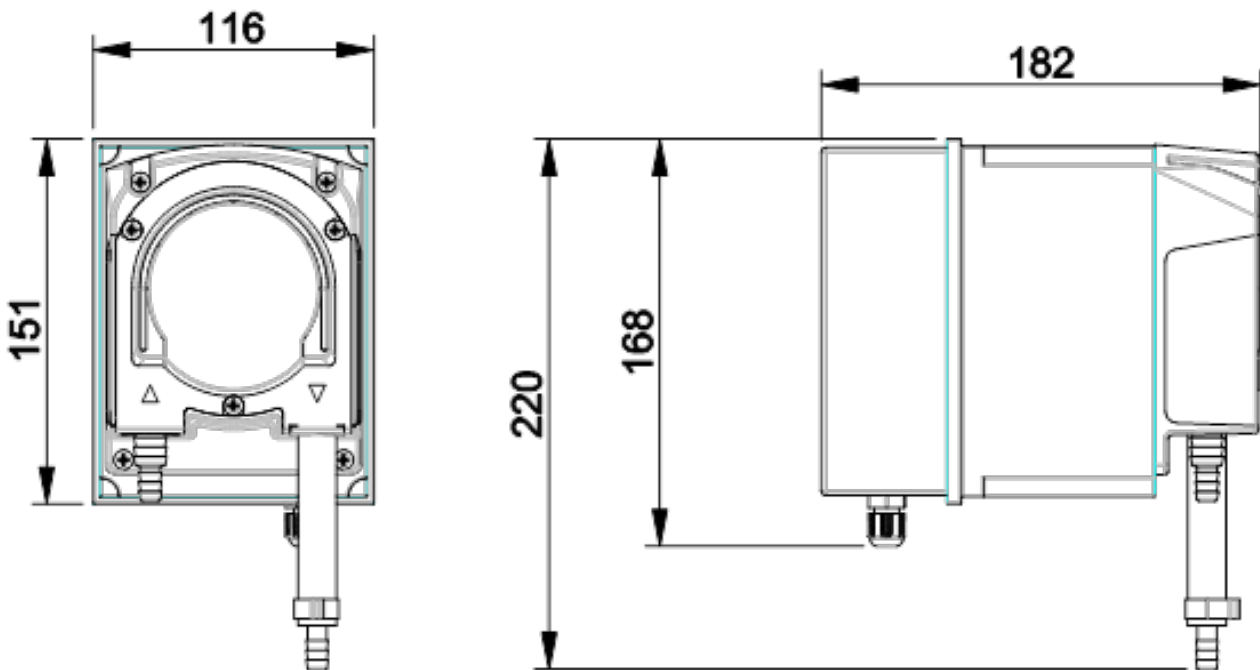
- Bigger Pump size (bell diameter 85 mm) for high flow rate.
- Analogue Interface.
- IP54 protection degree.
- Fixing bracket available for quick wall fixing.
- 230 Vac Power Supply, 66 W Power Consumption.
- Constant Dosage, continuous run not admitted.
- Flow Rates 25 or 100 l/h.
- It can be equipped with PTFE rollers for special applications. such as Chlorine Dosage in swimming pools.



Applications:

PSE peristaltic pumps are mainly used for condensate removal. They are particularly suitable for air conditioners, evaporators, refrigerated display cases.

DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSE	00	25	A	1	0,1 (15)	25 (416,7)	230 Vac	Santoprene
PSE	00	25	A	2	0,1 (15)	25 (416,7)	230 Vac	Sekobrill
PSE	0	100	A	1	0,1 (15)	100 (1667)	230 Vac	Santoprene

PSH Pumps

Family of Pumps with the following General Characteristics:

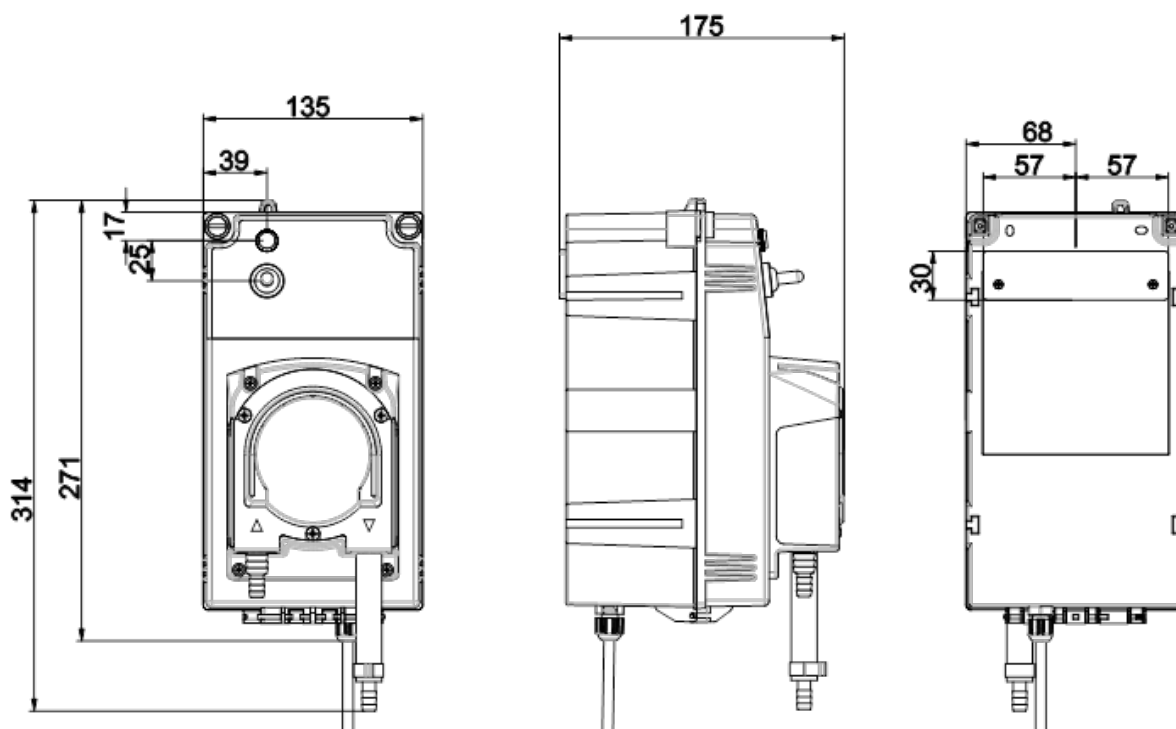
- Bigger Pump size (bell diameter 85 mm) for high flow rates.
- Analogue Interface (but the pump is always controlled by micro).
- IP65 protection degree guaranteed by its enclosure in PP.
- Fixing bracket available for quick wall fixing.
- Multi Power Supply 100÷240 Vac @ 50/60 Hz.
- Constant Dosage with selectable speed.
- Selectable Flow Rate via jumper on circuit board (30-60-90 or 120 l/h).
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

All kind of applications where high flow rates are needed, without strong backpressures at delivery.



DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSH	00	0H	M	1	0,1 (15)	30-60-90-120	100÷240 Vac	Santoprene
PSH	00	0H	M	2	0,1 (15)	30-60-90-120	100÷240 Vac	Sekobrill
PSH	00	0H	M	3	0,1 (15)	30-60-90-120	100÷240 Vac	Sekoflex

Dynamik Analogue Pumps

Family of Pumps with the following General Features:

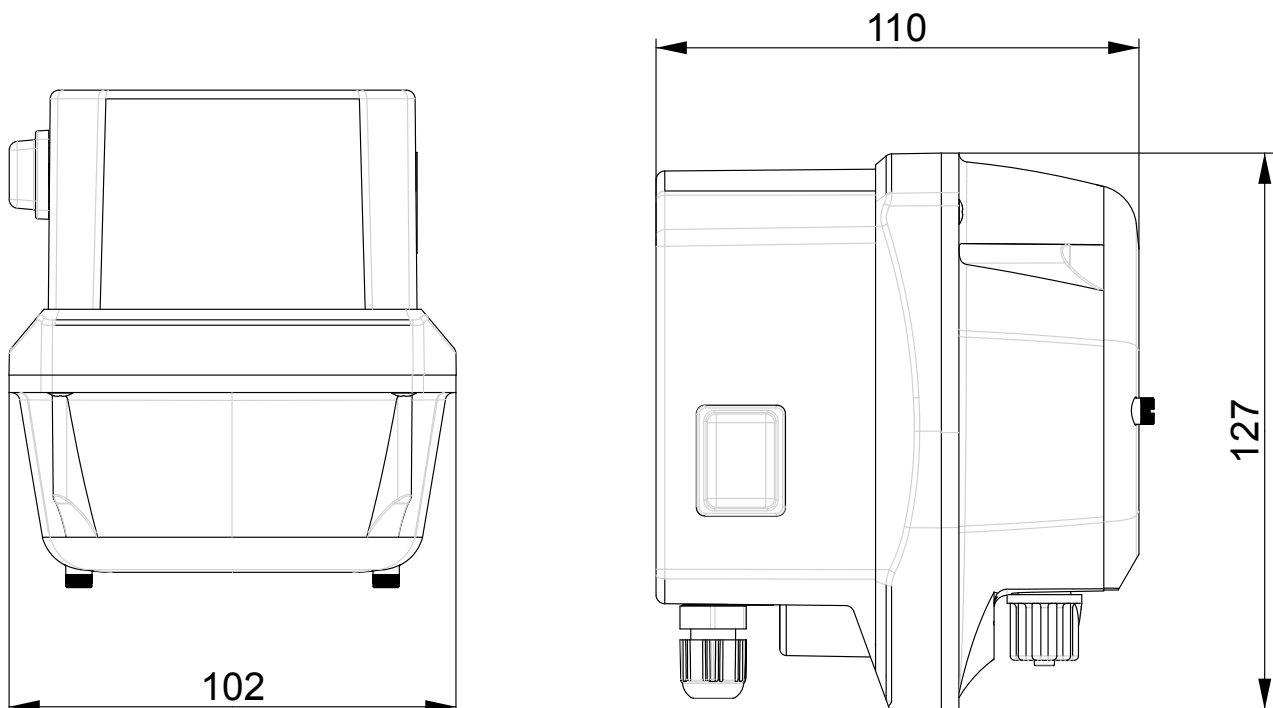
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF Switch.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.

Applications:

often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).



DIMENSIONAL DRAWING



Dynamik Analogue Pumps

KEY CODE

1, 2, 3	Family, Function				
NPE	Dynamik peristaltic pumps, Fixed Flow rate				
NPR	Dynamik peristaltic pumps, Speed Regulation				
NPM	Dynamik peristaltic pumps, Timed Dosing				
NTS	Dynamik "Season" peristaltic pumps, Time/Speed regulation				
	4, 5	Back pressure			
	00	0,1 bar			
	0H	0,5 bar			
	1H	1,5 bar			
	03	3 bar			
	6, 7	Flow Rate			
	0H	0,4 l/h (6,6 ml/min)			
	1H	1,5 l/h (25 ml/min)			
	2H	2,5 l/h (41,6 ml/min)			
	01	1 l/h (16,7 ml/min)			
	04	4 l/h (67 ml/min)			
	07	7 l/h (116,7 ml/min)			
	18	18 l/h (3000 ml/min)			
	28	28 l/h (466,7 ml/min)			
	30	30 l/h (500 ml/min)			
	8	Power Supply			
	A	230 Vac			
	B	24 Vac			
	D	24 VDC			
	M	100÷240 Vac			
	9	Membrane tubes			
	1	Santoprene			
	2	Sekobrill			
	3	Sekoflex			
	5	Sekoextra			
	6	Sekomed			
	10, 11, 12	Customization			
	000	No customization			
NPE	00	1H	A	3	000

AVAILABLE MODELS

NPM

Models with Dosage Adjustable through a potentiometer from 0s to 30 s.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1,5 l/h up to 2,6 l/h.

Tubes: Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPM	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill
NPM	03	2H	A	2	3 (45)	2,6 (43,3)	230 Vac	Sekobrill

Dynamik Analogue Pumps

NPE

Models with Fixed Flow Rate.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 100÷240 Vac 50/60 Hz.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 28 l/h.

Tubes: Santoprene, Sekoflex or Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPE	00	03	A	3	0,1 (1,5)	3 (50)	230 Vac	Sekoflex
NPE	00	1H	A	3	0,1 (1,5)	1,5 (25)	230 Vac	Sekoflex
NPE	00	28	A	2	0,1 (1,5)	28 (467)	100÷240 Vac	Sekobrill
NPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobrill
NPE	1H	1H	A	1	1,5 (22)	1,5 (25)	230 Vac	Santoprene

NPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,5 l/h up to 30 l/h.

Tubes: Santoprene, Sekobrill, Sekoflex (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPR	00	04	A	1	0,1 (1,5)	4 (66,7)	230 Vac	Santoprene
NPR	00	04	M	3	0,1 (1,5)	4 (66,7)	100÷240 Vac	Sekoflex
NPR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
NPR	00	18	M	1	0,1 (1,5)	28 (467)	100÷240 Vac	Santoprene
NPR	00	30	M	1	0,1 (1,5)	30 (500)	100÷240 Vac	Santoprene
NPR	03	01	A	2	3 (45)	1 (16,7)	230 Vac	Sekobrill
NPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
NPR	0H	0H	M	2	0,5 (7,5)	0,5 (8,8)	100÷240 Vac	Sekobrill

NTS (Dynamik "Season")

Model with Double Regulation: 1 potentiometer for Dosing Time adjustment (from 1 to 20 min), 1 selector for Flow Rate Selection (1 l/h Winter Season, 2 l/h Mid Season, 4 l/h in Summer Season). The pump repeats the set dosage every 24 hours.

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motor.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Max. Flow Rate l/h (ml/min)	Power Supply	Tube Material
NTS	1H	04	M	1	0,1 (1,5)	4 (66,7)	100÷240 Vac	Santoprene

Dynamik Digital Pumps

Family of Pumps with the following General Features:

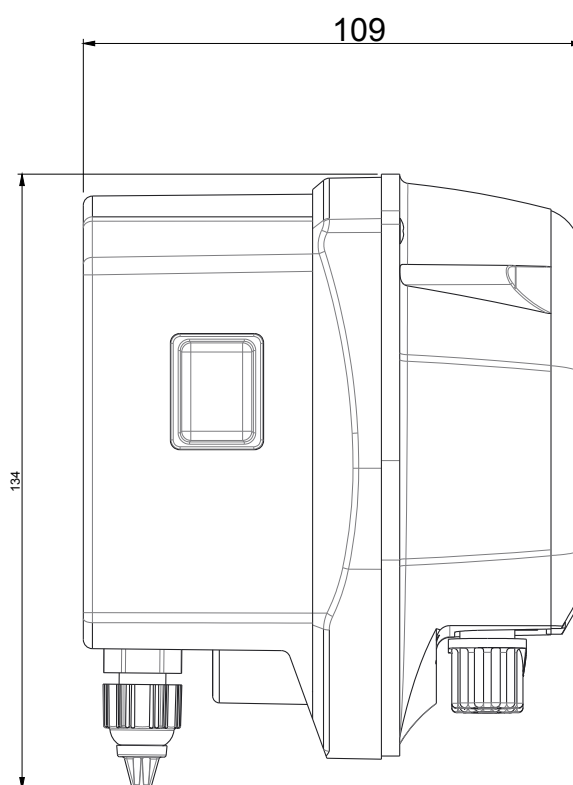
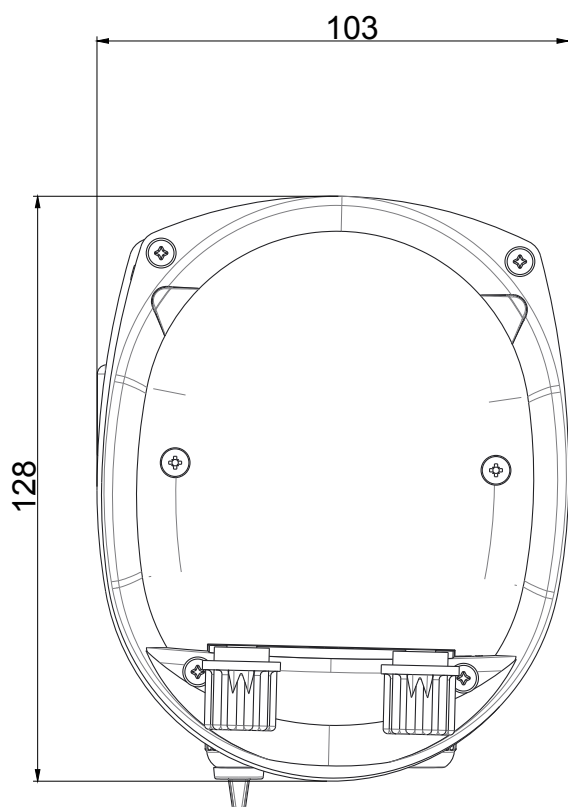
- Digital Interface with 7 segment display.
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF/Priming Button.
- Provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Transaxle technology to assure longer motor and tubing life.
- Level control input on most models.



Applications:

Advanced peristaltic pumps for dosing of essences, chlorine or other chemicals for application in shower foot, SPA pools and many others.

DIMENSIONAL DRAWING



Dynamik Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
SKCK		Dynamik Digital peristaltic pumps, Timed Dosing			
SKCR		Dynamik Digital peristaltic pumps, Conductivity Control Input			
SKFK		Dynamik Digital peristaltic pumps, micro dosing with speed regulation			
SKLR		Dynamik Digital peristaltic pumps, Timed dosing with external trigger			
SKPH		Dynamik Digital peristaltic pumps, pH control Input			
SKRX		Dynamik Digital peristaltic pumps, Redox control Input			
		5, 6	Back pressure		
		00	0,1 bar		
		1H	1,5 bar		
		03	3 bar		
		7, 8	Flow Rate		
		0H	0,4 l/h (6,6 ml/min)		
		1H	1,5 l/h (25 ml/min)		
		2H	2,5 l/h (41,6 ml/min)		
		01	1 l/h (16,7 ml/min)		
		04	4 l/h (67 ml/min)		
		07	7 l/h (116,7 ml/min)		
		10	10 l/h (166,6 ml/min)		
		15	15 l/h (250 ml/min)		
		9	Power Supply		
		A	230 Vac		
		B	24 Vac		
		D	24 VDC		
		M	100÷240 Vac		
		Z	24÷240 Vac		
		10	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		3	Sekoflex		
		5	Sekoextra		
		6	Sekomed		
		11, 12, 13	Customization		
		000	No customization		
NPE	00	1H	A	3	000

Dynamik Digital Pumps

SKCK

Models with Activation Time (A) and Pause Time (P) Adjustable by software.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

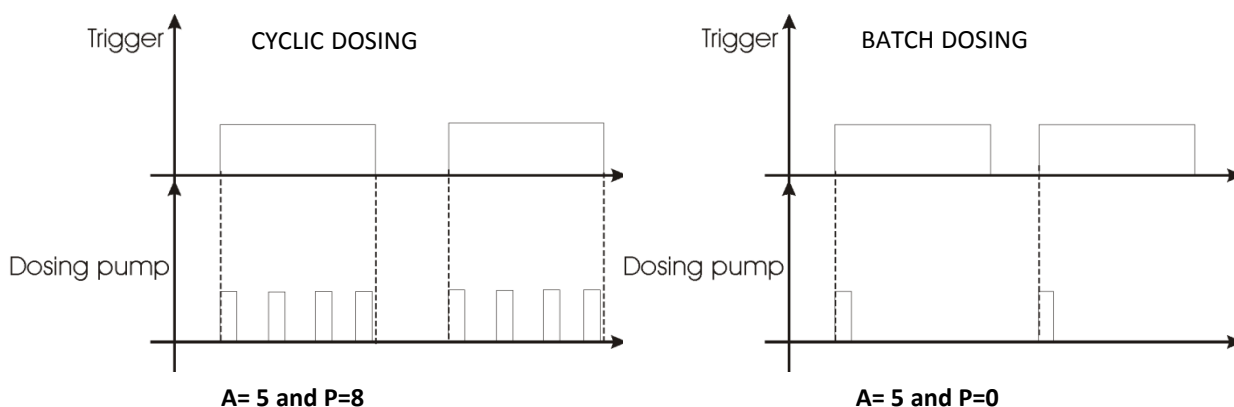
Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Santoprene, Sekobrill, Sekoextra (other materials on request).

The pump waits for a trigger and the display shows "A_on" flashing. When the pump receives a trigger, it starts to dose until the trigger is on according to the set A and P times; if P is set to 0 the pump will run only for the Activation time and then will stop; for example:

Power Supply: 100-240 Vac 50/60 Hz, 24 Vac.



CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCK	1H	1H	M	5	1,5 (22)	1,2 (20)	100÷240 Vac	Sekoextra
SKCK	1H	40	M	1	1,5 (22)	4 (66,7)	100÷240 Vac	Santoprene
SKCK	1H	70	M	1	1,5 (22)	7 (116,7)	100÷240 Vac	Santoprene

SKCR

Models with dosage depending on detected conductivity.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz, 24 Vac 50/60 Hz upon request.

Optional Level Control Input.

OFA Alarm buzzer (optional level) and signals on Set Point.

Reading Range 0.2 mS - 10 mS with +/-10% tolerance.

Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Sekoflex, Sekobrill, Sekoextra (other materials on request).

The pump doses at maximum speed (100%) if the reading is at least 10 SU less than Set Point (1 SU = 0.098 mS) When the conductivity value is exceeded, the SKCR gradually reduces its speed until it stops near the Set Point.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
SKCR	00	10	M	3	0,1 (1,5)	10 (66,7)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKFK

Models with adjustable speed, expressly realized for micro dosage of essences in SPA and Pools.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 2,5 ml/h up to 9,7 l/h.

Level Control Input.

External trigger 20÷240 Vac (Non Stop Dosage when the Trigger is ON).

Motors: Brushed DC motors.

Tubes: Santoprene, Sekoflex, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKFK	1H	01	M	1	1,5 (22)	0,025 (0,42)	100÷240 Vac	Santoprene
SKFK	1H	02	M	1	1,5 (22)	0,15 (2,5)	100÷240 Vac	Santoprene
SKFK	1H	03	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene
SKFK	1H	04	M	1	1,5 (22)	5,4 (90)	100÷240 Vac	Santoprene
SKFK	1H	05	M	1	1,5 (22)	9,7 (161,7)	100÷240 Vac	Santoprene
SKFK	30	05	M	2	3 (45)	9,7 (161,7)	100÷240 Vac	Sekobrill

SKLR

Models with adjustable dosing time, delay time and lockout time; originally created for laundry equipment, they can be used also in any other application where a trigger input is available.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF)

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz or 24 Vac 50/60 Hz upon request.

Max Flow rate: 15 l/h Optional Level Control Input. External trigger 20÷240 Vac .

Motors: Brushed DC motors.

Tubes: Sekoflex, Sekobrill (other materials on request).

Fixed Filter time (5 s), programmable delay time (0-999 seconds), dosing time (0-999 seconds), lock-out time (0-999 minutes).

The pump does not dose during the lock-out time, even if it receives another signal on the signal cable.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKLR	00	15	M	2	0,1 (1,5)	15 (250)	100÷240 Vac	Sekobrill
SKLR	00	15	M	3	0,1 (1,5)	15 (250)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKPH

Models with dosage depending on measured pH value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF) .

Bnc connection for probe pH.

Measure Range pH: 6÷8 pH (resolution: 0.1 pH).

Calibration method pH 1 Point.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 1,5 to 5 l/h

Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKPH	00	05	M	1	0,1 (1,5)	5 (83,3)	100÷240 Vac	Santoprene
SKPH	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKPH	1H	1H	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene

SKRX

Models with dosage depending on measured Rx value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

Bnc connection for ORP probe.

Measure Range ORP: 600÷1000 mV (resolution: 10 mV).

Calibration method: ORP 1 Point (740 mV set point by default).

Power Supply: 90÷265 Vac 50/60 Hz.

Flow rate: 1,5 l/h. Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKRX	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKRX	1H	1H	M	1	1,5 (22,5)	1,5 (25)	100÷240 Vac	Santoprene

Kronos 10 Analogue Pumps

Family of Pumps with the following General Features:

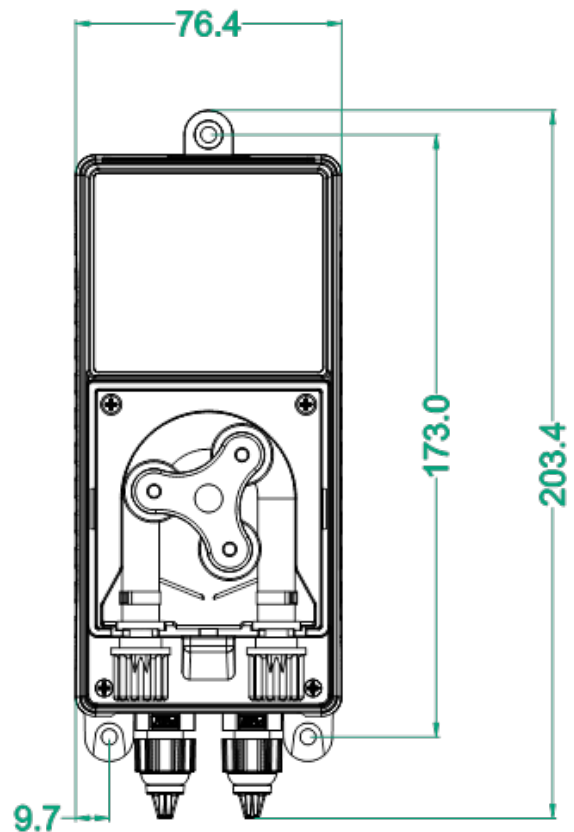
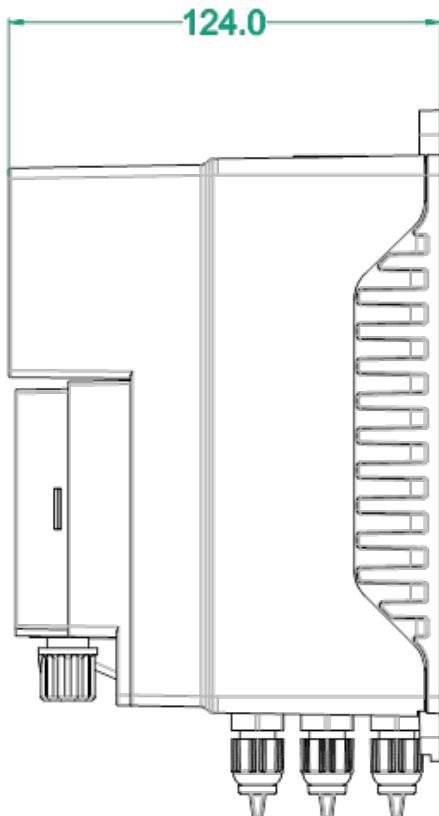
- Analogue Interface with micro controller.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Motors with extended lifetime.

Applications:

General Purpose Intermediate Range pump for low duty applications



DIMENSIONAL DRAWING



Kronos 10 Analogue Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
KXPR		Kronos Analogic peristaltic pumps, Adjustable Speed			
KXPA		Kronos Analogic peristaltic pump, Conductivity Control Input			
		5, 6	Back pressure		
		00	0,1 bar		
		03	3 bar		
		7, 8	Flow Rate		
		01	1 l/h (16,7 ml/min)		
		07	7 l/h (116,7 ml/min)		
		09	9 l/h (150 ml/min)		
		9	Power Supply		
		D	24 VDC		
		M	100÷240 Vac		
		10	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		11, 12, 13	Customization		
		000	No customization		
KXPR	00	07	M	1	000

KXPA

Models with Speed Regulation by potentiometer and Conductivity control Input with conductive probe.

Power Supply: 100÷240 Vac 50/60 Hz.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Flow rate: 9 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPA	00	09	M	1	0,1 (15)	9 (150)	100÷240 Vac	Santoprene

KXPR

Models with Speed Regulation by potentiometer.

Power Supply: 100÷240 Vac 50/60 Hz, 24 VDC.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Optional Level Control Input.

Flow rate: 1 l/h and 7 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
KXPR	00	07	M	1	0,1 (1,5)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 10 Digital Pumps

Family of Pumps with the following General Features:

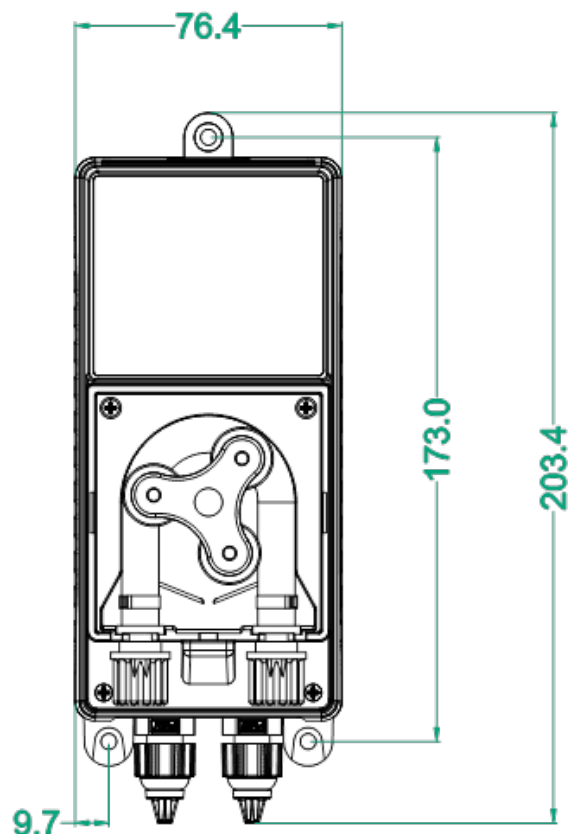
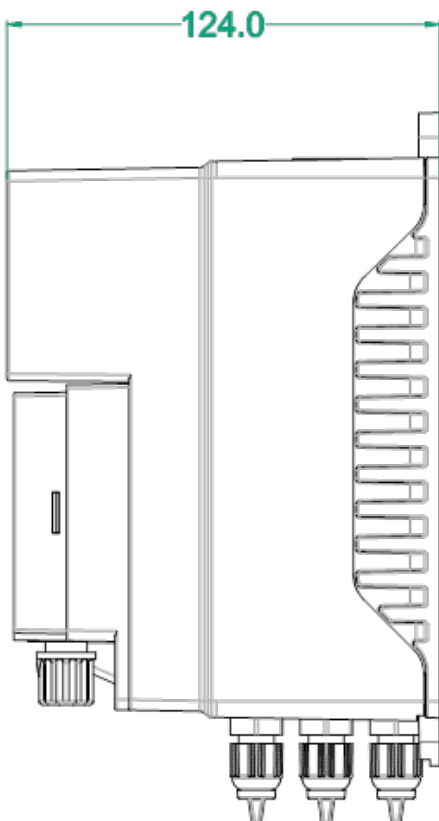
- Digital interface with 7 segments display.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime.
- Optionally equipped with ModBus connection for remote control.

Applications:

General Purpose Intermediate Range pump for low-medium duty applications.



DIMENSIONAL DRAWING



Kronos 10 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function				
KXDR		Kronos 10 Digital, Speed regulation				
KXCR		Kronos 10 Digital, Conductivity Control Input				
5, 6		Back pressure				
00		0,1 bar				
03		3 bar				
7, 8		Flow Rate				
01		1 l/h (16,7 ml/min)				
07		7 l/h (116,7 ml/min)				
10		10 l/h (166,7 ml/min)				
9		Power Supply				
M		100÷240 Vac				
10		Membrane tubes				
1		Santoprene				
2		Sekobrill				
3		Sekoflex				
5		Sekoextra				
6		Sekomed				
11		Communication				
0		No Communication				
I		Isolated ModBus				
M		Not Isolated ModBus				
12, 13		Customization				
00		No customization				
KXCR	00	07	M	1	0	00

KXCR

Models with Conductivity control Input and proportional reaching of the set point (100% until 80% of the set point and 20% with speed gradually decreasing).

Equipped with conductive probe (200 µS – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motors.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

Tubes: Santoprene (other materials on request).

KXDR

Models with possibility of speed regulation and trigger input signal.

ON/OFF switch and priming function.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXCR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene
KXDR	00	07	M	1	0,1 (15)	7(116,7)	100÷240 Vac	Santoprene

Kronos 20 Digital Pumps

Family of Pumps with the following General Features:

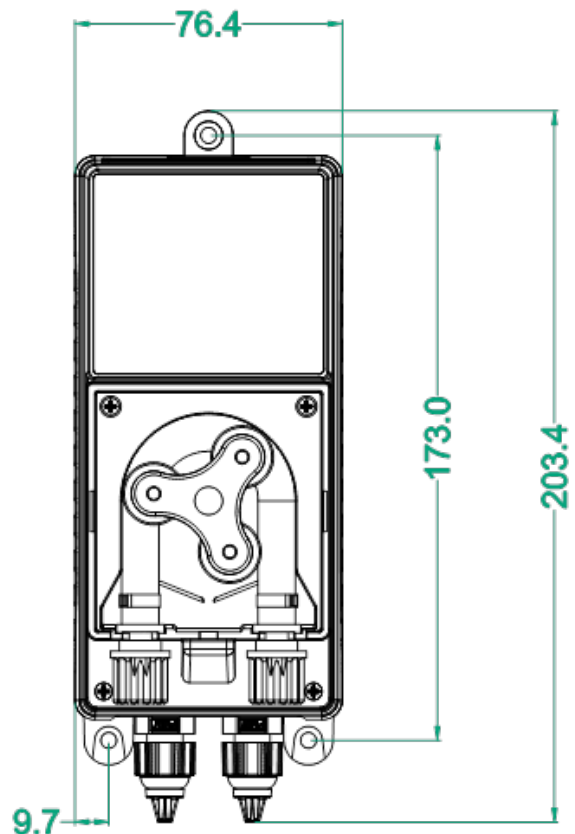
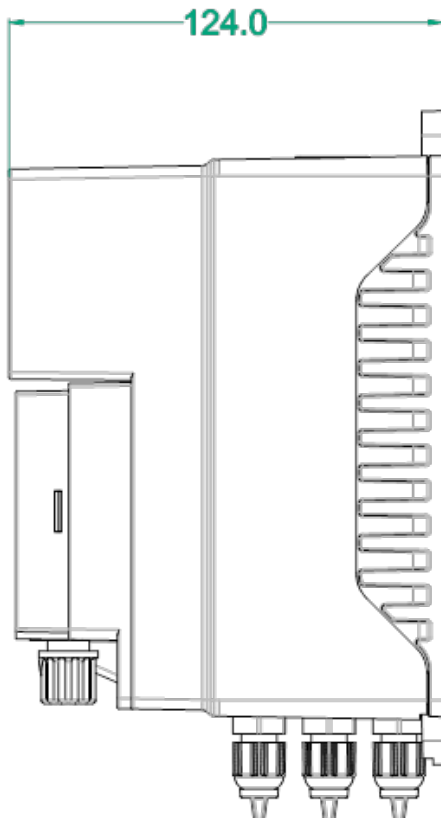
- Digital interface with 2 x 8 Characters LCD Display with backlight
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosage and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime, available with encoders on board, for better dosing accuracy.
- Optionally equipped with ModBus connection for remote control.



Applications:

Intermediate Range pump for medium duty applications

DIMENSIONAL DRAWING



Kronos 20 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function					
KTDR		Kronos 20 Digital, Constant Dosage with Speed Regulation					
KTCR		Kronos 20 Digital, Conductivity Control Input					
5, 6		Back pressure					
00		0,1 bar					
03		3 bar					
7, 8		Flow Rate					
01		1 l/h (16,7 ml/min)					
07		7 l/h (116,7 ml/min)					
10		10 l/h (166,7 ml/min)					
9		Power Supply					
M		100÷240 Vac					
10		Membrane tubes					
1		Santoprene					
5		Sekoextra					
6		Sekomed					
11		Communication					
0		No Communication					
I		Isolated ModBus					
M		Not Isolated ModBus					
12, 13		Customization					
00		No customization					
KTCR		00	10	M	1	0	00

KTCR

Models with Conductivity control Input and proportional reaching of the set point (*)

Equipped with conductive probe (200 µS – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz. Motors: Brushed DC motors.

Max Flow rate: 10 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials can be supplied upon request).

(*)The conductivity pump is intended to dose until the conductivity in the recipient where the pump is dosing reaches a programmed set point. The pump is therefore equipped with a conductive probe with a built-in temperature probe to compensate its readings.

A Proportional Band (like 80%-20% or 50%-50%) can be programmed in the menu of the pump: the pump will dose at its maximum flow rate until reaching the first programmed percentage of the set point, to then linearly decrease its speed down to 0% when the set point is reached, in order to avoid over dosage.

KTDR

Models with possibility of speed regulation and trigger input signal.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KTCR	00	10	M	1	0,1 (15)	10 (166,7)	100÷240 Vac	Santoprene
KTDR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 50 Digital Pumps

The Kronos 50 family is the best among Seko's range of peristaltic pumps. It is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. Due to the advanced technology and materials used, the various models can reach flow rates up to 15 l/h (@0,1 bar) and can dose at back pressures up to 6 bar with a special Sekotech tube.

General Features:

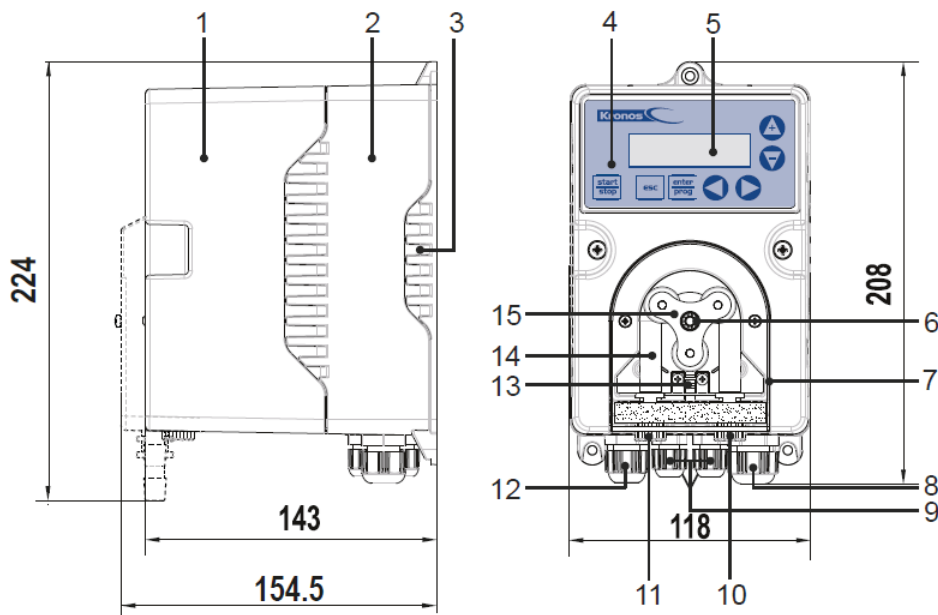
- Digital interface with 2 x 16 Characters LCD Display.
- Multi Power Supply 100÷240 Vac @50/60 Hz.
- IP65 protection degree with a professional looking enclosure made of shock proof and resistant ABS.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- The Stepper Motor guarantee a very accurate, adjustable and silent (< 35 dB) dosing.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Different models available with various functions (constant dosage, proportional dosage, conductivity mode).



Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.

DIMENSIONAL DRAWING



1	Housing: upper section	9	PCBs 7
2	Housing: central section	10	Discharge connector
3	Housing: bottom section	11	Suction connector
4	Control keys	12	PCB 9
5	LCD display	13	Hose rupture monitoring
6	Ball bearing	14	Pump hose
7	Transparent cover	15	Rotor
8	PCB 11		

Kronos 50 Digital Pumps

KEY CODE

1, 2, 3, 4	Family, Function					
KRFM	Kronos 50 Digital peristaltic pump, Full Mode					
KRFF	Kronos 50 Digital peristaltic pump, Full Full					
KRIR	Kronos 50 peristaltic pump, Inductive Conductivity Mode Set Point Dosing					
KRCR	Kronos 50 peristaltic pump, Conductivity Mode Set Point Dosing					
KREC	Kronos 50 peristaltic pump, Cooling Towers					
KKFM	Kronos 50 Digital peristaltic pump, Full Mode					
KSFM	Kronos 65 Digital peristaltic pump, Full Mode					
	5, 6	Back pressure				
	00	0,1 bar				
	1H	1,5 bar				
	02	2 bar				
	03	3 bar				
	04	4 bar				
	06	6 bar				
	7, 8	Flow Rate				
	02	2 l/h (33,3 ml/min)				
	04	4 l/h (66 ml/min)				
	08	8 l/h (133,3 ml/min)				
	10	10 l/h (166,7 ml/min)				
	15	15 l/h (250 ml/min)				
	25	25 l/h (416,7 ml/min)				
	9	Power Supply				
	M	100÷240 Vac				
	10	Membrane tubes				
	1	Santoprene				
	3	Sekoflex				
	5	Sekoextra				
	6	Sekomed				
	7	Sekotech				
	8	Sekofort				
	A	Pharmapure				
	11	Communication				
	0	No Communication				
	I	Isolated ModBus				
	M	Not Isolated ModBus				
	12, 13	Customization				
	00	No customization				
KRFM	02	10	M	1	0	00

Kronos 50 Digital Pumps

KRFM

Kronos FM pump has a multi-function setting; there are six different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time)

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical, starting from its density;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time.

Reversible direction.

Tube break alarm system integrated.

Flow rates: 0,02÷15 l/h, @3÷0,1 bar.

Tubes: Santoprene, Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFM	00	15	M	1	0,1 bar	15 (250,0)	100÷240 Vac	Santoprene
KRFM	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFM	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra
KRFM	1H	10	M	5	1,5 bar	10 (166,7)	100÷240 Vac	Sekoextra

KRFF

Kronos FF pump has a multi-function setting; there are seven different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

0-10V Mode - The pump doses proportionally to a signal of 0-10V; it's possible to set the V (Volt) input value corresponding to 0% dosing and the V input value corresponding to the pump maximum flow rate.

Reversible direction.

Remote Stop Possibility.

Tube break alarm system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar or 0,002 ÷ 2 l/h @ 3bar

Tubes: Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFF	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFF	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra

Kronos 50 Digital Pumps

KRIR

Kronos IR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity inductive probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.20 – 50.00 mS; The pump doses @ 100% if conductivity is lower than a programmable Set Point percent (default 80%); If mS value is higher than fixed percent, the pump proportionally decreases the speed down to 0%.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRIR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KRCR

Kronos CR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.10 – 14.99 mS. It's possible to set the mS Set Point corresponding to 0% dosing (desired conductivity). The pump doses @100% if conductivity is lower than a programmable Set Point percent (default 80%). If mS value is higher than fixed percentage, the pump proportionally decreases the speed down to 0% (at the programmed Set Point).

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar.

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRCR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

Kronos 50 Digital Pumps

KREC

Kronos EC-Cond pump has been specifically designed for application in cooling towers; 3 operating modes are selectable:

PPM Dosing - Dosage amount calculated to maintain the selected Concentration of chemical;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time

Timer Dosing Mode - The pump doses in Time without external trigger (ON/OFF Time selectable)

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Dosing by relay action.

Conductivity Measures 0,1÷15,0 mS, Accuracy ± 0.1 mS

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KREC	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KKFM

Kronos KK FM pump is a special version of Kronos 50 pump; it has the six different following configurations:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 2l/h @ 2bar, 2 l/h @6 bar , 8 l/h @3 bar, 4 l/h @4 bar.

Tubes: Sekotech (allows secure operation in harsh conditions), Sekofort, Pharmapure.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KKFM	03	08	M	7	3 bar	8 l/h	100÷240 Vac	Sekotech
KKFM	06	02	M	7	6 bar	2 l/h	100÷240 Vac	Sekotech
KKFM	03	02	M	8	3 bar	2 l/h	100÷240 Vac	Sekofort
KKFM	04	04	M	A	4 bar	4 l/h	100÷240 Vac	Pharmapure

Kronos 65 Digital Pumps

The Kronos 65 family is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. The Kronos 65 has a bigger head size (65 mm vs 50 mm), and due to the advanced technology and materials used, it can reach flow rates up to 25 l/h (@0,1 bar) and can dose at back pressures up to 3 bar always in safe operation.

General Features:

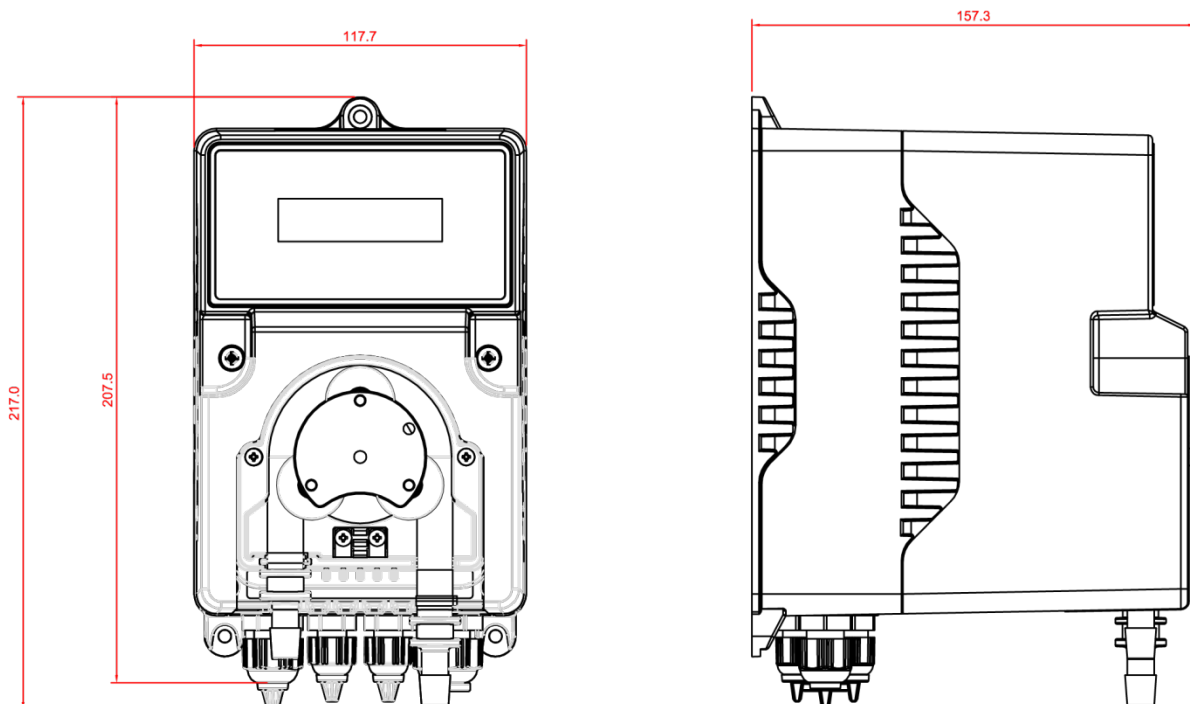
- Digital Interface with 2 x 16 characters LCD display.
- Multi power supply 100÷240 Vac @50/60 Hz, stepper motor, 3 rollers.
- Flow rate up to 25 l/h (@ 0,1 bar).
- Speed regulation 0,1...100%.
- Back Pressures up to 3 bar.
- Sekoflex tubing 6,35 x 12,7
- Tube breakage detection system.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.



DIMENSIONAL DRAWING



KSFM

Six different configuration modes:

Manual Mode, mA Mode, PPM Mode, 1:N Mode, N:1 Mode, Batch Mode.

Integrated Tube breakage detection system.

Flow rates: safely up to 25 l/h @0,1 bar.

Tubes: Sekoflex (other tubes can be supplied upon request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KSFM	00	25	M	3	0,1 bar	25 (416,7)	100÷240 Vac	Sekoflex

A large, dynamic splash of clear blue water with many bubbles, filling the background of the page. The water is captured in motion, creating a sense of freshness and purity.

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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The SEKO logo, consisting of the word "seko" in a bold, lowercase, blue sans-serif font. The letters are closely spaced and have a modern, clean appearance.

seko

seko

Peristaltic Pumps



Your Choice,
Our Commitment

Peristaltic Pumps operating principles and advantages

Peristaltic Pumps were introduced in the mid 50's of last century. In the first years after their introduction, these products didn't encounter a big success because the hoses used at that time were subject to quick damages and ruptures. When alternative and high performance plastic materials used for tubes were found, the peristaltic pumps began to have a huge diffusion in many kind of processes.

Their operating principle is very simple: a fluid is pumped up through the suction action created by the alternate compression and relaxation of a flexible hose, executed by apposite rollers. Upon restitution of the hose or tube a strong vacuum is formed drawing product into the pump. The medium to be pumped does not come into contact with any moving part and is totally contained within a flexible hose.

Benefits

Peristaltic pumps provide excellent solutions to solve pumping problems, especially when the product being pumped is particularly abrasive, corrosive or viscous.

Low maintenance costs

Their lack of valves, seals and glands makes them inexpensive to maintain; the only maintenance item is the hose or tube, a relatively low cost item that can be easily changed in a short time.

Dry running and self-priming

Peristaltic pumps do not require pumped fluid to be continually present.

The recovery of the hose or tube creates a powerful self-priming action and allows the pumps to move liquids containing entrapped air or that can off gas.

Reversible

Peristaltic pumps are reversible if driven by apposite programmed circuits.

Accurate dosing

The pumps are accurate in dosing; they have a repeatability of $\pm 3\%$ and metering capabilities of $\pm 5\%$.

No slip

The pumps have no internal backflow giving accurate dosing without slip.

Hygienic

The pumps, if provided with specific hose FDA compliant, can be used in food, beverages and pharmaceutical industry, because the dosed medium doesn't come in contact with parts different from the hose.

Low cost of ownership

Their cost of ownership is definitely lower than the one of other kind of pumps.

Peristaltic Pumps fields of application

The typical fields of application of the peristaltic pumps are in the Cleaning & Hygiene world, particularly in the ware washing and in the laundries, where these pumps are used as single systems or integrated in combined systems to dose the chemicals used for Glass/Dish or clothing cleaning. Seko is already a leading company in these fields with its wide range of pumps born for these purposes.

This catalogue shows the range of Seko's single pumps that can be used (and already are) in the Water Treatment field and in many other Industrial Processes.

Here following some examples of Water treatment and Industrial processes where Seko's peristaltic pumps are already widely used:

Swimming Pools

The quality of the water from a health, aesthetic, and safety point of view is the main characteristic in dealing with swimming pools.

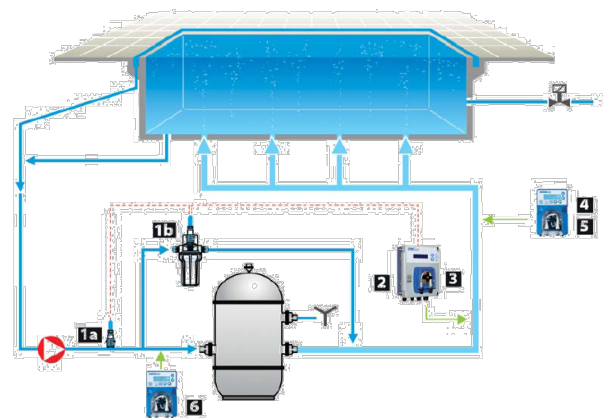
In this application peristaltic pumps are mainly used to dose pH inhibitors, chlorine inhibitors, algae inhibitors or flocculants inhibitors. The pumps we can offer for this application vary from the basic PE pumps to the Analogue or digital DYNAMIC pumps (these two mainly for residential pools), to the very high range KRONOS 50 and 65 pumps, equipped with stepper motors for total speed regulation (used also in public swimming pools or in waterparks).

Key

1 Probe holder **a** standard - **b** on demand

2 Measuring Instruments

3 Dosing pump for pH inhibitor



4 Dosing pump for chlorine inhibitor

5 Dosing pump for algae inhibitor

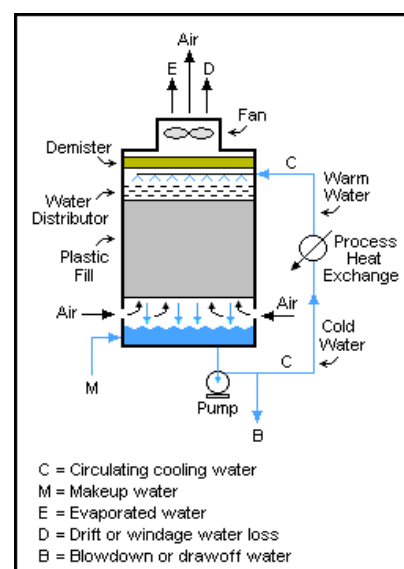
6 Dosing pump for flocculant inhibitor

Cooling Towers

Cooling towers are heat removal devices used to transfer process waste heat to the atmosphere, using cold water as heat removal medium. The cool water absorbs heat from the hot process streams which need to be cooled or condensed, and the absorbed heat warms the circulating water (C).

The warm water returns to the top of the cooling tower and trickles downward over the fill material inside the tower.

The cooling water has to be anyway treated and the Dosing Pumps in this case are used for Biocide, Algaecides, Chlorine chemical products and for Anti Scale Products, in combination with Seko's control instruments for pH, ORP, EC measuring.



Peristaltic Pumps fields of application

Drinking Water

The quality of the water coming from surface sources or from ground has to be checked and consequently adapted to National public health ministers requirements before coming to public fountains and houses.

In this application peristaltic pumps are mainly used to dose chlorine inhibitors, algae inhibitors to make water potable as for law requirements. DYNAMIC and KRONOS pumps are suitable for this job if activated by water meter pulse senders or chlorine measuring instruments.



Other Possible Applications In Industrial Processes

Oenology: Wine Additives/Wine Filtration Tanks Cleaning Systems

Dosage of enzymes and additives in the wine treatment process.

Dosage of chemicals for wine filtration tanks cleaning.

Car Washing Equipment

Dosage of detergents and other washing additives.

Printing Industry

Dosage of UV and water based inks into flexographic machines; The adjustability of the flow rate, the possibility of pumping also inks with solids pigments, the low speed handling of the peristaltic pump make it the ideal solution for this application.

Aquariums

Dosage of salt water into calcium reactors, dosage of enzymes and nutrients for fishes, dosage of additives to maintain the pure water quality necessary for aquariums' life.

Agriculture

Dosage of disinfectants, enzymes and fertilizers in agricultural business.

Laboratories

Dosage of cleaning agents for medical equipment.

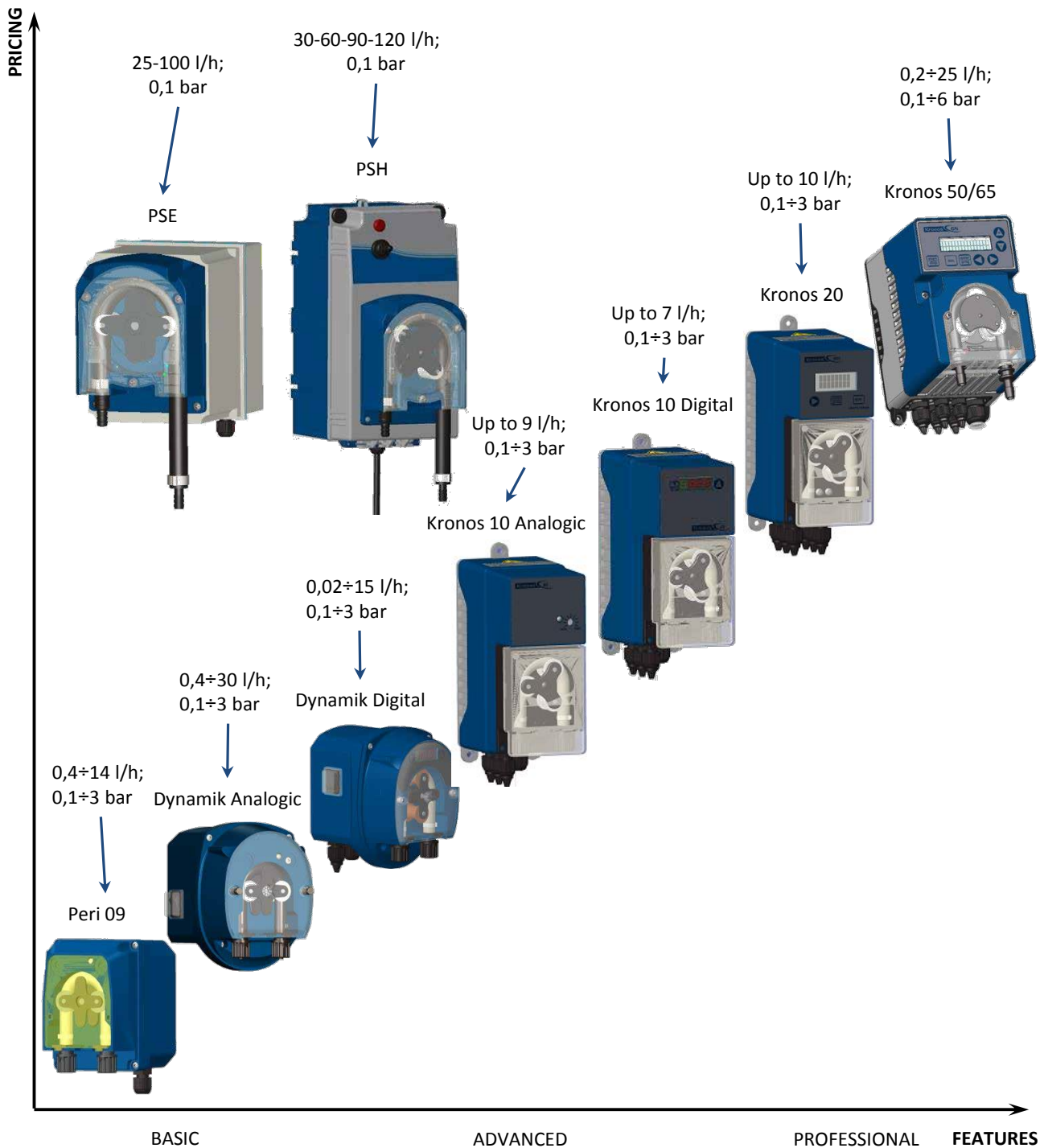
Waste Water Treatment On Board Of Vessels

Dosage of chemicals to treat the waste waters generated on board of small vessels.

The previous are only some examples of application fields between the many possibilities to use Seko peristaltic pumps in industrial processes.

Seko Full Range of Pumps

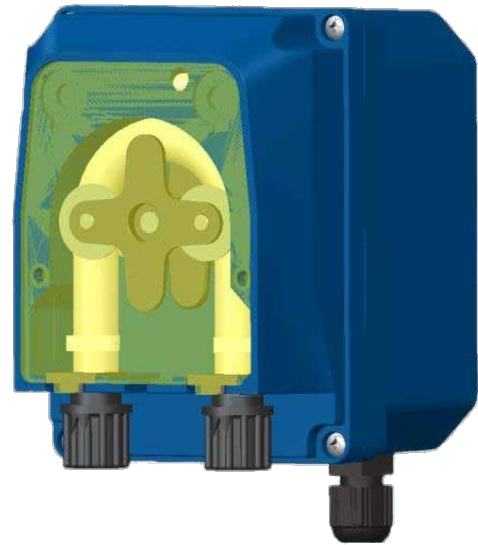
Here following an overview on Seko range of Peristaltic Pumps that can be used in Water Treatment and Industrial Applications:



Peri 09 Pumps

Family of Pumps with the following General Features:

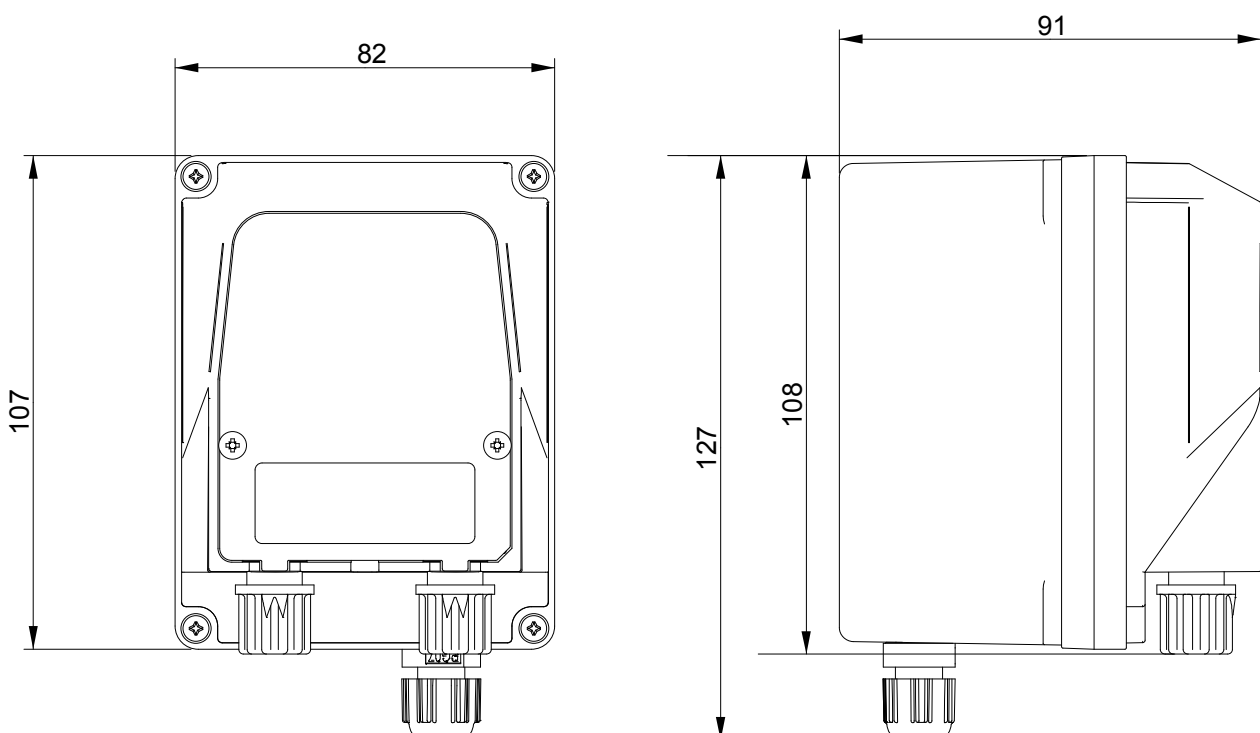
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.



Applications:

Often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).

DIMENSIONAL DRAWING



Peri 09 Pumps

KEY CODE

1, 2, 3	Family, Function				
PPE	Peri09 peristaltic pumps, Fixed Flow rate				
PPR	Peri09 peristaltic pumps, Speed Regulation				
PPM	Peri09 peristaltic pumps, Timed Dosing				
	4, 5	Back pressure			
	00	0,1 bar			
	0H	0,5 bar			
	1H	1,5 bar			
	03	3 bar			
	6, 7	Flow Rate			
	0H	0,4 l/h (6,6 ml/min)			
	1H	1,5 l/h (25 ml/min)			
	2H	2,5 l/h (41,6 ml/min)			
	03	3 l/h (50 ml/min)			
	04	4 l/h (67 ml/min)			
	05	5 l/h (83,3 ml/min)			
	06	6 l/h (100 ml/min)			
	07	7 l/h (116,7 ml/min)			
	10	10 l/h (166,6 ml/min)			
	14	14 l/h (233,3 ml/min)			
	18	18 l/h (300 ml/min)			
	8	Power Supply			
	A	230 Vac			
	B	24 Vac			
	D	24 VDC			
	M	100÷240 Vac			
	9	Membrane tubes			
	1	Santoprene			
	2	Sekobrill			
	3	Sekoflex			
	5	Sekoextra			
	6	Sekomed			
	8	Sekofort			
	9	Sekolast			
	10, 11, 12	Customization			
	000	No customization			
PPM	03	1H	A	1	000

Peri 09 Pumps

Available Models

PPE

Models with Fixed Flow Rate.

2 Rollers.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 14 l/h.

Tubes: Santoprene or Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPE	00	0H	A	1	0,1 (1,5)	0,4 (6,6)	230 Vac	Santoprene
PPE	00	1H	A	1	0,1 (1,5)	1,5 (25)	230 Vac	Santoprene
PPE	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPE	00	04	D	1	0,1 (1,5)	4 (67)	24 VDC	Santoprene
PPE	00	05	A	1	0,1 (1,5)	5 (83,3)	230 Vac	Santoprene
PPE	00	06	A	1	0,1 (1,5)	6 (100)	230 Vac	Santoprene
PPE	00	07	D	1	0,1 (1,5)	7 (116,7)	24 VDC	Santoprene
PPE	00	14	D	1	0,1 (1,5)	14 (233,3)	24 VDC	Santoprene
PPE	1H	1H	A	2	1,5 (22)	1,5 (25)	230 Vac	Sekobriill
PPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPE	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill

PPM

Models with Dosing Time Adjustable through a potentiometer from 0s to 30s.

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,4 l/h up to 10 l/h.

Tubes: Santoprene, Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz or 24 Vac.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPM	00	0H	A	2	0,1 (1,5)	0,7 (11,7)	230 Vac	Sekobriill
PPM	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPM	00	10	A	1	0,1 (1,5)	10 (166,7)	230 Vac	Santoprene
PPM	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPM	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill
PPM	03	2H	A	2	3 (45)	2,6 (43)	230 Vac	Sekobriill

Peri 09 Pumps

PPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1 l/h up to 18 l/h.

Tubes: Santoprene, Sekobrill, Sekolast, Sekoextra (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Max Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPR	00	04	A	1	0,1 (1,5)	4 (67)	230 Vac	Santoprene
PPR	00	04	M	1	0,1 (1,5)	4 (67)	24÷240 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	230 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	24÷240 Vac	Santoprene
PPR	00	18	A	1	0,1 (1,5)	18 (300)	230 Vac	Santoprene
PPR	00	18	M	1	0,1 (1,5)	18 (300)	24÷240 Vac	Santoprene
PPR	0H	01	M	2	3 (45)	1 (16,67)	100÷240 Vac	Sekobrill
PPR	03	01	A	2	3 (45)	1 (16,67)	230 Vac	Sekobrill
PPR	03	01	M	2	3 (45)	1 (16,67)	24÷240 Vac	Sekobrill
PPR	03	03	A	9	3 (45)	3 (50)	230 Vac	Sekolast
PPR	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill

PSE Pumps

Family of Pumps with the following General Characteristics:

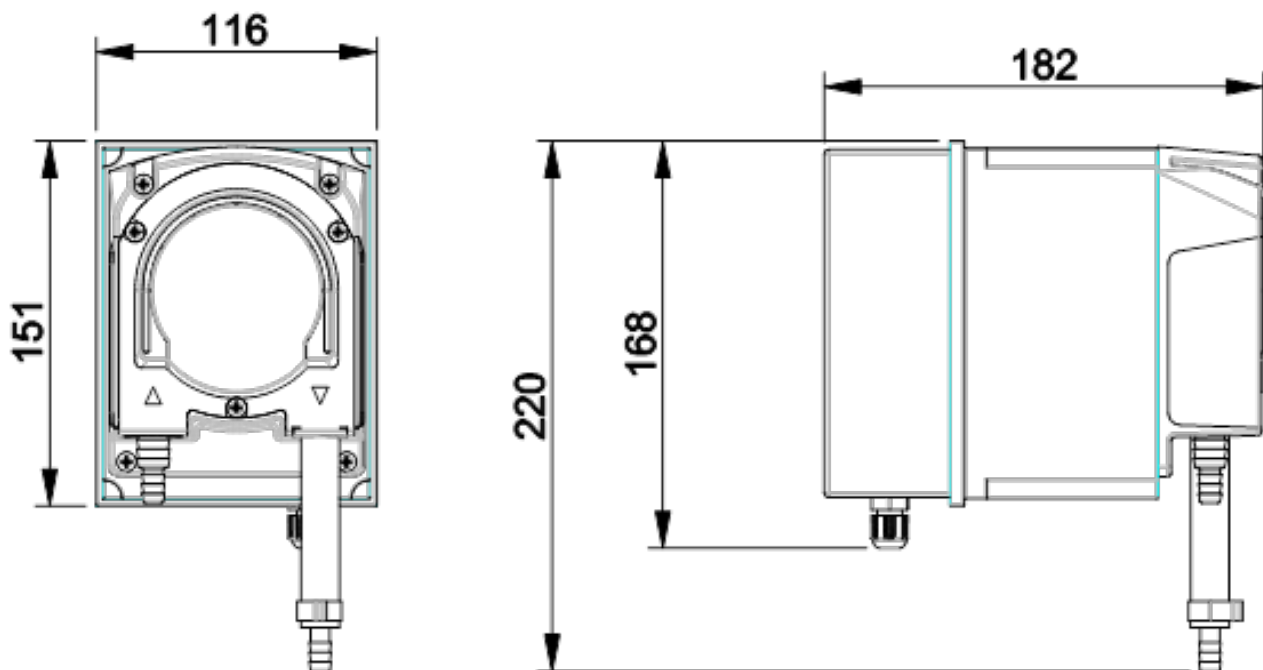
- Bigger Pump size (bell diameter 85 mm) for high flow rate.
- Analogue Interface.
- IP54 protection degree.
- Fixing bracket available for quick wall fixing.
- 230 Vac Power Supply, 66 W Power Consumption.
- Constant Dosage, continuous run not admitted.
- Flow Rates 25 or 100 l/h.
- It can be equipped with PTFE rollers for special applications. such as Chlorine Dosage in swimming pools.



Applications:

PSE peristaltic pumps are mainly used for condensate removal. They are particularly suitable for air conditioners, evaporators, refrigerated display cases.

DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSE	00	25	A	1	0,1 (15)	25 (416,7)	230 Vac	Santoprene
PSE	00	25	A	2	0,1 (15)	25 (416,7)	230 Vac	Sekobrill
PSE	0	100	A	1	0,1 (15)	100 (1667)	230 Vac	Santoprene

PSH Pumps

Family of Pumps with the following General Characteristics:

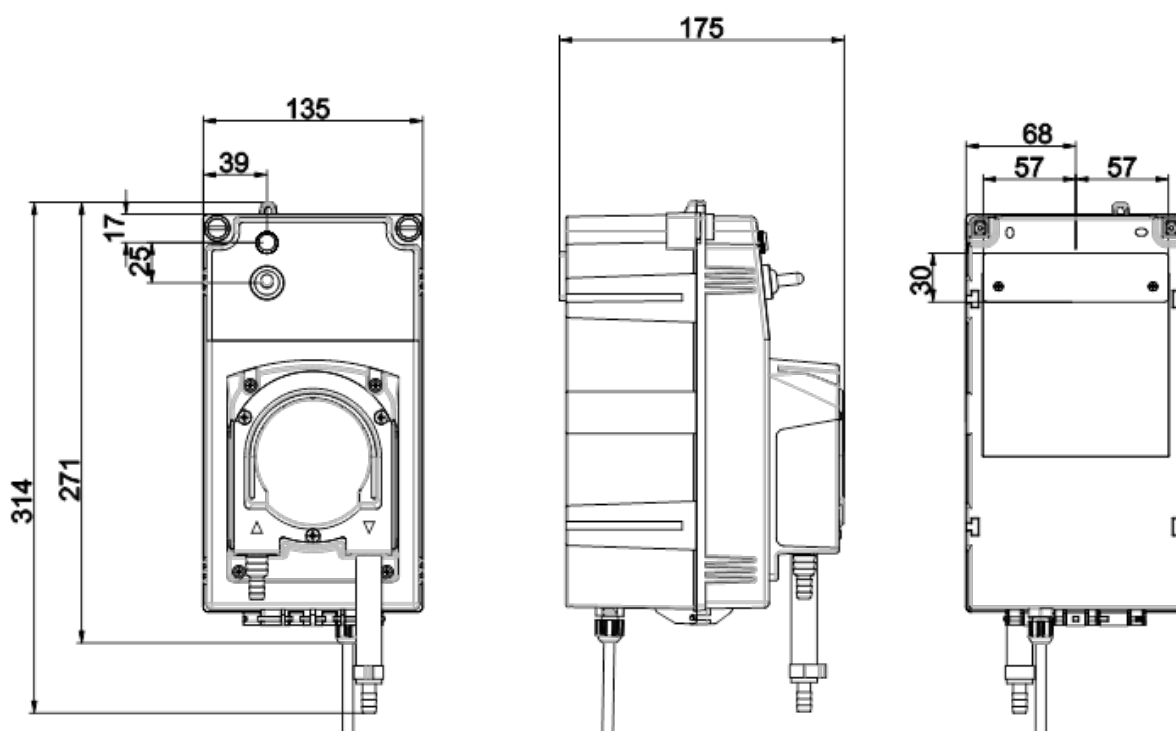
- Bigger Pump size (bell diameter 85 mm) for high flow rates.
- Analogue Interface (but the pump is always controlled by micro).
- IP65 protection degree guaranteed by its enclosure in PP.
- Fixing bracket available for quick wall fixing.
- Multi Power Supply 100÷240 Vac @ 50/60 Hz.
- Constant Dosage with selectable speed.
- Selectable Flow Rate via jumper on circuit board (30-60-90 or 120 l/h).
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

All kind of applications where high flow rates are needed, without strong backpressures at delivery.



DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSH	00	0H	M	1	0,1 (15)	30-60-90-120	100÷240 Vac	Santoprene
PSH	00	0H	M	2	0,1 (15)	30-60-90-120	100÷240 Vac	Sekobrill
PSH	00	0H	M	3	0,1 (15)	30-60-90-120	100÷240 Vac	Sekoflex

Dynamik Analogue Pumps

Family of Pumps with the following General Features:

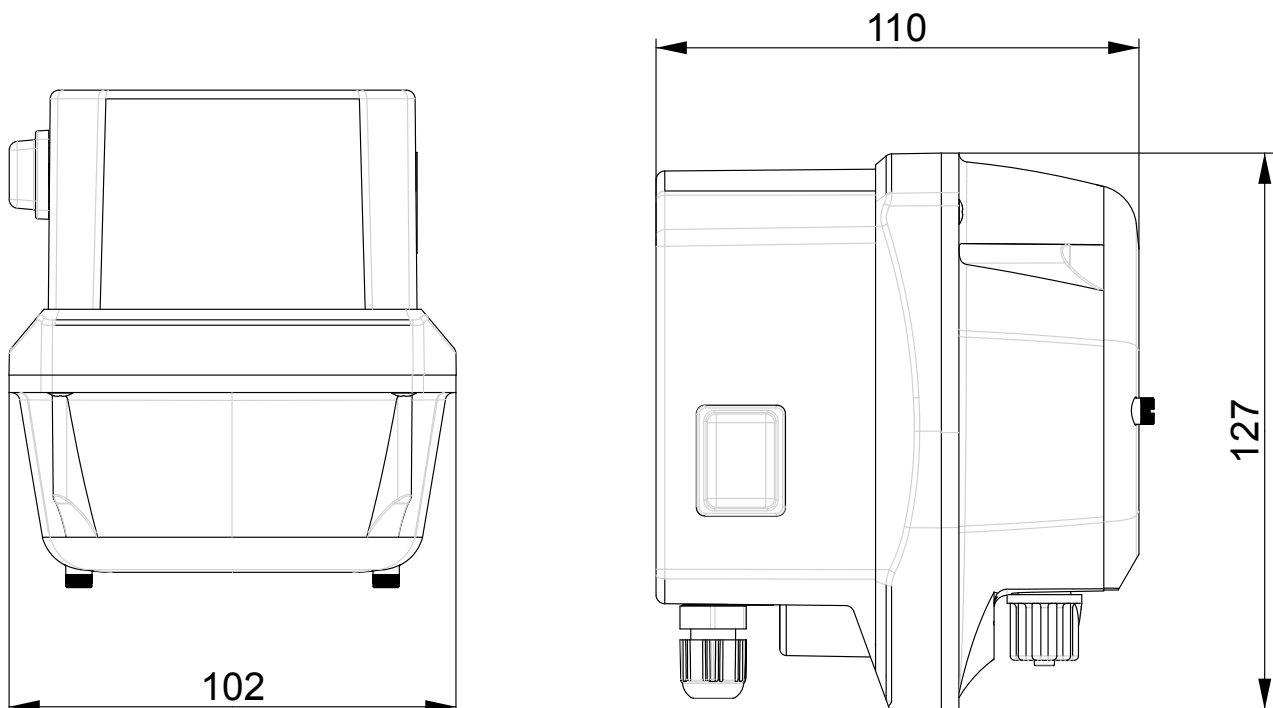
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF Switch.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.

Applications:

often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).



DIMENSIONAL DRAWING



Dynamik Analogue Pumps

KEY CODE

1, 2, 3	Family, Function				
NPE	Dynamik peristaltic pumps, Fixed Flow rate				
NPR	Dynamik peristaltic pumps, Speed Regulation				
NPM	Dynamik peristaltic pumps, Timed Dosing				
NTS	Dynamik "Season" peristaltic pumps, Time/Speed regulation				
	4, 5	Back pressure			
	00	0,1 bar			
	0H	0,5 bar			
	1H	1,5 bar			
	03	3 bar			
	6, 7	Flow Rate			
	0H	0,4 l/h (6,6 ml/min)			
	1H	1,5 l/h (25 ml/min)			
	2H	2,5 l/h (41,6 ml/min)			
	01	1 l/h (16,7 ml/min)			
	04	4 l/h (67 ml/min)			
	07	7 l/h (116,7 ml/min)			
	18	18 l/h (3000 ml/min)			
	28	28 l/h (466,7 ml/min)			
	30	30 l/h (500 ml/min)			
	8	Power Supply			
	A	230 Vac			
	B	24 Vac			
	D	24 VDC			
	M	100÷240 Vac			
	9	Membrane tubes			
	1	Santoprene			
	2	Sekobrill			
	3	Sekoflex			
	5	Sekoextra			
	6	Sekomed			
	10, 11, 12	Customization			
	000	No customization			
NPE	00	1H	A	3	000

AVAILABLE MODELS

NPM

Models with Dosage Adjustable through a potentiometer from 0s to 30 s.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1,5 l/h up to 2,6 l/h.

Tubes: Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPM	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill
NPM	03	2H	A	2	3 (45)	2,6 (43,3)	230 Vac	Sekobrill

Dynamik Analogue Pumps

NPE

Models with Fixed Flow Rate.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 100÷240 Vac 50/60 Hz.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 28 l/h.

Tubes: Santoprene, Sekoflex or Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPE	00	03	A	3	0,1 (1,5)	3 (50)	230 Vac	Sekoflex
NPE	00	1H	A	3	0,1 (1,5)	1,5 (25)	230 Vac	Sekoflex
NPE	00	28	A	2	0,1 (1,5)	28 (467)	100÷240 Vac	Sekobrill
NPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobrill
NPE	1H	1H	A	1	1,5 (22)	1,5 (25)	230 Vac	Santoprene

NPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,5 l/h up to 30 l/h.

Tubes: Santoprene, Sekobrill, Sekoflex (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPR	00	04	A	1	0,1 (1,5)	4 (66,7)	230 Vac	Santoprene
NPR	00	04	M	3	0,1 (1,5)	4 (66,7)	100÷240 Vac	Sekoflex
NPR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
NPR	00	18	M	1	0,1 (1,5)	28 (467)	100÷240 Vac	Santoprene
NPR	00	30	M	1	0,1 (1,5)	30 (500)	100÷240 Vac	Santoprene
NPR	03	01	A	2	3 (45)	1 (16,7)	230 Vac	Sekobrill
NPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
NPR	0H	0H	M	2	0,5 (7,5)	0,5 (8,8)	100÷240 Vac	Sekobrill

NTS (Dynamik "Season")

Model with Double Regulation: 1 potentiometer for Dosing Time adjustment (from 1 to 20 min), 1 selector for Flow Rate Selection (1 l/h Winter Season, 2 l/h Mid Season, 4 l/h in Summer Season). The pump repeats the set dosage every 24 hours.

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motor.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Max. Flow Rate l/h (ml/min)	Power Supply	Tube Material
NTS	1H	04	M	1	0,1 (1,5)	4 (66,7)	100÷240 Vac	Santoprene

Dynamik Digital Pumps

Family of Pumps with the following General Features:

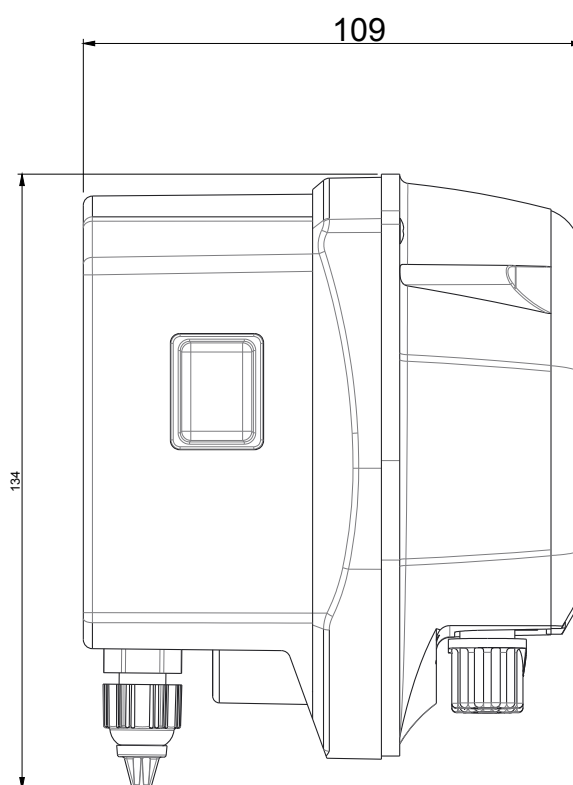
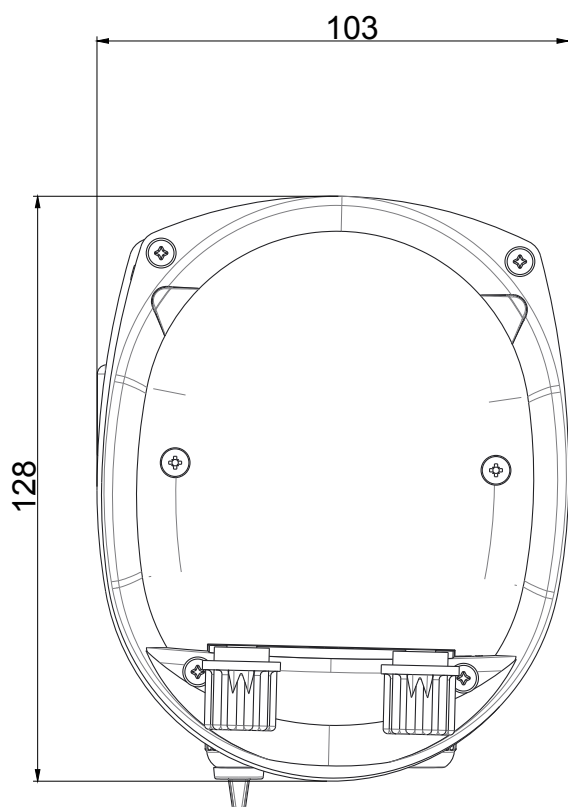
- Digital Interface with 7 segment display.
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF/Priming Button.
- Provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Transaxle technology to assure longer motor and tubing life.
- Level control input on most models.

Applications:

Advanced peristaltic pumps for dosing of essences, chlorine or other chemicals for application in shower foot, SPA pools and many others.



DIMENSIONAL DRAWING



Dynamik Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
SKCK		Dynamik Digital peristaltic pumps, Timed Dosing			
SKCR		Dynamik Digital peristaltic pumps, Conductivity Control Input			
SKFK		Dynamik Digital peristaltic pumps, micro dosing with speed regulation			
SKLR		Dynamik Digital peristaltic pumps, Timed dosing with external trigger			
SKPH		Dynamik Digital peristaltic pumps, pH control Input			
SKRX		Dynamik Digital peristaltic pumps, Redox control Input			
		5, 6	Back pressure		
		00	0,1 bar		
		1H	1,5 bar		
		03	3 bar		
		7, 8	Flow Rate		
		0H	0,4 l/h (6,6 ml/min)		
		1H	1,5 l/h (25 ml/min)		
		2H	2,5 l/h (41,6 ml/min)		
		01	1 l/h (16,7 ml/min)		
		04	4 l/h (67 ml/min)		
		07	7 l/h (116,7 ml/min)		
		10	10 l/h (166,6 ml/min)		
		15	15 l/h (250 ml/min)		
		9	Power Supply		
		A	230 Vac		
		B	24 Vac		
		D	24 VDC		
		M	100÷240 Vac		
		Z	24÷240 Vac		
		10	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		3	Sekoflex		
		5	Sekoextra		
		6	Sekomed		
		11, 12, 13	Customization		
		000	No customization		
NPE	00	1H	A	3	000

Dynamik Digital Pumps

SKCK

Models with Activation Time (A) and Pause Time (P) Adjustable by software.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

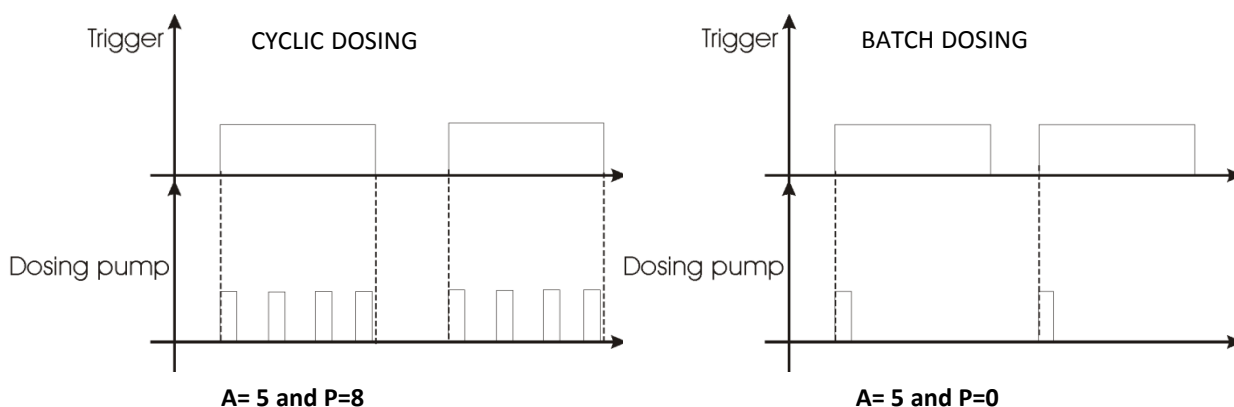
Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Santoprene, Sekobrill, Sekoextra (other materials on request).

The pump waits for a trigger and the display shows "A_on" flashing. When the pump receives a trigger, it starts to dose until the trigger is on according to the set A and P times; if P is set to 0 the pump will run only for the Activation time and then will stop; for example:

Power Supply: 100-240 Vac 50/60 Hz, 24 Vac.



CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCK	1H	1H	M	5	1,5 (22)	1,2 (20)	100÷240 Vac	Sekoextra
SKCK	1H	40	M	1	1,5 (22)	4 (66,7)	100÷240 Vac	Santoprene
SKCK	1H	70	M	1	1,5 (22)	7 (116,7)	100÷240 Vac	Santoprene

SKCR

Models with dosage depending on detected conductivity.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz, 24 Vac 50/60 Hz upon request.

Optional Level Control Input.

OFA Alarm buzzer (optional level) and signals on Set Point.

Reading Range 0.2 mS - 10 mS with +/-10% tolerance.

Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Sekoflex, Sekobrill, Sekoextra (other materials on request).

The pump doses at maximum speed (100%) if the reading is at least 10 SU less than Set Point (1 SU = 0.098 mS) When the conductivity value is exceeded, the SKCR gradually reduces its speed until it stops near the Set Point.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
SKCR	00	10	M	3	0,1 (1,5)	10 (66,7)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKFK

Models with adjustable speed, expressly realized for micro dosage of essences in SPA and Pools.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 2,5 ml/h up to 9,7 l/h.

Level Control Input.

External trigger 20÷240 Vac (Non Stop Dosage when the Trigger is ON).

Motors: Brushed DC motors.

Tubes: Santoprene, Sekoflex, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKFK	1H	01	M	1	1,5 (22)	0,025 (0,42)	100÷240 Vac	Santoprene
SKFK	1H	02	M	1	1,5 (22)	0,15 (2,5)	100÷240 Vac	Santoprene
SKFK	1H	03	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene
SKFK	1H	04	M	1	1,5 (22)	5,4 (90)	100÷240 Vac	Santoprene
SKFK	1H	05	M	1	1,5 (22)	9,7 (161,7)	100÷240 Vac	Santoprene
SKFK	30	05	M	2	3 (45)	9,7 (161,7)	100÷240 Vac	Sekobrill

SKLR

Models with adjustable dosing time, delay time and lockout time; originally created for laundry equipment, they can be used also in any other application where a trigger input is available.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF)

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz or 24 Vac 50/60 Hz upon request.

Max Flow rate: 15 l/h Optional Level Control Input. External trigger 20÷240 Vac .

Motors: Brushed DC motors.

Tubes: Sekoflex, Sekobrill (other materials on request).

Fixed Filter time (5 s), programmable delay time (0-999 seconds), dosing time (0-999 seconds), lock-out time (0-999 minutes).

The pump does not dose during the lock-out time, even if it receives another signal on the signal cable.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKLR	00	15	M	2	0,1 (1,5)	15 (250)	100÷240 Vac	Sekobrill
SKLR	00	15	M	3	0,1 (1,5)	15 (250)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKPH

Models with dosage depending on measured pH value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF) .

Bnc connection for probe pH.

Measure Range pH: 6÷8 pH (resolution: 0.1 pH).

Calibration method pH 1 Point.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 1,5 to 5 l/h

Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKPH	00	05	M	1	0,1 (1,5)	5 (83,3)	100÷240 Vac	Santoprene
SKPH	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKPH	1H	1H	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene

SKRX

Models with dosage depending on measured Rx value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

Bnc connection for ORP probe.

Measure Range ORP: 600÷1000 mV (resolution: 10 mV).

Calibration method: ORP 1 Point (740 mV set point by default).

Power Supply: 90÷265 Vac 50/60 Hz.

Flow rate: 1,5 l/h. Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKRX	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKRX	1H	1H	M	1	1,5 (22,5)	1,5 (25)	100÷240 Vac	Santoprene

Kronos 10 Analogue Pumps

Family of Pumps with the following General Features:

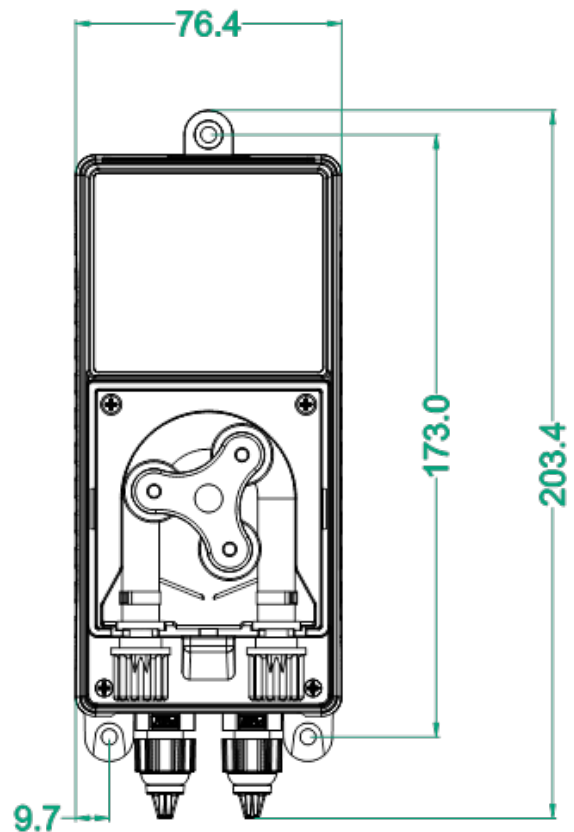
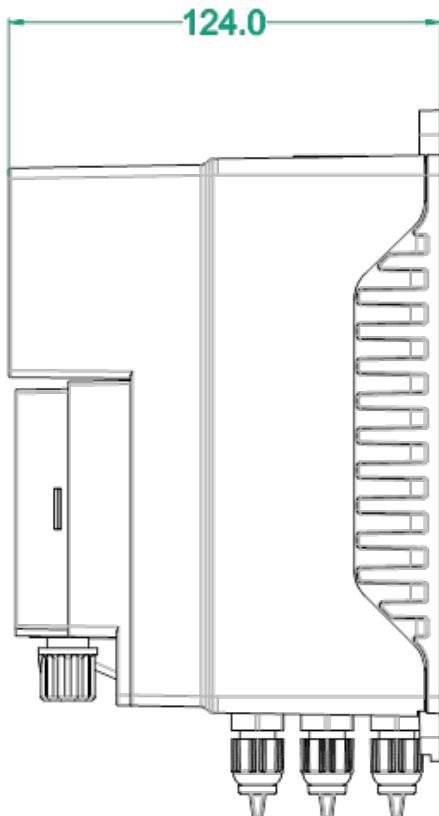
- Analogue Interface with micro controller.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Motors with extended lifetime.

Applications:

General Purpose Intermediate Range pump for low duty applications



DIMENSIONAL DRAWING



Kronos 10 Analogue Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
KXPR		Kronos Analogic peristaltic pumps, Adjustable Speed			
KXPA		Kronos Analogic peristaltic pump, Conductivity Control Input			
		5, 6	Back pressure		
		00	0,1 bar		
		03	3 bar		
		7, 8	Flow Rate		
		01	1 l/h (16,7 ml/min)		
		07	7 l/h (116,7 ml/min)		
		09	9 l/h (150 ml/min)		
		9	Power Supply		
		D	24 VDC		
		M	100÷240 Vac		
		10	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		11, 12, 13	Customization		
		000	No customization		
KXPR	00	07	M	1	000

KXPA

Models with Speed Regulation by potentiometer and Conductivity control Input with conductive probe.

Power Supply: 100÷240 Vac 50/60 Hz.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Flow rate: 9 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPA	00	09	M	1	0,1 (15)	9 (150)	100÷240 Vac	Santoprene

KXPR

Models with Speed Regulation by potentiometer.

Power Supply: 100÷240 Vac 50/60 Hz, 24 VDC.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Optional Level Control Input.

Flow rate: 1 l/h and 7 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
KXPR	00	07	M	1	0,1 (1,5)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 10 Digital Pumps

Family of Pumps with the following General Features:

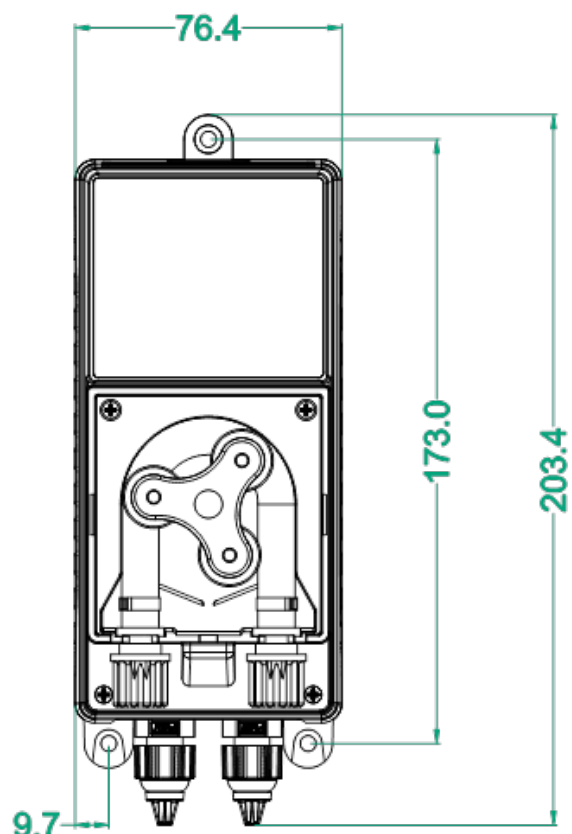
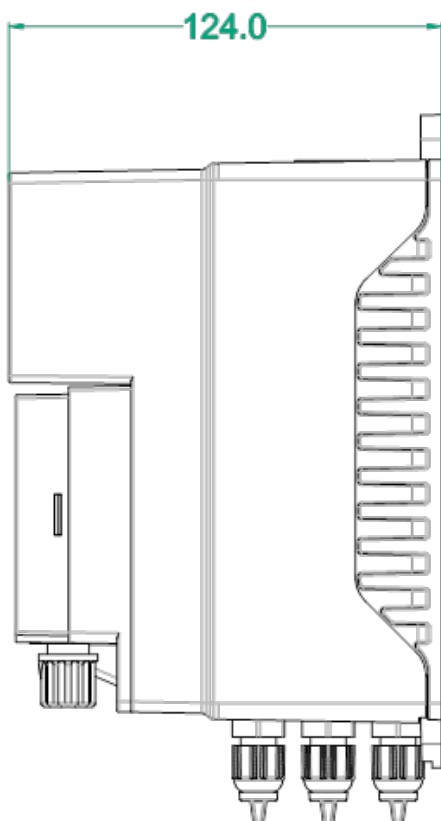
- Digital interface with 7 segments display.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime.
- Optionally equipped with ModBus connection for remote control.

Applications:

General Purpose Intermediate Range pump for low-medium duty applications.



DIMENSIONAL DRAWING



Kronos 10 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function				
KXDR		Kronos 10 Digital, Speed regulation				
KXCR		Kronos 10 Digital, Conductivity Control Input				
5, 6		Back pressure				
00		0,1 bar				
03		3 bar				
7, 8		Flow Rate				
01		1 l/h (16,7 ml/min)				
07		7 l/h (116,7 ml/min)				
10		10 l/h (166,7 ml/min)				
9		Power Supply				
M		100÷240 Vac				
10		Membrane tubes				
1		Santoprene				
2		Sekobrill				
3		Sekoflex				
5		Sekoextra				
6		Sekomed				
11		Communication				
0		No Communication				
I		Isolated ModBus				
M		Not Isolated ModBus				
12, 13		Customization				
00		No customization				
KXCR	00	07	M	1	0	00

KXCR

Models with Conductivity control Input and proportional reaching of the set point (100% until 80% of the set point and 20% with speed gradually decreasing).

Equipped with conductive probe (200 µS – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motors.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

Tubes: Santoprene (other materials on request).

KXDR

Models with possibility of speed regulation and trigger input signal.

ON/OFF switch and priming function.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXCR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene
KXDR	00	07	M	1	0,1 (15)	7(116,7)	100÷240 Vac	Santoprene

Kronos 20 Digital Pumps

Family of Pumps with the following General Features:

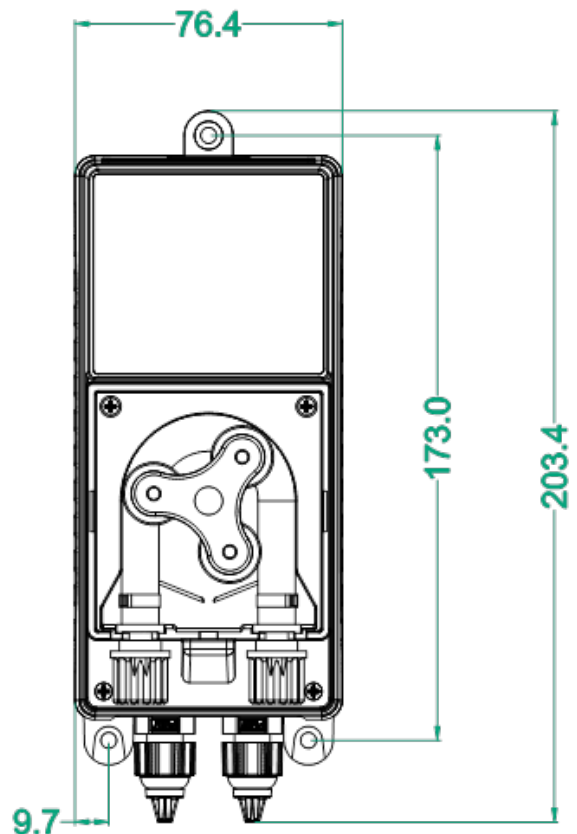
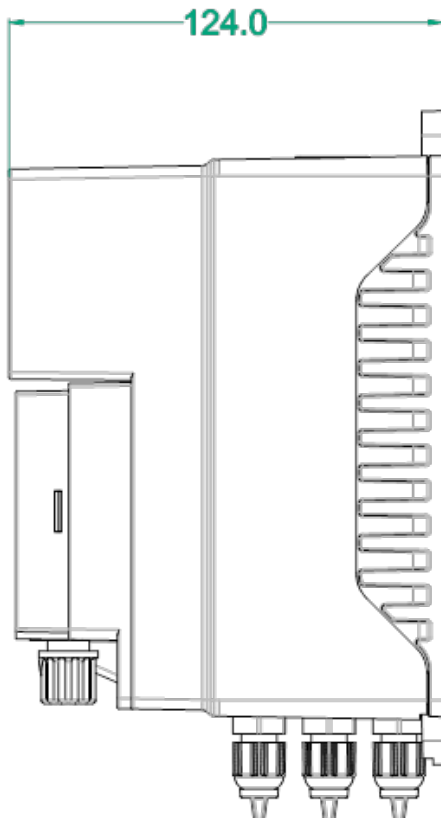
- Digital interface with 2 x 8 Characters LCD Display with backlight
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosage and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime, available with encoders on board, for better dosing accuracy.
- Optionally equipped with ModBus connection for remote control.



Applications:

Intermediate Range pump for medium duty applications

DIMENSIONAL DRAWING



Kronos 20 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function					
KTDR		Kronos 20 Digital, Constant Dosage with Speed Regulation					
KTCR		Kronos 20 Digital, Conductivity Control Input					
5, 6		Back pressure					
00		0,1 bar					
03		3 bar					
7, 8		Flow Rate					
01		1 l/h (16,7 ml/min)					
07		7 l/h (116,7 ml/min)					
10		10 l/h (166,7 ml/min)					
9		Power Supply					
M		100÷240 Vac					
10		Membrane tubes					
1		Santoprene					
5		Sekoextra					
6		Sekomed					
11		Communication					
0		No Communication					
I		Isolated ModBus					
M		Not Isolated ModBus					
12, 13		Customization					
00		No customization					
KTCR		00	10	M	1	0	00

KTCR

Models with Conductivity control Input and proportional reaching of the set point (*)

Equipped with conductive probe (200 µS – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz. Motors: Brushed DC motors.

Max Flow rate: 10 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials can be supplied upon request).

(*)The conductivity pump is intended to dose until the conductivity in the recipient where the pump is dosing reaches a programmed set point. The pump is therefore equipped with a conductive probe with a built-in temperature probe to compensate its readings.

A Proportional Band (like 80%-20% or 50%-50%) can be programmed in the menu of the pump: the pump will dose at its maximum flow rate until reaching the first programmed percentage of the set point, to then linearly decrease its speed down to 0% when the set point is reached, in order to avoid over dosage.

KTDR

Models with possibility of speed regulation and trigger input signal.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KTCR	00	10	M	1	0,1 (15)	10 (166,7)	100÷240 Vac	Santoprene
KTDR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 50 Digital Pumps

The Kronos 50 family is the best among Seko's range of peristaltic pumps. It is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. Due to the advanced technology and materials used, the various models can reach flow rates up to 15 l/h (@0,1 bar) and can dose at back pressures up to 6 bar with a special Sekotech tube.

General Features:

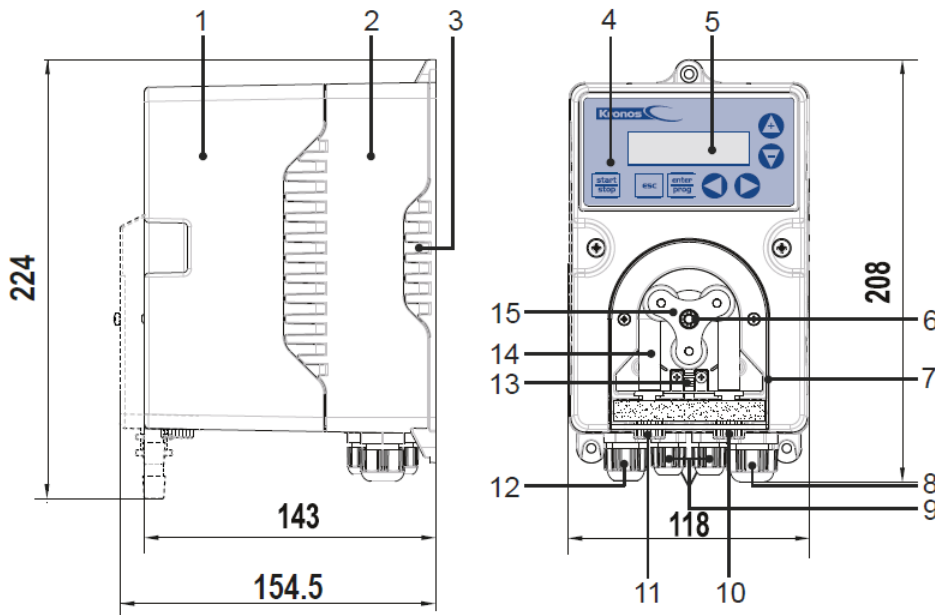
- Digital interface with 2 x 16 Characters LCD Display.
- Multi Power Supply 100÷240 Vac @50/60 Hz.
- IP65 protection degree with a professional looking enclosure made of shock proof and resistant ABS.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- The Stepper Motor guarantee a very accurate, adjustable and silent (< 35 dB) dosing.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosing in swimming pools.
- Different models available with various functions (constant dosage, proportional dosage, conductivity mode).



Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.

DIMENSIONAL DRAWING



1	Housing: upper section	9	PCBs 7
2	Housing: central section	10	Discharge connector
3	Housing: bottom section	11	Suction connector
4	Control keys	12	PCB 9
5	LCD display	13	Hose rupture monitoring
6	Ball bearing	14	Pump hose
7	Transparent cover	15	Rotor
8	PCB 11		

Kronos 50 Digital Pumps

KEY CODE

1, 2, 3, 4	Family, Function					
KRFM	Kronos 50 Digital peristaltic pump, Full Mode					
KRFF	Kronos 50 Digital peristaltic pump, Full Full					
KRIR	Kronos 50 peristaltic pump, Inductive Conductivity Mode Set Point Dosing					
KRCR	Kronos 50 peristaltic pump, Conductivity Mode Set Point Dosing					
KREC	Kronos 50 peristaltic pump, Cooling Towers					
KKFM	Kronos 50 Digital peristaltic pump, Full Mode					
KSFM	Kronos 65 Digital peristaltic pump, Full Mode					
	5, 6	Back pressure				
	00	0,1 bar				
	1H	1,5 bar				
	02	2 bar				
	03	3 bar				
	04	4 bar				
	06	6 bar				
	7, 8	Flow Rate				
	02	2 l/h (33,3 ml/min)				
	04	4 l/h (66 ml/min)				
	08	8 l/h (133,3 ml/min)				
	10	10 l/h (166,7 ml/min)				
	15	15 l/h (250 ml/min)				
	25	25 l/h (416,7 ml/min)				
	9	Power Supply				
	M	100÷240 Vac				
	10	Membrane tubes				
	1	Santoprene				
	3	Sekoflex				
	5	Sekoextra				
	6	Sekomed				
	7	Sekotech				
	8	Sekofort				
	A	Pharmapure				
	11	Communication				
	0	No Communication				
	I	Isolated ModBus				
	M	Not Isolated ModBus				
	12, 13	Customization				
	00	No customization				
KRFM	02	10	M	1	0	00

Kronos 50 Digital Pumps

KRFM

Kronos FM pump has a multi-function setting; there are six different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time)

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical, starting from its density;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time.

Reversible direction.

Tube break alarm system integrated.

Flow rates: 0,02÷15 l/h, @3÷0,1 bar.

Tubes: Santoprene, Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFM	00	15	M	1	0,1 bar	15 (250,0)	100÷240 Vac	Santoprene
KRFM	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFM	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra
KRFM	1H	10	M	5	1,5 bar	10 (166,7)	100÷240 Vac	Sekoextra

KRFF

Kronos FF pump has a multi-function setting; there are seven different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

0-10V Mode - The pump doses proportionally to a signal of 0-10V; it's possible to set the V (Volt) input value corresponding to 0% dosing and the V input value corresponding to the pump maximum flow rate.

Reversible direction.

Remote Stop Possibility.

Tube break alarm system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar or 0,002 ÷ 2 l/h @ 3bar

Tubes: Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFF	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFF	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra

Kronos 50 Digital Pumps

KRIR

Kronos IR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity inductive probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.20 – 50.00 mS; The pump doses @ 100% if conductivity is lower than a programmable Set Point percent (default 80%); If mS value is higher than fixed percent, the pump proportionally decreases the speed down to 0%.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRIR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KRCR

Kronos CR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.10 – 14.99 mS. It's possible to set the mS Set Point corresponding to 0% dosing (desired conductivity). The pump doses @100% if conductivity is lower than a programmable Set Point percent (default 80%). If mS value is higher than fixed percentage, the pump proportionally decreases the speed down to 0% (at the programmed Set Point).

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar.

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRCR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

Kronos 50 Digital Pumps

KREC

Kronos EC-Cond pump has been specifically designed for application in cooling towers; 3 operating modes are selectable:

PPM Dosing - Dosage amount calculated to maintain the selected Concentration of chemical;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time

Timer Dosing Mode - The pump doses in Time without external trigger (ON/OFF Time selectable)

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Dosing by relay action.

Conductivity Measures 0,1÷15,0 mS, Accuracy ± 0.1 mS

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KREC	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KKFM

Kronos KK FM pump is a special version of Kronos 50 pump; it has the six different following configurations:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 2l/h @ 2bar, 2 l/h @6 bar , 8 l/h @3 bar, 4 l/h @4 bar.

Tubes: Sekotech (allows secure operation in harsh conditions), Sekofort, Pharmapure.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KKFM	03	08	M	7	3 bar	8 l/h	100÷240 Vac	Sekotech
KKFM	06	02	M	7	6 bar	2 l/h	100÷240 Vac	Sekotech
KKFM	03	02	M	8	3 bar	2 l/h	100÷240 Vac	Sekofort
KKFM	04	04	M	A	4 bar	4 l/h	100÷240 Vac	Pharmapure

Kronos 65 Digital Pumps

The Kronos 65 family is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. The Kronos 65 has a bigger head size (65 mm vs 50 mm), and due to the advanced technology and materials used, it can reach flow rates up to 25 l/h (@0,1 bar) and can dose at back pressures up to 3 bar always in safe operation.

General Features:

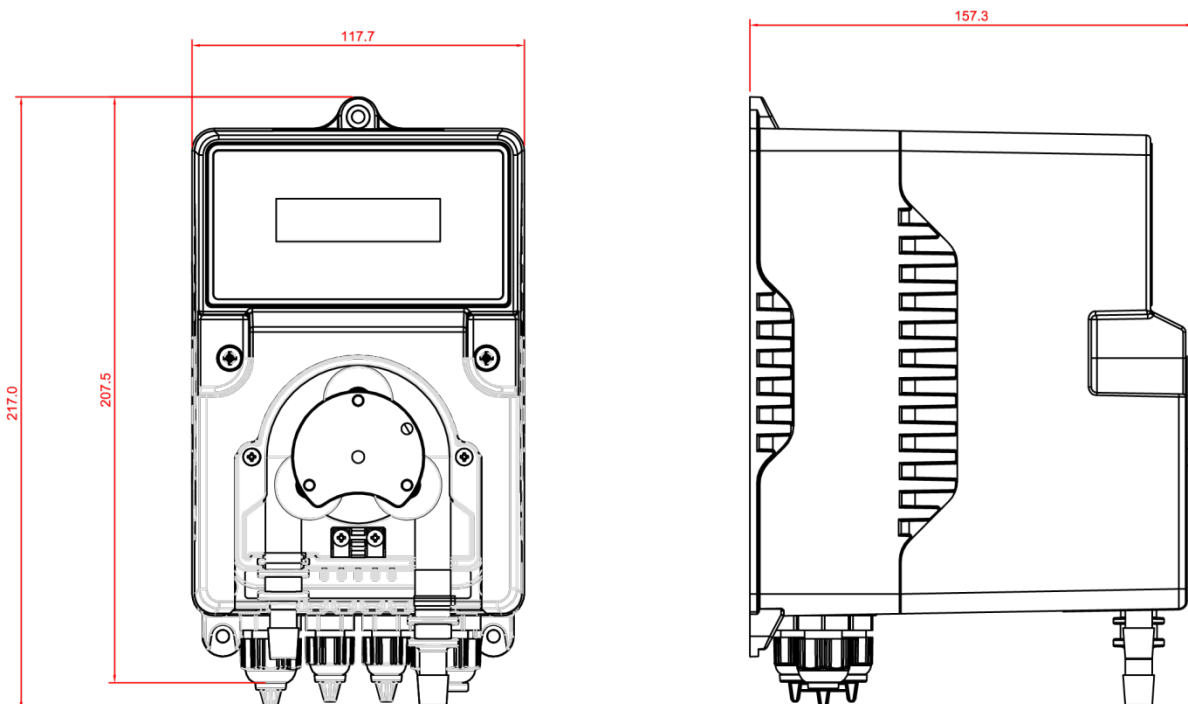
- Digital Interface with 2 x 16 characters LCD display.
- Multi power supply 100÷240 Vac @50/60 Hz, stepper motor, 3 rollers.
- Flow rate up to 25 l/h (@ 0,1 bar).
- Speed regulation 0,1...100%.
- Back Pressures up to 3 bar.
- Sekoflex tubing 6,35 x 12,7
- Tube breakage detection system.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.



DIMENSIONAL DRAWING



KSFM

Six different configuration modes:

Manual Mode, mA Mode, PPM Mode, 1:N Mode, N:1 Mode, Batch Mode.

Integrated Tube breakage detection system.

Flow rates: safely up to 25 l/h @0,1 bar.

Tubes: Sekoflex (other tubes can be supplied upon request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KSFM	00	25	M	3	0,1 bar	25 (416,7)	100÷240 Vac	Sekoflex

A large, dynamic splash of clear blue water with many bubbles, filling the right side and bottom of the page. The water is captured in motion, creating a sense of freshness and purity.

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.

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Peristaltic Pumps



Your Choice,
Our Commitment

Peristaltic Pumps operating principles and advantages

Peristaltic Pumps were introduced in the mid 50's of last century. In the first years after their introduction, these products didn't encounter a big success because the hoses used at that time were subject to quick damages and ruptures. When alternative and high performance plastic materials used for tubes were found, the peristaltic pumps began to have a huge diffusion in many kind of processes.

Their operating principle is very simple: a fluid is pumped up through the suction action created by the alternate compression and relaxation of a flexible hose, executed by apposite rollers. Upon restitution of the hose or tube a strong vacuum is formed drawing product into the pump. The medium to be pumped does not come into contact with any moving part and is totally contained within a flexible hose.

Benefits

Peristaltic pumps provide excellent solutions to solve pumping problems, especially when the product being pumped is particularly abrasive, corrosive or viscous.

Low maintenance costs

Their lack of valves, seals and glands makes them inexpensive to maintain; the only maintenance item is the hose or tube, a relatively low cost item that can be easily changed in a short time.

Dry running and self-priming

Peristaltic pumps do not require pumped fluid to be continually present.

The recovery of the hose or tube creates a powerful self-priming action and allows the pumps to move liquids containing entrapped air or that can off gas.

Reversible

Peristaltic pumps are reversible if driven by apposite programmed circuits.

Accurate dosing

The pumps are accurate in dosing; they have a repeatability of $\pm 3\%$ and metering capabilities of $\pm 5\%$.

No slip

The pumps have no internal backflow giving accurate dosing without slip.

Hygienic

The pumps, if provided with specific hose FDA compliant, can be used in food, beverages and pharmaceutical industry, because the dosed medium doesn't come in contact with parts different from the hose.

Low cost of ownership

Their cost of ownership is definitely lower than the one of other kind of pumps.

Peristaltic Pumps fields of application

The typical fields of application of the peristaltic pumps are in the Cleaning & Hygiene world, particularly in the ware washing and in the laundries, where these pumps are used as single systems or integrated in combined systems to dose the chemicals used for Glass/Dish or clothing cleaning. Seko is already a leading company in these fields with its wide range of pumps born for these purposes.

This catalogue shows the range of Seko's single pumps that can be used (and already are) in the Water Treatment field and in many other Industrial Processes.

Here following some examples of Water treatment and Industrial processes where Seko's peristaltic pumps are already widely used:

Swimming Pools

The quality of the water from a health, aesthetic, and safety point of view is the main characteristic in dealing with swimming pools.

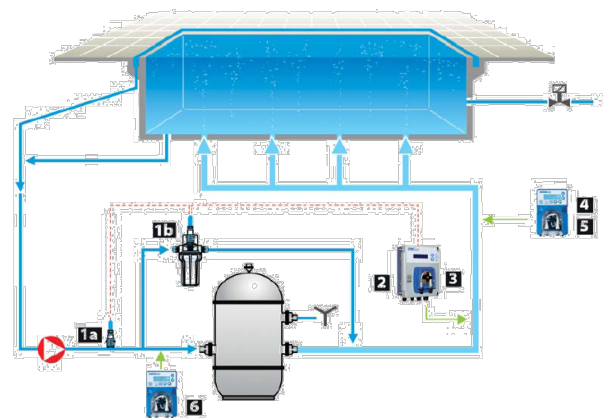
In this application peristaltic pumps are mainly used to dose pH inhibitors, chlorine inhibitors, algae inhibitors or flocculants inhibitors. The pumps we can offer for this application vary from the basic PE pumps to the Analogue or digital DYNAMIC pumps (these two mainly for residential pools), to the very high range KRONOS 50 and 65 pumps, equipped with stepper motors for total speed regulation (used also in public swimming pools or in waterparks).

Key

1 Probe holder **a** standard - **b** on demand

2 Measuring Instruments

3 Dosing pump for pH inhibitor



4 Dosing pump for chlorine inhibitor

5 Dosing pump for algae inhibitor

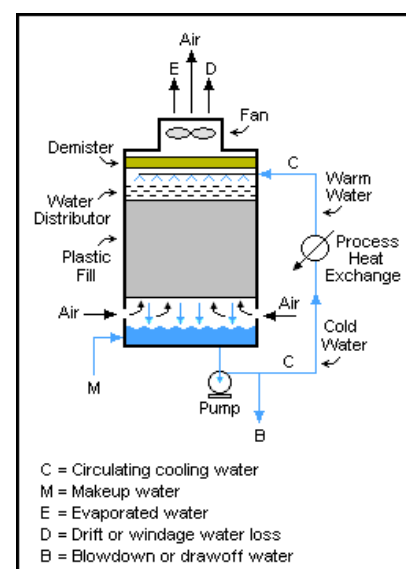
6 Dosing pump for flocculant inhibitor

Cooling Towers

Cooling towers are heat removal devices used to transfer process waste heat to the atmosphere, using cold water as heat removal medium. The cool water absorbs heat from the hot process streams which need to be cooled or condensed, and the absorbed heat warms the circulating water (C).

The warm water returns to the top of the cooling tower and trickles downward over the fill material inside the tower.

The cooling water has to be anyway treated and the Dosing Pumps in this case are used for Biocide, Algaecides, Chlorine chemical products and for Anti Scale Products, in combination with Seko's control instruments for pH, ORP, EC measuring.



Peristaltic Pumps fields of application

Drinking Water

The quality of the water coming from surface sources or from ground has to be checked and consequently adapted to National public health ministers requirements before coming to public fountains and houses.

In this application peristaltic pumps are mainly used to dose chlorine inhibitors, algae inhibitors to make water potable as for law requirements. DYNAMIC and KRONOS pumps are suitable for this job if activated by water meter pulse senders or chlorine measuring instruments.



Other Possible Applications In Industrial Processes

Oenology: Wine Additives/Wine Filtration Tanks Cleaning Systems

Dosage of enzymes and additives in the wine treatment process.

Dosage of chemicals for wine filtration tanks cleaning.

Car Washing Equipment

Dosage of detergents and other washing additives.

Printing Industry

Dosage of UV and water based inks into flexographic machines; The adjustability of the flow rate, the possibility of pumping also inks with solids pigments, the low speed handling of the peristaltic pump make it the ideal solution for this application.

Aquariums

Dosage of salt water into calcium reactors, dosage of enzymes and nutrients for fishes, dosage of additives to maintain the pure water quality necessary for aquariums' life.

Agriculture

Dosage of disinfectants, enzymes and fertilizers in agricultural business.

Laboratories

Dosage of cleaning agents for medical equipment.

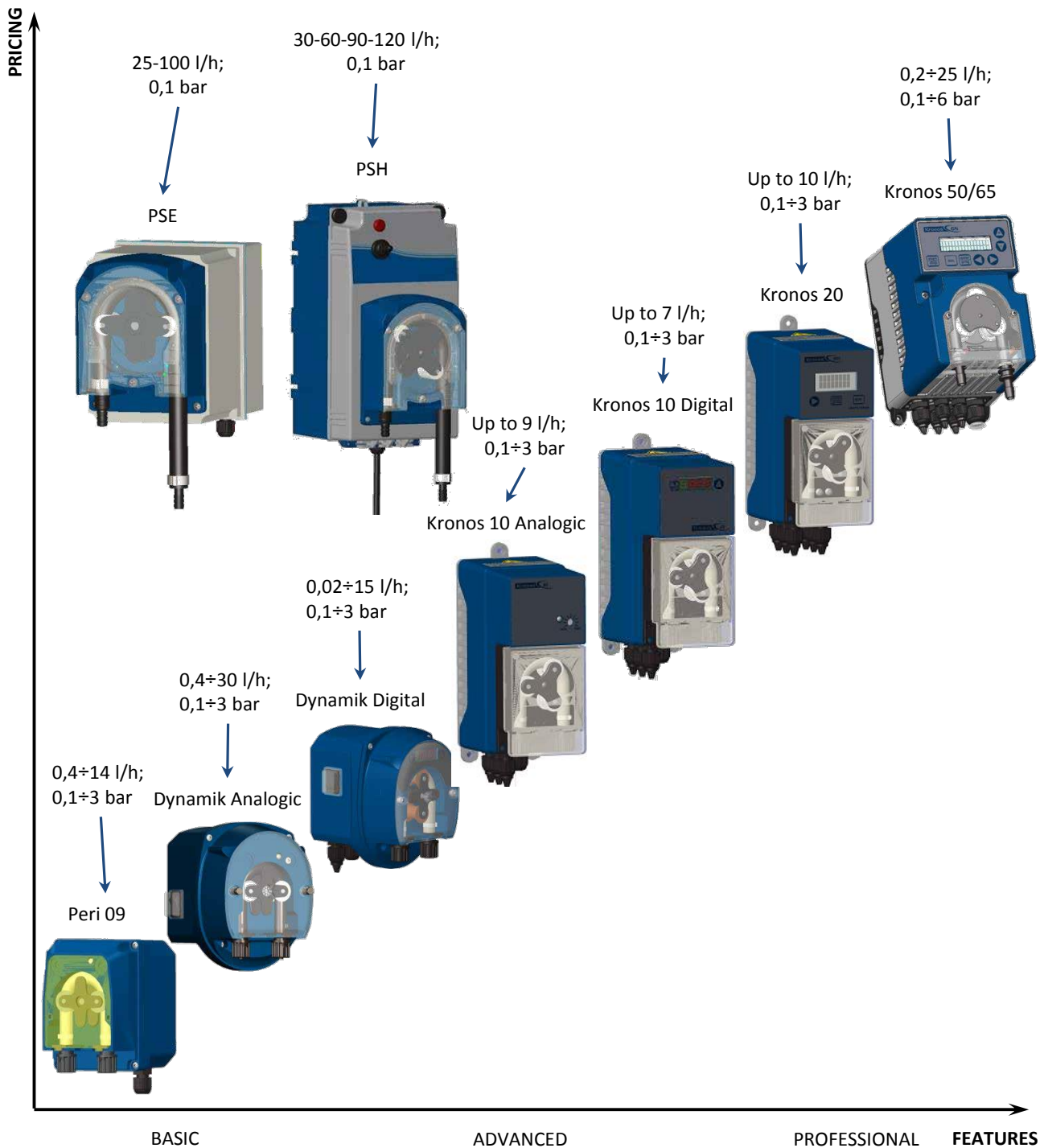
Waste Water Treatment On Board Of Vessels

Dosage of chemicals to treat the waste waters generated on board of small vessels.

The previous are only some examples of application fields between the many possibilities to use Seko peristaltic pumps in industrial processes.

Seko Full Range of Pumps

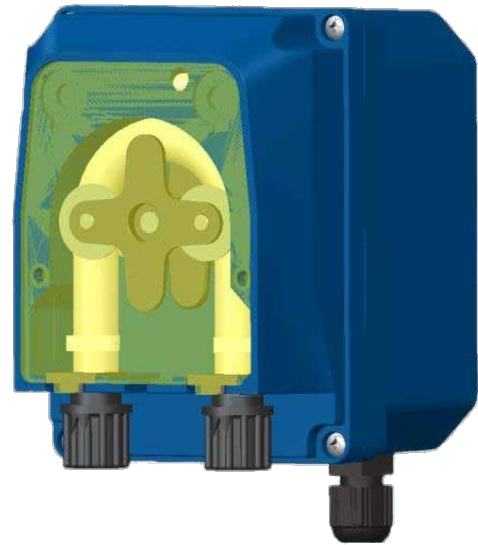
Here following an overview on Seko range of Peristaltic Pumps that can be used in Water Treatment and Industrial Applications:



Peri 09 Pumps

Family of Pumps with the following General Features:

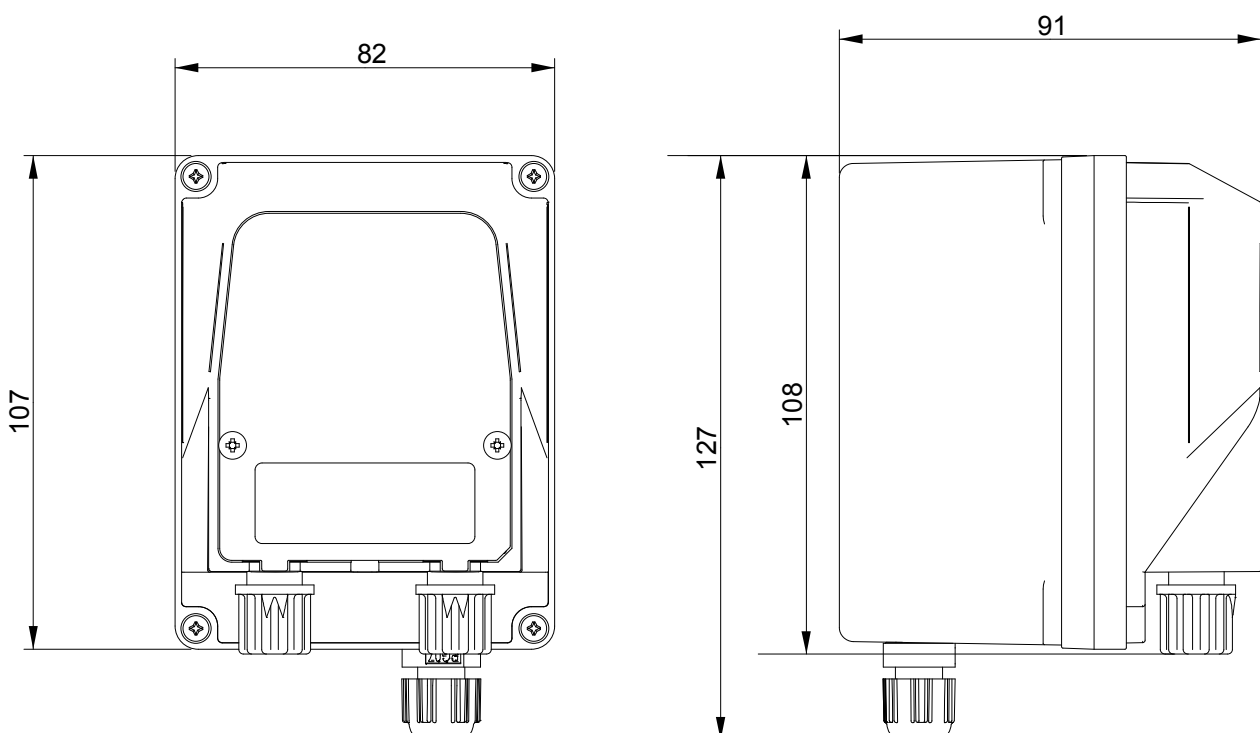
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.



Applications:

Often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).

DIMENSIONAL DRAWING



Peri 09 Pumps

KEY CODE

1, 2, 3	Family, Function				
PPE	Peri09 peristaltic pumps, Fixed Flow rate				
PPR	Peri09 peristaltic pumps, Speed Regulation				
PPM	Peri09 peristaltic pumps, Timed Dosing				
	4, 5	Back pressure			
	00	0,1 bar			
	0H	0,5 bar			
	1H	1,5 bar			
	03	3 bar			
	6, 7	Flow Rate			
	0H	0,4 l/h (6,6 ml/min)			
	1H	1,5 l/h (25 ml/min)			
	2H	2,5 l/h (41,6 ml/min)			
	03	3 l/h (50 ml/min)			
	04	4 l/h (67 ml/min)			
	05	5 l/h (83,3 ml/min)			
	06	6 l/h (100 ml/min)			
	07	7 l/h (116,7 ml/min)			
	10	10 l/h (166,6 ml/min)			
	14	14 l/h (233,3 ml/min)			
	18	18 l/h (300 ml/min)			
	8	Power Supply			
	A	230 Vac			
	B	24 Vac			
	D	24 VDC			
	M	100÷240 Vac			
	9	Membrane tubes			
	1	Santoprene			
	2	Sekobrill			
	3	Sekoflex			
	5	Sekoextra			
	6	Sekomed			
	8	Sekofort			
	9	Sekolast			
	10, 11, 12	Customization			
	000	No customization			
PPM	03	1H	A	1	000

Peri 09 Pumps

Available Models

PPE

Models with Fixed Flow Rate.

2 Rollers.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 14 l/h.

Tubes: Santoprene or Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPE	00	0H	A	1	0,1 (1,5)	0,4 (6,6)	230 Vac	Santoprene
PPE	00	1H	A	1	0,1 (1,5)	1,5 (25)	230 Vac	Santoprene
PPE	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPE	00	04	D	1	0,1 (1,5)	4 (67)	24 VDC	Santoprene
PPE	00	05	A	1	0,1 (1,5)	5 (83,3)	230 Vac	Santoprene
PPE	00	06	A	1	0,1 (1,5)	6 (100)	230 Vac	Santoprene
PPE	00	07	D	1	0,1 (1,5)	7 (116,7)	24 VDC	Santoprene
PPE	00	14	D	1	0,1 (1,5)	14 (233,3)	24 VDC	Santoprene
PPE	1H	1H	A	2	1,5 (22)	1,5 (25)	230 Vac	Sekobriill
PPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPE	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill

PPM

Models with Dosing Time Adjustable through a potentiometer from 0s to 30s.

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,4 l/h up to 10 l/h.

Tubes: Santoprene, Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz or 24 Vac.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPM	00	0H	A	2	0,1 (1,5)	0,7 (11,7)	230 Vac	Sekobriill
PPM	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPM	00	10	A	1	0,1 (1,5)	10 (166,7)	230 Vac	Santoprene
PPM	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPM	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill
PPM	03	2H	A	2	3 (45)	2,6 (43)	230 Vac	Sekobriill

Peri 09 Pumps

PPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1 l/h up to 18 l/h.

Tubes: Santoprene, Sekobrill, Sekolast, Sekoextra (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Max Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPR	00	04	A	1	0,1 (1,5)	4 (67)	230 Vac	Santoprene
PPR	00	04	M	1	0,1 (1,5)	4 (67)	24÷240 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	230 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	24÷240 Vac	Santoprene
PPR	00	18	A	1	0,1 (1,5)	18 (300)	230 Vac	Santoprene
PPR	00	18	M	1	0,1 (1,5)	18 (300)	24÷240 Vac	Santoprene
PPR	0H	01	M	2	3 (45)	1 (16,67)	100÷240 Vac	Sekobrill
PPR	03	01	A	2	3 (45)	1 (16,67)	230 Vac	Sekobrill
PPR	03	01	M	2	3 (45)	1 (16,67)	24÷240 Vac	Sekobrill
PPR	03	03	A	9	3 (45)	3 (50)	230 Vac	Sekolast
PPR	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill

PSE Pumps

Family of Pumps with the following General Characteristics:

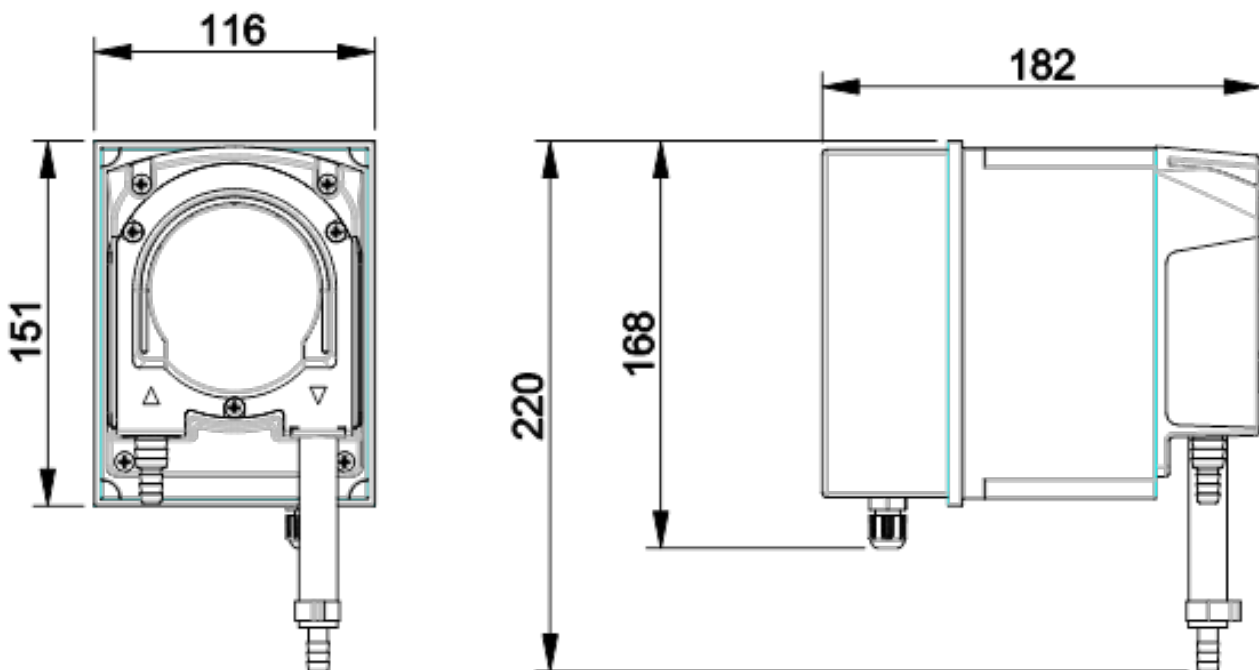
- Bigger Pump size (bell diameter 85 mm) for high flow rate.
- Analogue Interface.
- IP54 protection degree.
- Fixing bracket available for quick wall fixing.
- 230 Vac Power Supply, 66 W Power Consumption.
- Constant Dosage, continuous run not admitted.
- Flow Rates 25 or 100 l/h.
- It can be equipped with PTFE rollers for special applications. such as Chlorine Dosage in swimming pools.



Applications:

PSE peristaltic pumps are mainly used for condensate removal. They are particularly suitable for air conditioners, evaporators, refrigerated display cases.

DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSE	00	25	A	1	0,1 (15)	25 (416,7)	230 Vac	Santoprene
PSE	00	25	A	2	0,1 (15)	25 (416,7)	230 Vac	Sekobrill
PSE	0	100	A	1	0,1 (15)	100 (1667)	230 Vac	Santoprene

PSH Pumps

Family of Pumps with the following General Characteristics:

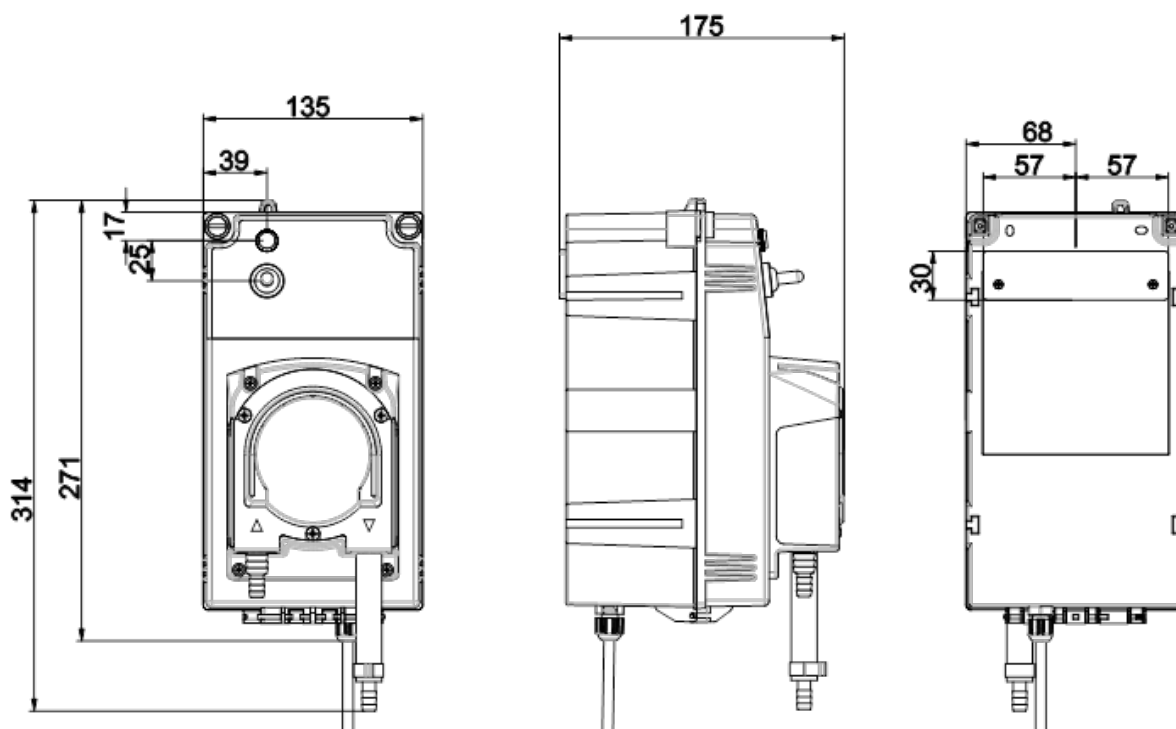
- Bigger Pump size (bell diameter 85 mm) for high flow rates.
- Analogue Interface (but the pump is always controlled by micro).
- IP65 protection degree guaranteed by its enclosure in PP.
- Fixing bracket available for quick wall fixing.
- Multi Power Supply 100÷240 Vac @ 50/60 Hz.
- Constant Dosage with selectable speed.
- Selectable Flow Rate via jumper on circuit board (30-60-90 or 120 l/h).
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

All kind of applications where high flow rates are needed, without strong backpressures at delivery.



DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSH	00	0H	M	1	0,1 (15)	30-60-90-120	100÷240 Vac	Santoprene
PSH	00	0H	M	2	0,1 (15)	30-60-90-120	100÷240 Vac	Sekobrill
PSH	00	0H	M	3	0,1 (15)	30-60-90-120	100÷240 Vac	Sekoflex

Dynamik Analogue Pumps

Family of Pumps with the following General Features:

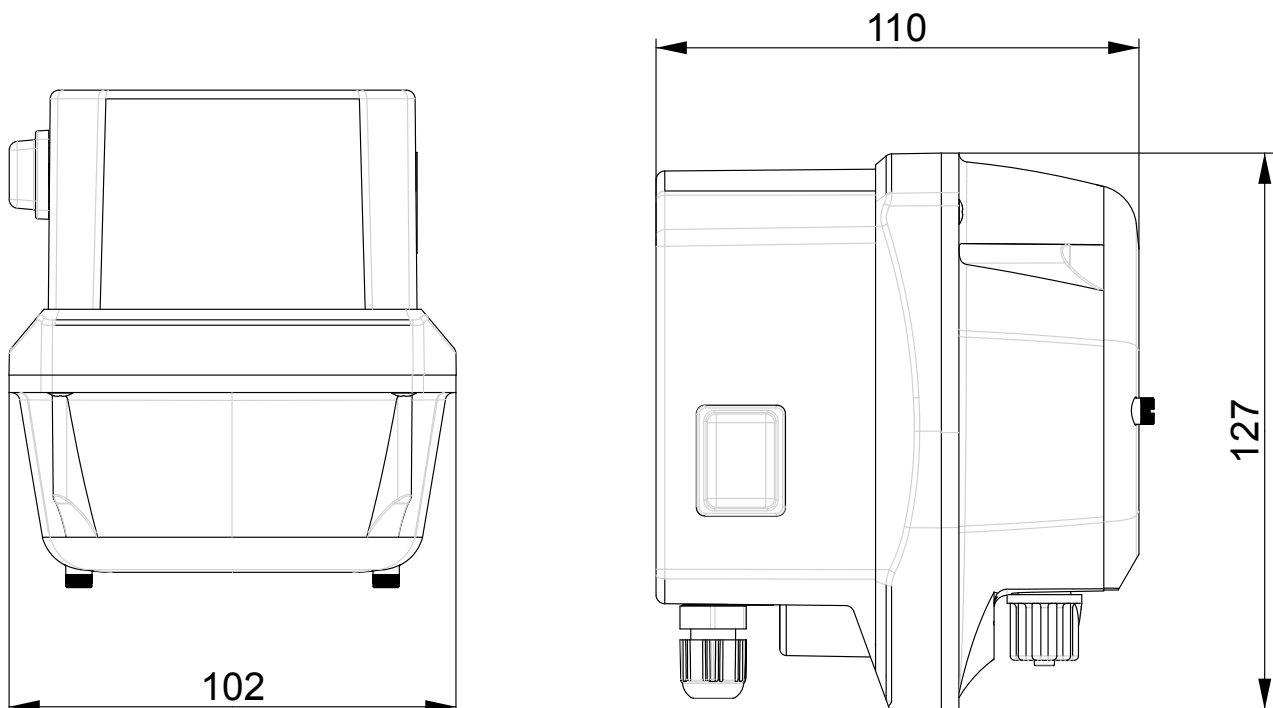
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF Switch.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.

Applications:

often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).



DIMENSIONAL DRAWING



Dynamik Analogue Pumps

KEY CODE

1, 2, 3	Family, Function				
NPE	Dynamik peristaltic pumps, Fixed Flow rate				
NPR	Dynamik peristaltic pumps, Speed Regulation				
NPM	Dynamik peristaltic pumps, Timed Dosing				
NTS	Dynamik "Season" peristaltic pumps, Time/Speed regulation				
	4, 5	Back pressure			
	00	0,1 bar			
	0H	0,5 bar			
	1H	1,5 bar			
	03	3 bar			
	6, 7	Flow Rate			
	0H	0,4 l/h (6,6 ml/min)			
	1H	1,5 l/h (25 ml/min)			
	2H	2,5 l/h (41,6 ml/min)			
	01	1 l/h (16,7 ml/min)			
	04	4 l/h (67 ml/min)			
	07	7 l/h (116,7 ml/min)			
	18	18 l/h (3000 ml/min)			
	28	28 l/h (466,7 ml/min)			
	30	30 l/h (500 ml/min)			
	8	Power Supply			
	A	230 Vac			
	B	24 Vac			
	D	24 VDC			
	M	100÷240 Vac			
	9	Membrane tubes			
	1	Santoprene			
	2	Sekobrill			
	3	Sekoflex			
	5	Sekoextra			
	6	Sekomed			
	10, 11, 12	Customization			
	000	No customization			
NPE	00	1H	A	3	000

AVAILABLE MODELS

NPM

Models with Dosage Adjustable through a potentiometer from 0s to 30 s.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1,5 l/h up to 2,6 l/h.

Tubes: Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPM	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill
NPM	03	2H	A	2	3 (45)	2,6 (43,3)	230 Vac	Sekobrill

Dynamik Analogue Pumps

NPE

Models with Fixed Flow Rate.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 100÷240 Vac 50/60 Hz.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 28 l/h.

Tubes: Santoprene, Sekoflex or Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPE	00	03	A	3	0,1 (1,5)	3 (50)	230 Vac	Sekoflex
NPE	00	1H	A	3	0,1 (1,5)	1,5 (25)	230 Vac	Sekoflex
NPE	00	28	A	2	0,1 (1,5)	28 (467)	100÷240 Vac	Sekobrill
NPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobrill
NPE	1H	1H	A	1	1,5 (22)	1,5 (25)	230 Vac	Santoprene

NPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,5 l/h up to 30 l/h.

Tubes: Santoprene, Sekobrill, Sekoflex (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPR	00	04	A	1	0,1 (1,5)	4 (66,7)	230 Vac	Santoprene
NPR	00	04	M	3	0,1 (1,5)	4 (66,7)	100÷240 Vac	Sekoflex
NPR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
NPR	00	18	M	1	0,1 (1,5)	28 (467)	100÷240 Vac	Santoprene
NPR	00	30	M	1	0,1 (1,5)	30 (500)	100÷240 Vac	Santoprene
NPR	03	01	A	2	3 (45)	1 (16,7)	230 Vac	Sekobrill
NPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
NPR	0H	0H	M	2	0,5 (7,5)	0,5 (8,8)	100÷240 Vac	Sekobrill

NTS (Dynamik "Season")

Model with Double Regulation: 1 potentiometer for Dosing Time adjustment (from 1 to 20 min), 1 selector for Flow Rate Selection (1 l/h Winter Season, 2 l/h Mid Season, 4 l/h in Summer Season). The pump repeats the set dosage every 24 hours.

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motor.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Max. Flow Rate l/h (ml/min)	Power Supply	Tube Material
NTS	1H	04	M	1	0,1 (1,5)	4 (66,7)	100÷240 Vac	Santoprene

Dynamik Digital Pumps

Family of Pumps with the following General Features:

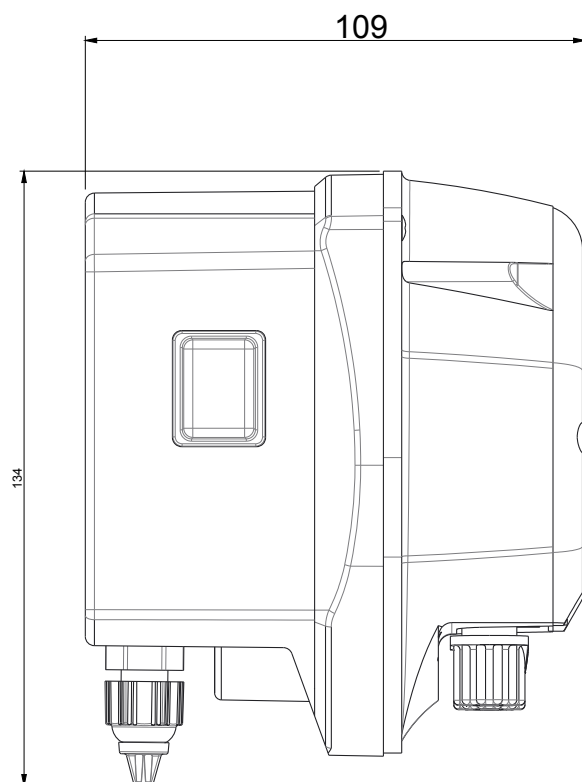
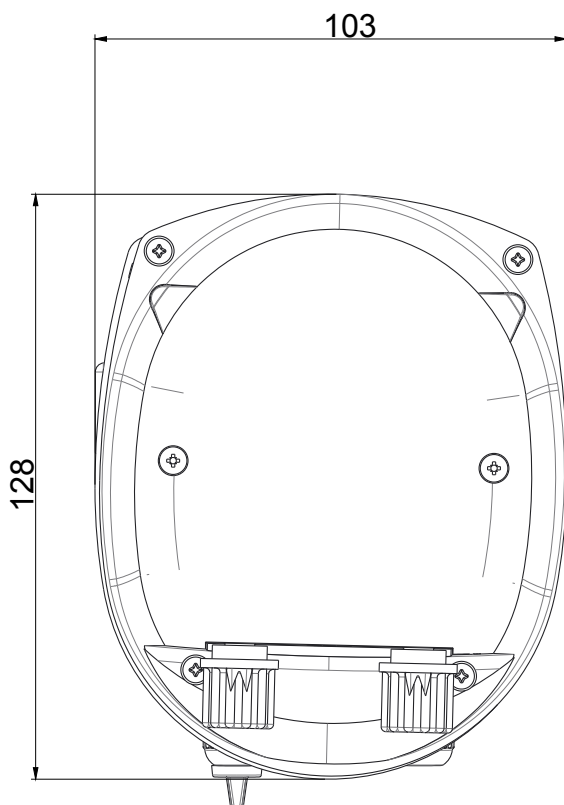
- Digital Interface with 7 segment display.
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF/Priming Button.
- Provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Transaxle technology to assure longer motor and tubing life.
- Level control input on most models.

Applications:

Advanced peristaltic pumps for dosing of essences, chlorine or other chemicals for application in shower foot, SPA pools and many others.



DIMENSIONAL DRAWING



Dynamik Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
SKCK		Dynamik Digital peristaltic pumps, Timed Dosing			
SKCR		Dynamik Digital peristaltic pumps, Conductivity Control Input			
SKFK		Dynamik Digital peristaltic pumps, micro dosing with speed regulation			
SKLR		Dynamik Digital peristaltic pumps, Timed dosing with external trigger			
SKPH		Dynamik Digital peristaltic pumps, pH control Input			
SKRX		Dynamik Digital peristaltic pumps, Redox control Input			
		5, 6	Back pressure		
		00	0,1 bar		
		1H	1,5 bar		
		03	3 bar		
		7, 8	Flow Rate		
		0H	0,4 l/h (6,6 ml/min)		
		1H	1,5 l/h (25 ml/min)		
		2H	2,5 l/h (41,6 ml/min)		
		01	1 l/h (16,7 ml/min)		
		04	4 l/h (67 ml/min)		
		07	7 l/h (116,7 ml/min)		
		10	10 l/h (166,6 ml/min)		
		15	15 l/h (250 ml/min)		
		9	Power Supply		
		A	230 Vac		
		B	24 Vac		
		D	24 VDC		
		M	100÷240 Vac		
		Z	24÷240 Vac		
		10	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		3	Sekoflex		
		5	Sekoextra		
		6	Sekomed		
		11, 12, 13	Customization		
		000	No customization		
NPE	00	1H	A	3	000

Dynamik Digital Pumps

SKCK

Models with Activation Time (A) and Pause Time (P) Adjustable by software.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

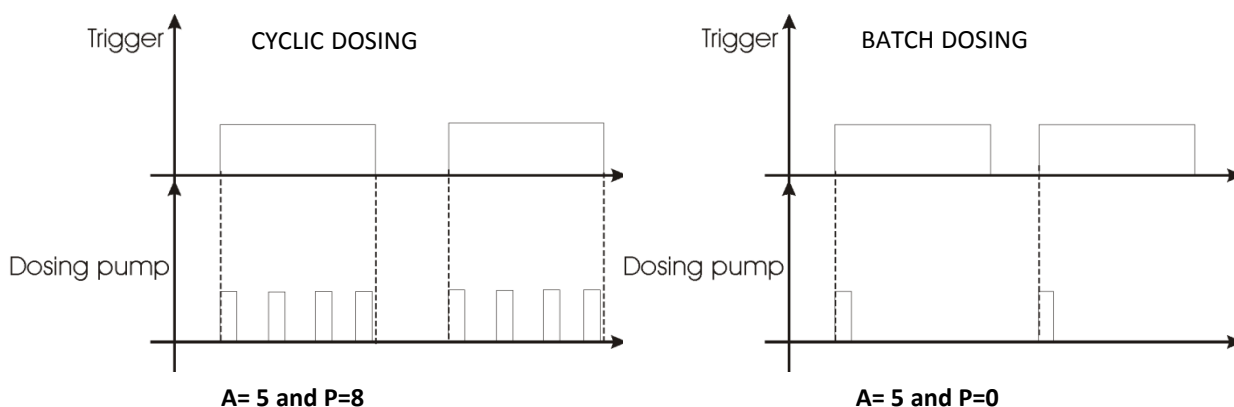
Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Santoprene, Sekobrill, Sekoextra (other materials on request).

The pump waits for a trigger and the display shows "A_on" flashing. When the pump receives a trigger, it starts to dose until the trigger is on according to the set A and P times; if P is set to 0 the pump will run only for the Activation time and then will stop; for example:

Power Supply: 100-240 Vac 50/60 Hz, 24 Vac.



CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCK	1H	1H	M	5	1,5 (22)	1,2 (20)	100÷240 Vac	Sekoextra
SKCK	1H	40	M	1	1,5 (22)	4 (66,7)	100÷240 Vac	Santoprene
SKCK	1H	70	M	1	1,5 (22)	7 (116,7)	100÷240 Vac	Santoprene

SKCR

Models with dosage depending on detected conductivity.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz, 24 Vac 50/60 Hz upon request.

Optional Level Control Input.

OFA Alarm buzzer (optional level) and signals on Set Point.

Reading Range 0.2 mS - 10 mS with +/-10% tolerance.

Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Sekoflex, Sekobrill, Sekoextra (other materials on request).

The pump doses at maximum speed (100%) if the reading is at least 10 SU less than Set Point (1 SU = 0.098 mS) When the conductivity value is exceeded, the SKCR gradually reduces its speed until it stops near the Set Point.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
SKCR	00	10	M	3	0,1 (1,5)	10 (66,7)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKFK

Models with adjustable speed, expressly realized for micro dosage of essences in SPA and Pools.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 2,5 ml/h up to 9,7 l/h.

Level Control Input.

External trigger 20÷240 Vac (Non Stop Dosage when the Trigger is ON).

Motors: Brushed DC motors.

Tubes: Santoprene, Sekoflex, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKFK	1H	01	M	1	1,5 (22)	0,025 (0,42)	100÷240 Vac	Santoprene
SKFK	1H	02	M	1	1,5 (22)	0,15 (2,5)	100÷240 Vac	Santoprene
SKFK	1H	03	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene
SKFK	1H	04	M	1	1,5 (22)	5,4 (90)	100÷240 Vac	Santoprene
SKFK	1H	05	M	1	1,5 (22)	9,7 (161,7)	100÷240 Vac	Santoprene
SKFK	30	05	M	2	3 (45)	9,7 (161,7)	100÷240 Vac	Sekobrill

SKLR

Models with adjustable dosing time, delay time and lockout time; originally created for laundry equipment, they can be used also in any other application where a trigger input is available.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF)

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz or 24 Vac 50/60 Hz upon request.

Max Flow rate: 15 l/h Optional Level Control Input. External trigger 20÷240 Vac .

Motors: Brushed DC motors.

Tubes: Sekoflex, Sekobrill (other materials on request).

Fixed Filter time (5 s), programmable delay time (0-999 seconds), dosing time (0-999 seconds), lock-out time (0-999 minutes).

The pump does not dose during the lock-out time, even if it receives another signal on the signal cable.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKLR	00	15	M	2	0,1 (1,5)	15 (250)	100÷240 Vac	Sekobrill
SKLR	00	15	M	3	0,1 (1,5)	15 (250)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKPH

Models with dosage depending on measured pH value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF) .

Bnc connection for probe pH.

Measure Range pH: 6÷8 pH (resolution: 0.1 pH).

Calibration method pH 1 Point.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 1,5 to 5 l/h

Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKPH	00	05	M	1	0,1 (1,5)	5 (83,3)	100÷240 Vac	Santoprene
SKPH	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKPH	1H	1H	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene

SKRX

Models with dosage depending on measured Rx value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

Bnc connection for ORP probe.

Measure Range ORP: 600÷1000 mV (resolution: 10 mV).

Calibration method: ORP 1 Point (740 mV set point by default).

Power Supply: 90÷265 Vac 50/60 Hz.

Flow rate: 1,5 l/h. Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKRX	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKRX	1H	1H	M	1	1,5 (22,5)	1,5 (25)	100÷240 Vac	Santoprene

Kronos 10 Analogue Pumps

Family of Pumps with the following General Features:

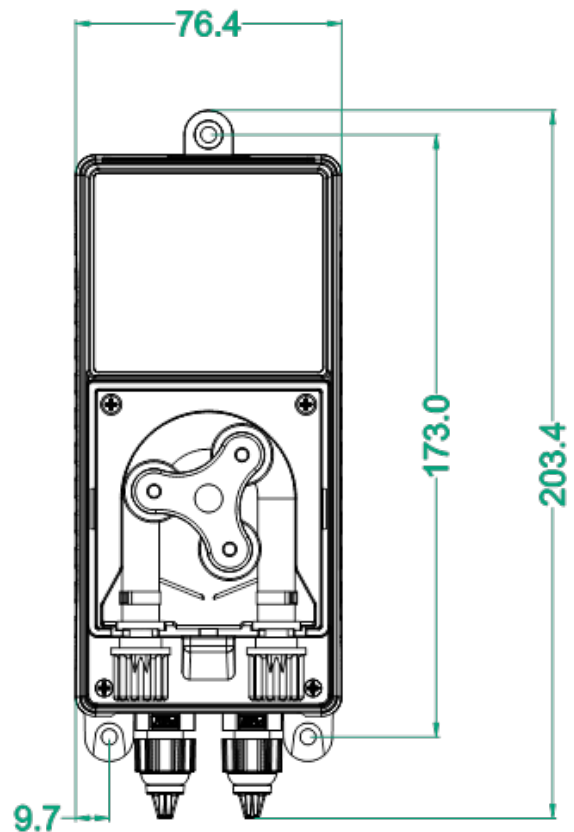
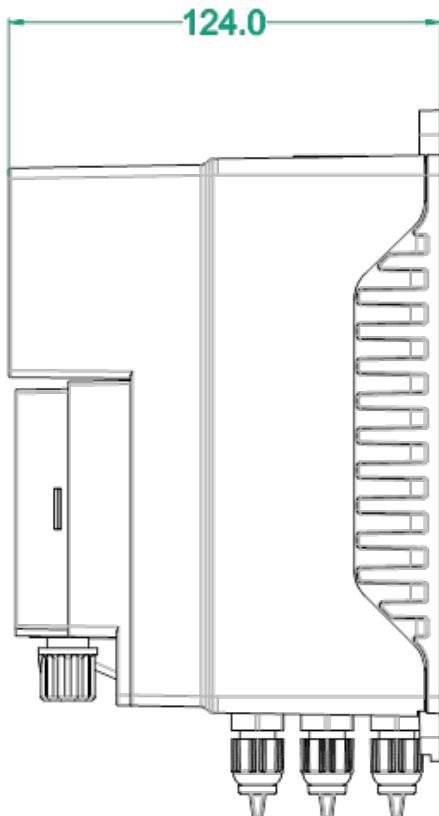
- Analogue Interface with micro controller.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Motors with extended lifetime.

Applications:

General Purpose Intermediate Range pump for low duty applications



DIMENSIONAL DRAWING



Kronos 10 Analogue Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
KXPR		Kronos Analogic peristaltic pumps, Adjustable Speed			
KXPA		Kronos Analogic peristaltic pump, Conductivity Control Input			
		5, 6	Back pressure		
		00	0,1 bar		
		03	3 bar		
		7, 8	Flow Rate		
		01	1 l/h (16,7 ml/min)		
		07	7 l/h (116,7 ml/min)		
		09	9 l/h (150 ml/min)		
		9	Power Supply		
		D	24 VDC		
		M	100÷240 Vac		
		10	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		11, 12, 13	Customization		
		000	No customization		
KXPR	00	07	M	1	000

KXPA

Models with Speed Regulation by potentiometer and Conductivity control Input with conductive probe.

Power Supply: 100÷240 Vac 50/60 Hz.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Flow rate: 9 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPA	00	09	M	1	0,1 (15)	9 (150)	100÷240 Vac	Santoprene

KXPR

Models with Speed Regulation by potentiometer.

Power Supply: 100÷240 Vac 50/60 Hz, 24 VDC.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Optional Level Control Input.

Flow rate: 1 l/h and 7 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
KXPR	00	07	M	1	0,1 (1,5)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 10 Digital Pumps

Family of Pumps with the following General Features:

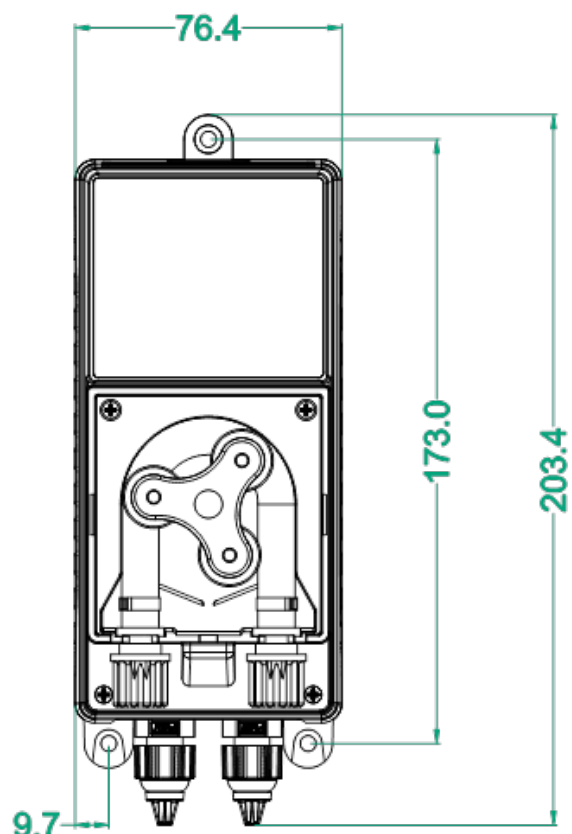
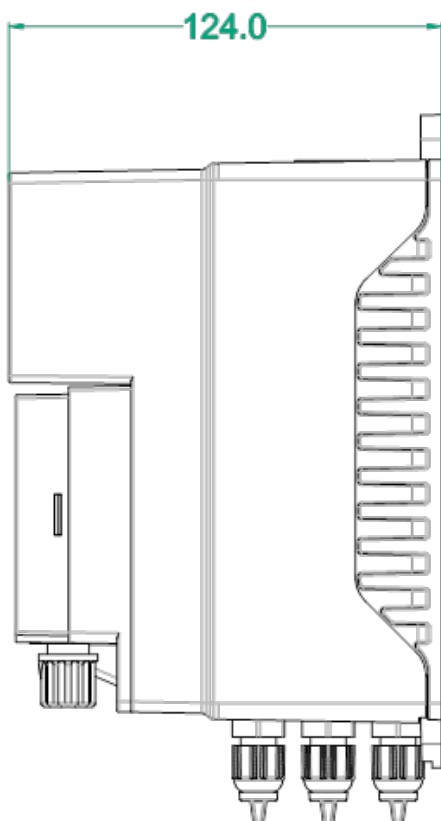
- Digital interface with 7 segments display.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime.
- Optionally equipped with ModBus connection for remote control.

Applications:

General Purpose Intermediate Range pump for low-medium duty applications.



DIMENSIONAL DRAWING



Kronos 10 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function					
KXDR		Kronos 10 Digital, Speed regulation					
KXCR		Kronos 10 Digital, Conductivity Control Input					
		5, 6	Back pressure				
		00	0,1 bar				
		03	3 bar				
		7, 8	Flow Rate				
		01	1 l/h (16,7 ml/min)				
		07	7 l/h (116,7 ml/min)				
		10	10 l/h (166,7 ml/min)				
		9	Power Supply				
		M	100÷240 Vac				
		10	Membrane tubes				
		1	Santoprene				
		2	Sekobrill				
		3	Sekoflex				
		5	Sekoextra				
		6	Sekomed				
		11	Communication				
		0	No Communication				
		I	Isolated ModBus				
		M	Not Isolated ModBus				
		12, 13	Customization				
		00	No customization				
KXCR		00	07	M	1	0	00

KXCR

Models with Conductivity control Input and proportional reaching of the set point (100% until 80% of the set point and 20% with speed gradually decreasing).

Equipped with conductive probe (200 µS – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motors.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

Tubes: Santoprene (other materials on request).

KXDR

Models with possibility of speed regulation and trigger input signal.

ON/OFF switch and priming function.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXCR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene
KXDR	00	07	M	1	0,1 (15)	7(116,7)	100÷240 Vac	Santoprene

Kronos 20 Digital Pumps

Family of Pumps with the following General Features:

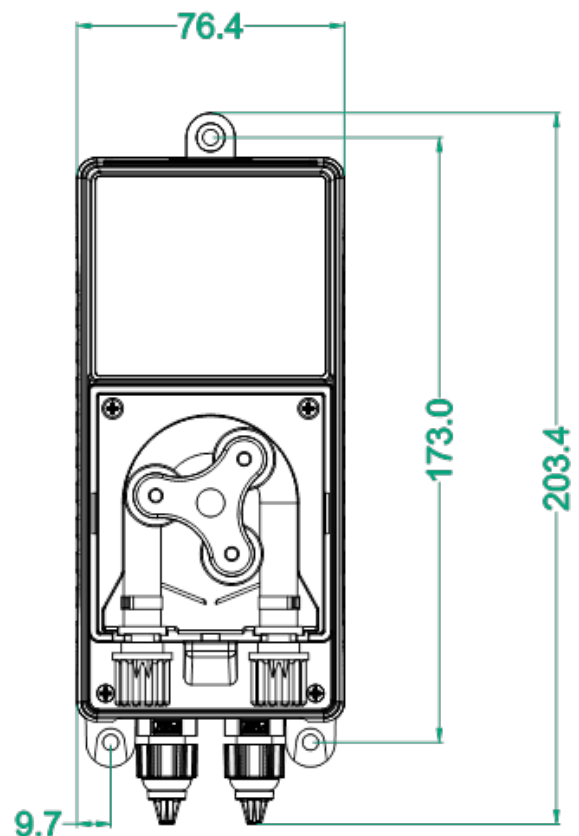
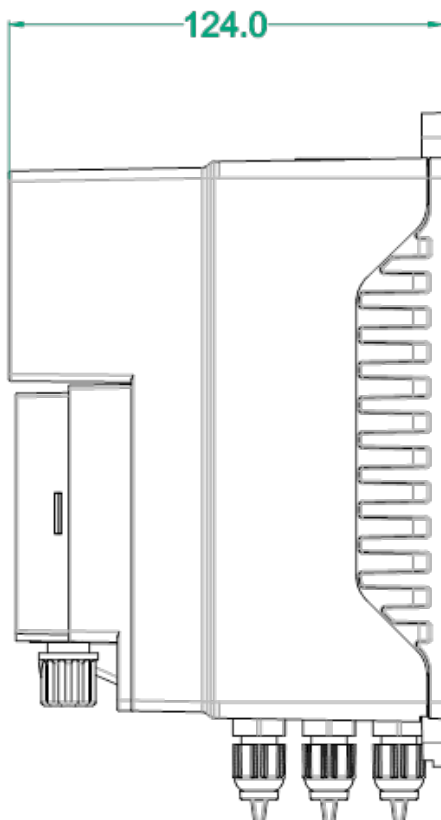
- Digital interface with 2 x 8 Characters LCD Display with backlight
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosage and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime, available with encoders on board, for better dosing accuracy.
- Optionally equipped with ModBus connection for remote control.



Applications:

Intermediate Range pump for medium duty applications

DIMENSIONAL DRAWING



Kronos 20 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function					
KTDR		Kronos 20 Digital, Constant Dosage with Speed Regulation					
KTCR		Kronos 20 Digital, Conductivity Control Input					
5, 6		Back pressure					
00		0,1 bar					
03		3 bar					
7, 8		Flow Rate					
01		1 l/h (16,7 ml/min)					
07		7 l/h (116,7 ml/min)					
10		10 l/h (166,7 ml/min)					
9		Power Supply					
M		100÷240 Vac					
10		Membrane tubes					
1		Santoprene					
5		Sekoextra					
6		Sekomed					
11		Communication					
0		No Communication					
I		Isolated ModBus					
M		Not Isolated ModBus					
12, 13		Customization					
00		No customization					
KTCR		00	10	M	1	0	00

KTCR

Models with Conductivity control Input and proportional reaching of the set point (*)

Equipped with conductive probe (200 µS – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz. Motors: Brushed DC motors.

Max Flow rate: 10 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials can be supplied upon request).

(*)The conductivity pump is intended to dose until the conductivity in the recipient where the pump is dosing reaches a programmed set point. The pump is therefore equipped with a conductive probe with a built-in temperature probe to compensate its readings.

A Proportional Band (like 80%-20% or 50%-50%) can be programmed in the menu of the pump: the pump will dose at its maximum flow rate until reaching the first programmed percentage of the set point, to then linearly decrease its speed down to 0% when the set point is reached, in order to avoid over dosage.

KTDR

Models with possibility of speed regulation and trigger input signal.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KTCR	00	10	M	1	0,1 (15)	10 (166,7)	100÷240 Vac	Santoprene
KTDR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 50 Digital Pumps

The Kronos 50 family is the best among Seko's range of peristaltic pumps. It is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. Due to the advanced technology and materials used, the various models can reach flow rates up to 15 l/h (@0,1 bar) and can dose at back pressures up to 6 bar with a special Sekotech tube.

General Features:

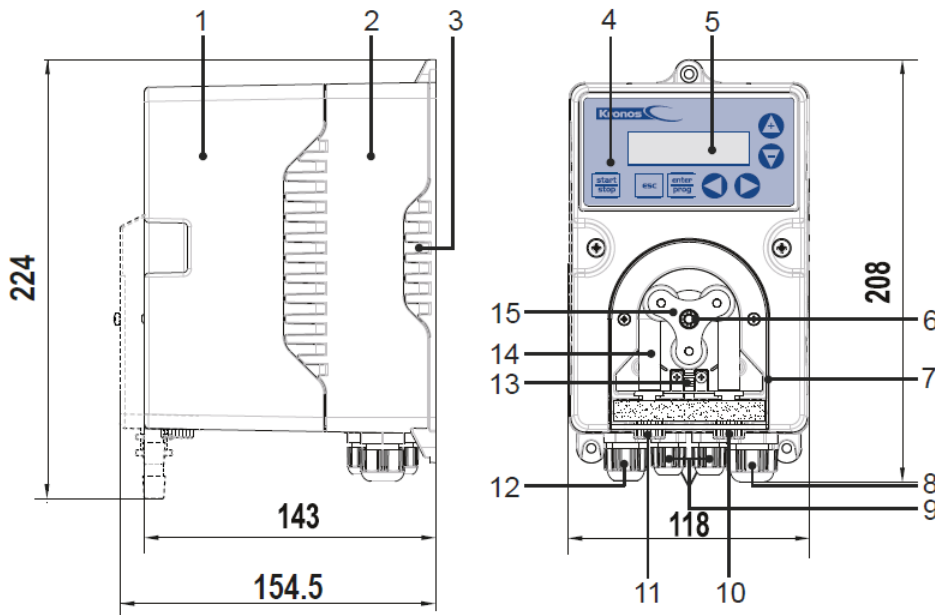
- Digital interface with 2 x 16 Characters LCD Display.
- Multi Power Supply 100÷240 Vac @50/60 Hz.
- IP65 protection degree with a professional looking enclosure made of shock proof and resistant ABS.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- The Stepper Motor guarantee a very accurate, adjustable and silent (< 35 dB) dosing.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Different models available with various functions (constant dosage, proportional dosage, conductivity mode).



Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.

DIMENSIONAL DRAWING



1	Housing: upper section	9	PCBs 7
2	Housing: central section	10	Discharge connector
3	Housing: bottom section	11	Suction connector
4	Control keys	12	PCB 9
5	LCD display	13	Hose rupture monitoring
6	Ball bearing	14	Pump hose
7	Transparent cover	15	Rotor
8	PCB 11		

Kronos 50 Digital Pumps

KEY CODE

1, 2, 3, 4	Family, Function					
KRFM	Kronos 50 Digital peristaltic pump, Full Mode					
KRFF	Kronos 50 Digital peristaltic pump, Full Full					
KRIR	Kronos 50 peristaltic pump, Inductive Conductivity Mode Set Point Dosing					
KRCR	Kronos 50 peristaltic pump, Conductivity Mode Set Point Dosing					
KREC	Kronos 50 peristaltic pump, Cooling Towers					
KKFM	Kronos 50 Digital peristaltic pump, Full Mode					
KSFM	Kronos 65 Digital peristaltic pump, Full Mode					
	5, 6	Back pressure				
	00	0,1 bar				
	1H	1,5 bar				
	02	2 bar				
	03	3 bar				
	04	4 bar				
	06	6 bar				
	7, 8	Flow Rate				
	02	2 l/h (33,3 ml/min)				
	04	4 l/h (66 ml/min)				
	08	8 l/h (133,3 ml/min)				
	10	10 l/h (166,7 ml/min)				
	15	15 l/h (250 ml/min)				
	25	25 l/h (416,7 ml/min)				
	9	Power Supply				
	M	100÷240 Vac				
	10	Membrane tubes				
	1	Santoprene				
	3	Sekoflex				
	5	Sekoextra				
	6	Sekomed				
	7	Sekotech				
	8	Sekofort				
	A	Pharmapure				
	11	Communication				
	0	No Communication				
	I	Isolated ModBus				
	M	Not Isolated ModBus				
	12, 13	Customization				
	00	No customization				
KRFM	02	10	M	1	0	00

Kronos 50 Digital Pumps

KRFM

Kronos FM pump has a multi-function setting; there are six different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time)

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical, starting from its density;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time.

Reversible direction.

Tube break alarm system integrated.

Flow rates: 0,02÷15 l/h, @3÷0,1 bar.

Tubes: Santoprene, Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFM	00	15	M	1	0,1 bar	15 (250,0)	100÷240 Vac	Santoprene
KRFM	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFM	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra
KRFM	1H	10	M	5	1,5 bar	10 (166,7)	100÷240 Vac	Sekoextra

KRFF

Kronos FF pump has a multi-function setting; there are seven different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

0-10V Mode - The pump doses proportionally to a signal of 0-10V; it's possible to set the V (Volt) input value corresponding to 0% dosing and the V input value corresponding to the pump maximum flow rate.

Reversible direction.

Remote Stop Possibility.

Tube break alarm system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar or 0,002 ÷ 2 l/h @ 3bar

Tubes: Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFF	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFF	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra

Kronos 50 Digital Pumps

KRIR

Kronos IR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity inductive probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.20 – 50.00 mS; The pump doses @ 100% if conductivity is lower than a programmable Set Point percent (default 80%); If mS value is higher than fixed percent, the pump proportionally decreases the speed down to 0%.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRIR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KRCR

Kronos CR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.10 – 14.99 mS. It's possible to set the mS Set Point corresponding to 0% dosing (desired conductivity). The pump doses @100% if conductivity is lower than a programmable Set Point percent (default 80%). If mS value is higher than fixed percentage, the pump proportionally decreases the speed down to 0% (at the programmed Set Point).

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar.

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRCR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

Kronos 50 Digital Pumps

KREC

Kronos EC-Cond pump has been specifically designed for application in cooling towers; 3 operating modes are selectable:

PPM Dosing - Dosage amount calculated to maintain the selected Concentration of chemical;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time

Timer Dosing Mode - The pump doses in Time without external trigger (ON/OFF Time selectable)

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Dosing by relay action.

Conductivity Measures 0,1÷15,0 mS, Accuracy ± 0.1 mS

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KREC	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KKFM

Kronos KK FM pump is a special version of Kronos 50 pump; it has the six different following configurations:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 2l/h @ 2bar, 2 l/h @6 bar , 8 l/h @3 bar, 4 l/h @4 bar.

Tubes: Sekotech (allows secure operation in harsh conditions), Sekofort, Pharmapure.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KKFM	03	08	M	7	3 bar	8 l/h	100÷240 Vac	Sekotech
KKFM	06	02	M	7	6 bar	2 l/h	100÷240 Vac	Sekotech
KKFM	03	02	M	8	3 bar	2 l/h	100÷240 Vac	Sekofort
KKFM	04	04	M	A	4 bar	4 l/h	100÷240 Vac	Pharmapure

Kronos 65 Digital Pumps

The Kronos 65 family is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. The Kronos 65 has a bigger head size (65 mm vs 50 mm), and due to the advanced technology and materials used, it can reach flow rates up to 25 l/h (@0,1 bar) and can dose at back pressures up to 3 bar always in safe operation.

General Features:

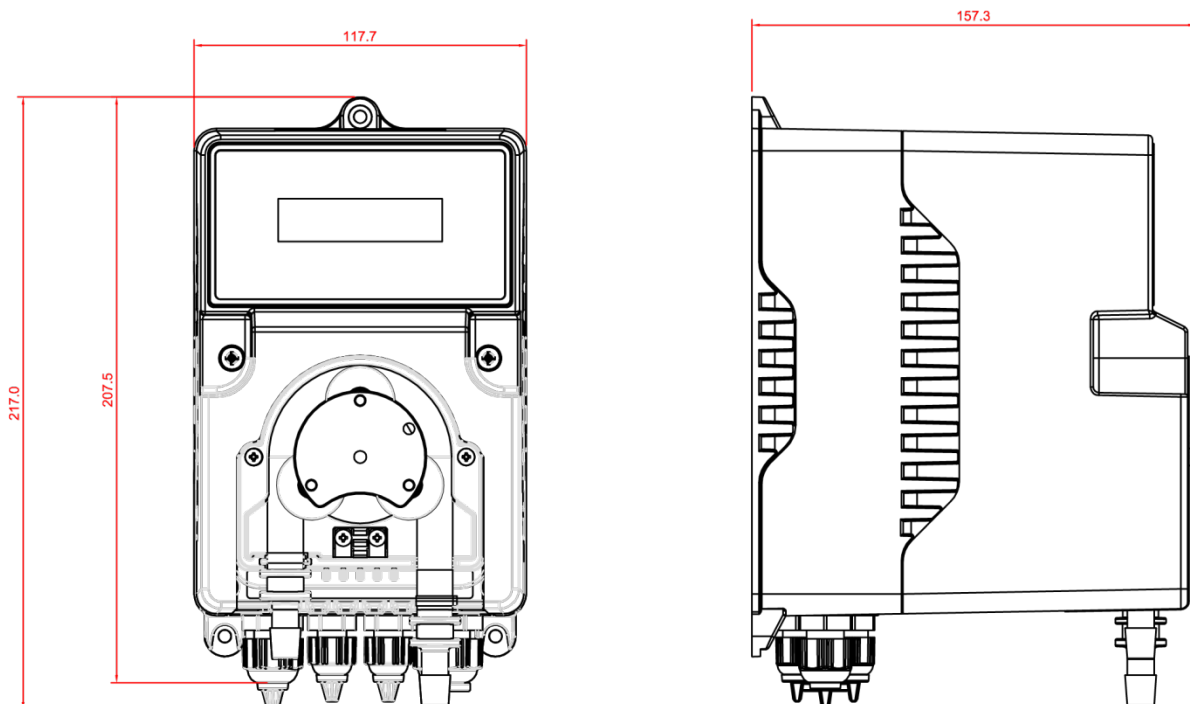
- Digital Interface with 2 x 16 characters LCD display.
- Multi power supply 100÷240 Vac @50/60 Hz, stepper motor, 3 rollers.
- Flow rate up to 25 l/h (@ 0,1 bar).
- Speed regulation 0,1...100%.
- Back Pressures up to 3 bar.
- Sekoflex tubing 6,35 x 12,7
- Tube breakage detection system.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.



DIMENSIONAL DRAWING



KSFM

Six different configuration modes:

Manual Mode, mA Mode, PPM Mode, 1:N Mode, N:1 Mode, Batch Mode.

Integrated Tube breakage detection system.

Flow rates: safely up to 25 l/h @0,1 bar.

Tubes: Sekoflex (other tubes can be supplied upon request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KSFM	00	25	M	3	0,1 bar	25 (416,7)	100÷240 Vac	Sekoflex

A large, dynamic splash of clear blue water with many bubbles, filling the right side and bottom of the page. The water is captured in motion, creating a sense of freshness and purity.

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.

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Peristaltic Pumps



Your Choice,
Our Commitment

Peristaltic Pumps operating principles and advantages

Peristaltic Pumps were introduced in the mid 50's of last century. In the first years after their introduction, these products didn't encounter a big success because the hoses used at that time were subject to quick damages and ruptures. When alternative and high performance plastic materials used for tubes were found, the peristaltic pumps began to have a huge diffusion in many kind of processes.

Their operating principle is very simple: a fluid is pumped up through the suction action created by the alternate compression and relaxation of a flexible hose, executed by apposite rollers. Upon restitution of the hose or tube a strong vacuum is formed drawing product into the pump. The medium to be pumped does not come into contact with any moving part and is totally contained within a flexible hose.

Benefits

Peristaltic pumps provide excellent solutions to solve pumping problems, especially when the product being pumped is particularly abrasive, corrosive or viscous.

Low maintenance costs

Their lack of valves, seals and glands makes them inexpensive to maintain; the only maintenance item is the hose or tube, a relatively low cost item that can be easily changed in a short time.

Dry running and self-priming

Peristaltic pumps do not require pumped fluid to be continually present.

The recovery of the hose or tube creates a powerful self-priming action and allows the pumps to move liquids containing entrapped air or that can off gas.

Reversible

Peristaltic pumps are reversible if driven by apposite programmed circuits.

Accurate dosing

The pumps are accurate in dosing; they have a repeatability of $\pm 3\%$ and metering capabilities of $\pm 5\%$.

No slip

The pumps have no internal backflow giving accurate dosing without slip.

Hygienic

The pumps, if provided with specific hose FDA compliant, can be used in food, beverages and pharmaceutical industry, because the dosed medium doesn't come in contact with parts different from the hose.

Low cost of ownership

Their cost of ownership is definitely lower than the one of other kind of pumps.

Peristaltic Pumps fields of application

The typical fields of application of the peristaltic pumps are in the Cleaning & Hygiene world, particularly in the ware washing and in the laundries, where these pumps are used as single systems or integrated in combined systems to dose the chemicals used for Glass/Dish or clothing cleaning. Seko is already a leading company in these fields with its wide range of pumps born for these purposes.

This catalogue shows the range of Seko's single pumps that can be used (and already are) in the Water Treatment field and in many other Industrial Processes.

Here following some examples of Water treatment and Industrial processes where Seko's peristaltic pumps are already widely used:

Swimming Pools

The quality of the water from a health, aesthetic, and safety point of view is the main characteristic in dealing with swimming pools.

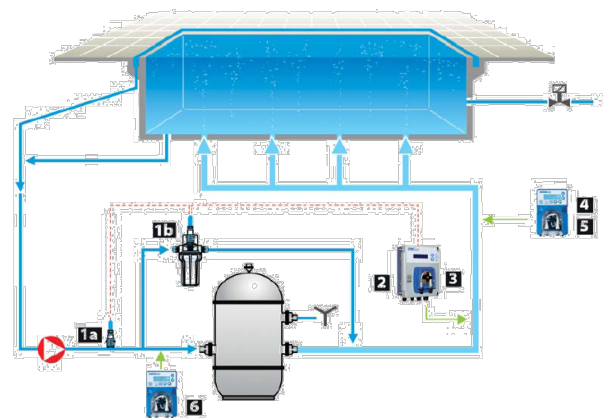
In this application peristaltic pumps are mainly used to dose pH inhibitors, chlorine inhibitors, algae inhibitors or flocculants inhibitors. The pumps we can offer for this application vary from the basic PE pumps to the Analogue or digital DYNAMIC pumps (these two mainly for residential pools), to the very high range KRONOS 50 and 65 pumps, equipped with stepper motors for total speed regulation (used also in public swimming pools or in waterparks).

Key

1 Probe holder **a** standard - **b** on demand

2 Measuring Instruments

3 Dosing pump for pH inhibitor



4 Dosing pump for chlorine inhibitor

5 Dosing pump for algae inhibitor

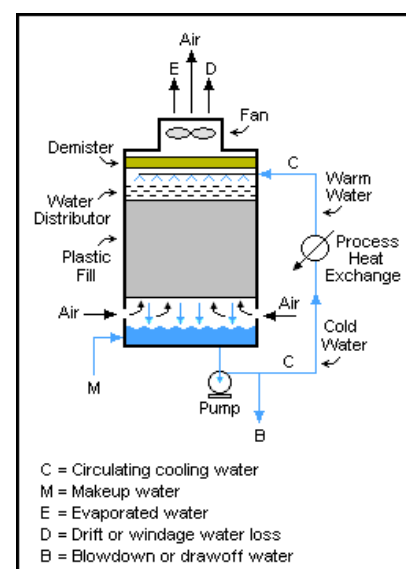
6 Dosing pump for flocculant inhibitor

Cooling Towers

Cooling towers are heat removal devices used to transfer process waste heat to the atmosphere, using cold water as heat removal medium. The cool water absorbs heat from the hot process streams which need to be cooled or condensed, and the absorbed heat warms the circulating water (C).

The warm water returns to the top of the cooling tower and trickles downward over the fill material inside the tower.

The cooling water has to be anyway treated and the Dosing Pumps in this case are used for Biocide, Algaecides, Chlorine chemical products and for Anti Scale Products, in combination with Seko's control instruments for pH, ORP, EC measuring.



Peristaltic Pumps fields of application

Drinking Water

The quality of the water coming from surface sources or from ground has to be checked and consequently adapted to National public health ministers requirements before coming to public fountains and houses.

In this application peristaltic pumps are mainly used to dose chlorine inhibitors, algae inhibitors to make water potable as for law requirements. DYNAMIC and KRONOS pumps are suitable for this job if activated by water meter pulse senders or chlorine measuring instruments.



Other Possible Applications In Industrial Processes

Oenology: Wine Additives/Wine Filtration Tanks Cleaning Systems

Dosage of enzymes and additives in the wine treatment process.

Dosage of chemicals for wine filtration tanks cleaning.

Car Washing Equipment

Dosage of detergents and other washing additives.

Printing Industry

Dosage of UV and water based inks into flexographic machines; The adjustability of the flow rate, the possibility of pumping also inks with solids pigments, the low speed handling of the peristaltic pump make it the ideal solution for this application.

Aquariums

Dosage of salt water into calcium reactors, dosage of enzymes and nutrients for fishes, dosage of additives to maintain the pure water quality necessary for aquariums' life.

Agriculture

Dosage of disinfectants, enzymes and fertilizers in agricultural business.

Laboratories

Dosage of cleaning agents for medical equipment.

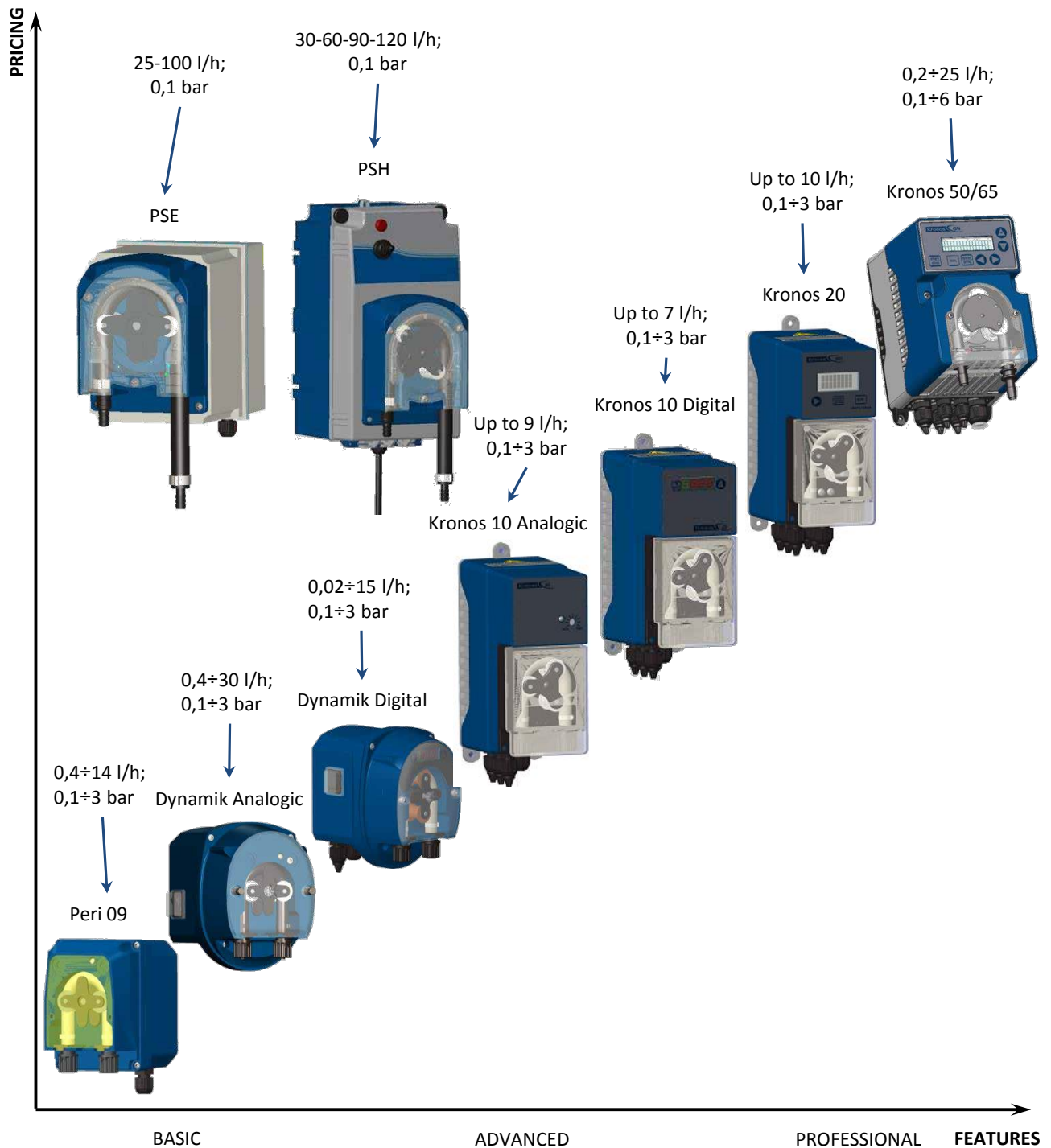
Waste Water Treatment On Board Of Vessels

Dosage of chemicals to treat the waste waters generated on board of small vessels.

The previous are only some examples of application fields between the many possibilities to use Seko peristaltic pumps in industrial processes.

Seko Full Range of Pumps

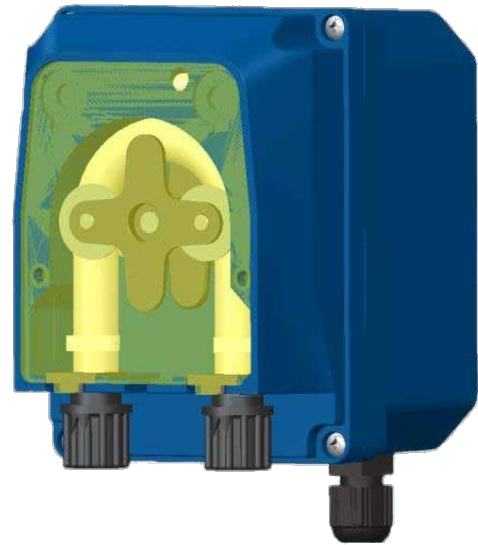
Here following an overview on Seko range of Peristaltic Pumps that can be used in Water Treatment and Industrial Applications:



Peri 09 Pumps

Family of Pumps with the following General Features:

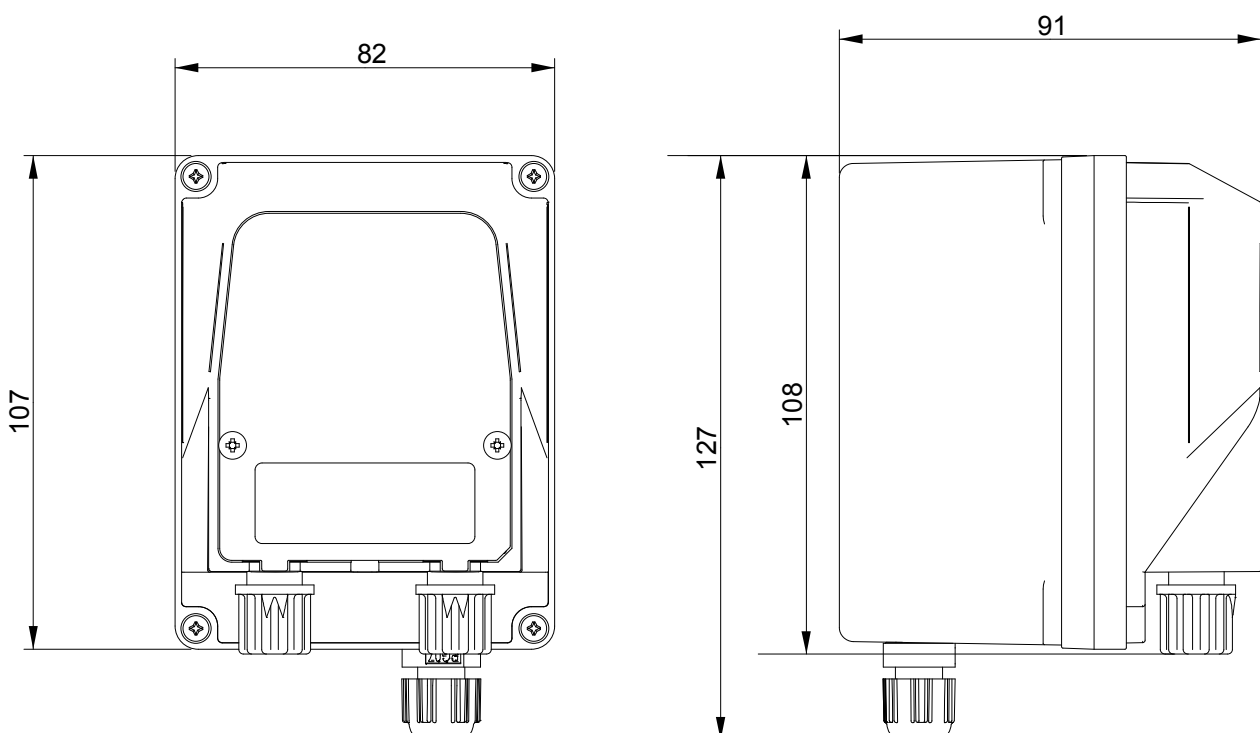
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.



Applications:

Often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).

DIMENSIONAL DRAWING



Peri 09 Pumps

KEY CODE

1, 2, 3	Family, Function				
PPE	Peri09 peristaltic pumps, Fixed Flow rate				
PPR	Peri09 peristaltic pumps, Speed Regulation				
PPM	Peri09 peristaltic pumps, Timed Dosing				
	4, 5	Back pressure			
	00	0,1 bar			
	0H	0,5 bar			
	1H	1,5 bar			
	03	3 bar			
	6, 7	Flow Rate			
	0H	0,4 l/h (6,6 ml/min)			
	1H	1,5 l/h (25 ml/min)			
	2H	2,5 l/h (41,6 ml/min)			
	03	3 l/h (50 ml/min)			
	04	4 l/h (67 ml/min)			
	05	5 l/h (83,3 ml/min)			
	06	6 l/h (100 ml/min)			
	07	7 l/h (116,7 ml/min)			
	10	10 l/h (166,6 ml/min)			
	14	14 l/h (233,3 ml/min)			
	18	18 l/h (300 ml/min)			
	8	Power Supply			
	A	230 Vac			
	B	24 Vac			
	D	24 VDC			
	M	100÷240 Vac			
	9	Membrane tubes			
	1	Santoprene			
	2	Sekobrill			
	3	Sekoflex			
	5	Sekoextra			
	6	Sekomed			
	8	Sekofort			
	9	Sekolast			
	10, 11, 12	Customization			
	000	No customization			
PPM	03	1H	A	1	000

Peri 09 Pumps

Available Models

PPE

Models with Fixed Flow Rate.

2 Rollers.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 14 l/h.

Tubes: Santoprene or Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPE	00	0H	A	1	0,1 (1,5)	0,4 (6,6)	230 Vac	Santoprene
PPE	00	1H	A	1	0,1 (1,5)	1,5 (25)	230 Vac	Santoprene
PPE	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPE	00	04	D	1	0,1 (1,5)	4 (67)	24 VDC	Santoprene
PPE	00	05	A	1	0,1 (1,5)	5 (83,3)	230 Vac	Santoprene
PPE	00	06	A	1	0,1 (1,5)	6 (100)	230 Vac	Santoprene
PPE	00	07	D	1	0,1 (1,5)	7 (116,7)	24 VDC	Santoprene
PPE	00	14	D	1	0,1 (1,5)	14 (233,3)	24 VDC	Santoprene
PPE	1H	1H	A	2	1,5 (22)	1,5 (25)	230 Vac	Sekobriill
PPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPE	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill

PPM

Models with Dosing Time Adjustable through a potentiometer from 0s to 30s.

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,4 l/h up to 10 l/h.

Tubes: Santoprene, Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz or 24 Vac.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPM	00	0H	A	2	0,1 (1,5)	0,7 (11,7)	230 Vac	Sekobriill
PPM	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPM	00	10	A	1	0,1 (1,5)	10 (166,7)	230 Vac	Santoprene
PPM	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPM	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill
PPM	03	2H	A	2	3 (45)	2,6 (43)	230 Vac	Sekobriill

Peri 09 Pumps

PPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1 l/h up to 18 l/h.

Tubes: Santoprene, Sekobrill, Sekolast, Sekoextra (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Max Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPR	00	04	A	1	0,1 (1,5)	4 (67)	230 Vac	Santoprene
PPR	00	04	M	1	0,1 (1,5)	4 (67)	24÷240 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	230 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	24÷240 Vac	Santoprene
PPR	00	18	A	1	0,1 (1,5)	18 (300)	230 Vac	Santoprene
PPR	00	18	M	1	0,1 (1,5)	18 (300)	24÷240 Vac	Santoprene
PPR	0H	01	M	2	3 (45)	1 (16,67)	100÷240 Vac	Sekobrill
PPR	03	01	A	2	3 (45)	1 (16,67)	230 Vac	Sekobrill
PPR	03	01	M	2	3 (45)	1 (16,67)	24÷240 Vac	Sekobrill
PPR	03	03	A	9	3 (45)	3 (50)	230 Vac	Sekolast
PPR	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill

PSE Pumps

Family of Pumps with the following General Characteristics:

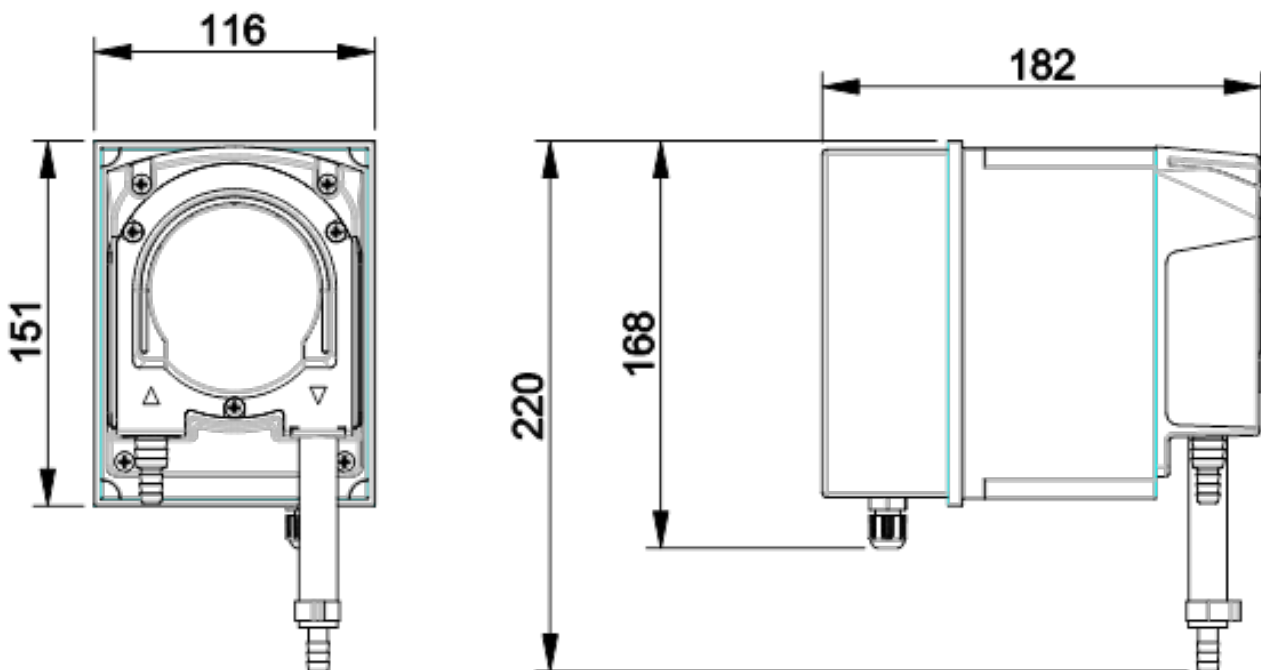
- Bigger Pump size (bell diameter 85 mm) for high flow rate.
- Analogue Interface.
- IP54 protection degree.
- Fixing bracket available for quick wall fixing.
- 230 Vac Power Supply, 66 W Power Consumption.
- Constant Dosage, continuous run not admitted.
- Flow Rates 25 or 100 l/h.
- It can be equipped with PTFE rollers for special applications. such as Chlorine Dosage in swimming pools.



Applications:

PSE peristaltic pumps are mainly used for condensate removal. They are particularly suitable for air conditioners, evaporators, refrigerated display cases.

DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSE	00	25	A	1	0,1 (15)	25 (416,7)	230 Vac	Santoprene
PSE	00	25	A	2	0,1 (15)	25 (416,7)	230 Vac	Sekobrill
PSE	0	100	A	1	0,1 (15)	100 (1667)	230 Vac	Santoprene

PSH Pumps

Family of Pumps with the following General Characteristics:

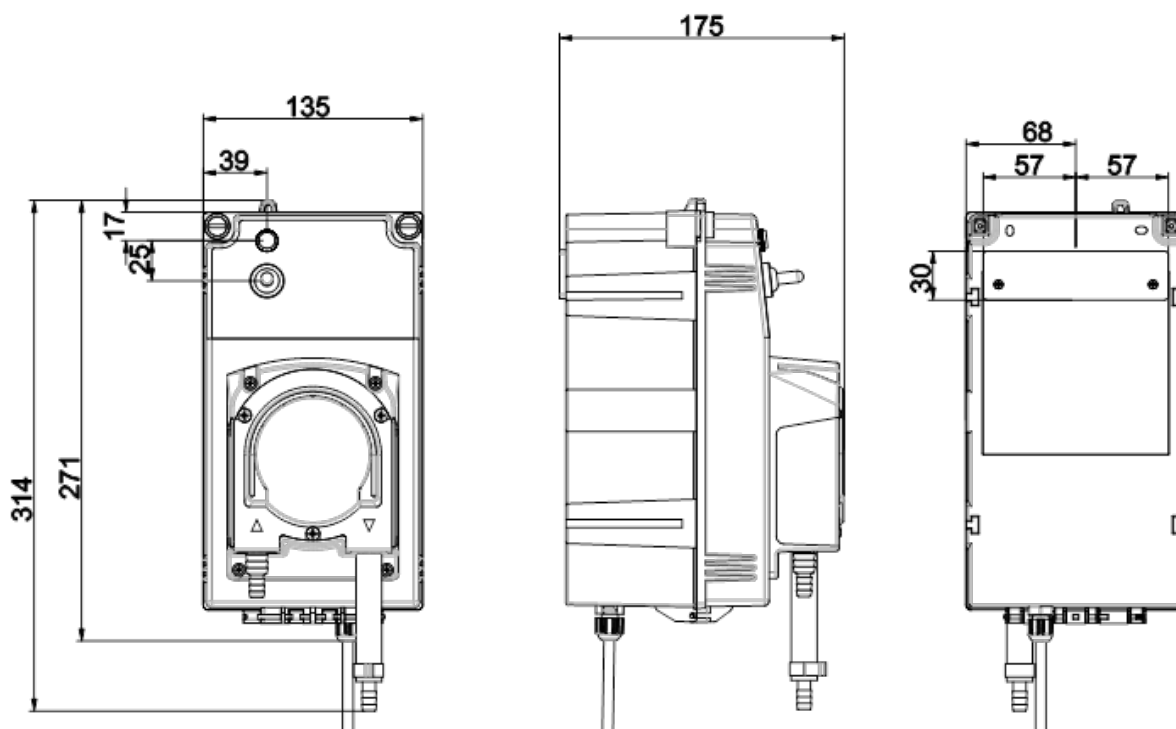
- Bigger Pump size (bell diameter 85 mm) for high flow rates.
- Analogue Interface (but the pump is always controlled by micro).
- IP65 protection degree guaranteed by its enclosure in PP.
- Fixing bracket available for quick wall fixing.
- Multi Power Supply 100÷240 Vac @ 50/60 Hz.
- Constant Dosage with selectable speed.
- Selectable Flow Rate via jumper on circuit board (30-60-90 or 120 l/h).
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

All kind of applications where high flow rates are needed, without strong backpressures at delivery.



DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSH	00	0H	M	1	0,1 (15)	30-60-90-120	100÷240 Vac	Santoprene
PSH	00	0H	M	2	0,1 (15)	30-60-90-120	100÷240 Vac	Sekobrill
PSH	00	0H	M	3	0,1 (15)	30-60-90-120	100÷240 Vac	Sekoflex

Dynamik Analogue Pumps

Family of Pumps with the following General Features:

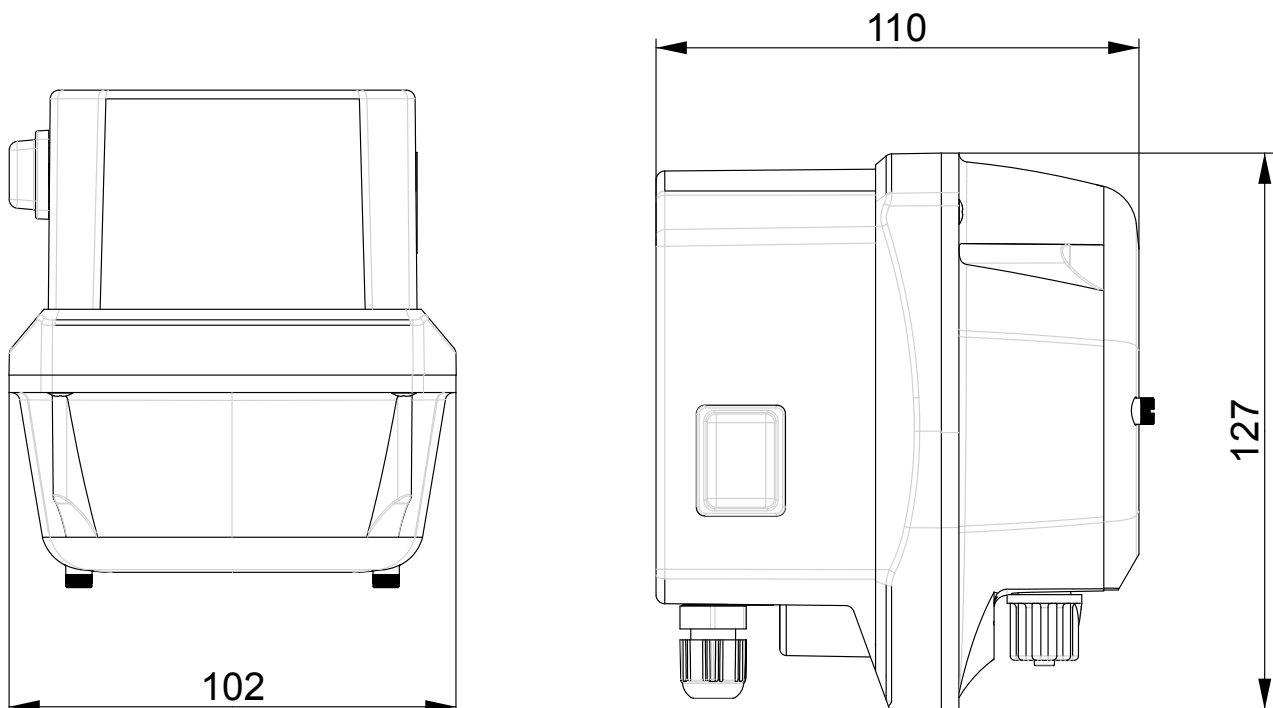
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF Switch.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.

Applications:

often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).



DIMENSIONAL DRAWING



Dynamik Analogue Pumps

KEY CODE

1, 2, 3		Family, Function			
NPE		Dynamik peristaltic pumps, Fixed Flow rate			
NPR		Dynamik peristaltic pumps, Speed Regulation			
NPM		Dynamik peristaltic pumps, Timed Dosing			
NTS		Dynamik "Season" peristaltic pumps, Time/Speed regulation			
		4, 5	Back pressure		
		00	0,1 bar		
		0H	0,5 bar		
		1H	1,5 bar		
		03	3 bar		
		6, 7	Flow Rate		
		0H	0,4 l/h (6,6 ml/min)		
		1H	1,5 l/h (25 ml/min)		
		2H	2,5 l/h (41,6 ml/min)		
		01	1 l/h (16,7 ml/min)		
		04	4 l/h (67 ml/min)		
		07	7 l/h (116,7 ml/min)		
		18	18 l/h (3000 ml/min)		
		28	28 l/h (466,7 ml/min)		
		30	30 l/h (500 ml/min)		
		8	Power Supply		
		A	230 Vac		
		B	24 Vac		
		D	24 VDC		
		M	100÷240 Vac		
		9	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		3	Sekoflex		
		5	Sekoextra		
		6	Sekomed		
		10, 11, 12	Customization		
		000	No customization		
NPE	00	1H	A	3	000

AVAILABLE MODELS

NPM

Models with Dosage Adjustable through a potentiometer from 0s to 30 s.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1,5 l/h up to 2,6 l/h.

Tubes: Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPM	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill
NPM	03	2H	A	2	3 (45)	2,6 (43,3)	230 Vac	Sekobrill

Dynamik Analogue Pumps

NPE

Models with Fixed Flow Rate.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 100÷240 Vac 50/60 Hz.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 28 l/h.

Tubes: Santoprene, Sekoflex or Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPE	00	03	A	3	0,1 (1,5)	3 (50)	230 Vac	Sekoflex
NPE	00	1H	A	3	0,1 (1,5)	1,5 (25)	230 Vac	Sekoflex
NPE	00	28	A	2	0,1 (1,5)	28 (467)	100÷240 Vac	Sekobrill
NPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobrill
NPE	1H	1H	A	1	1,5 (22)	1,5 (25)	230 Vac	Santoprene

NPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,5 l/h up to 30 l/h.

Tubes: Santoprene, Sekobrill, Sekoflex (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPR	00	04	A	1	0,1 (1,5)	4 (66,7)	230 Vac	Santoprene
NPR	00	04	M	3	0,1 (1,5)	4 (66,7)	100÷240 Vac	Sekoflex
NPR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
NPR	00	18	M	1	0,1 (1,5)	28 (467)	100÷240 Vac	Santoprene
NPR	00	30	M	1	0,1 (1,5)	30 (500)	100÷240 Vac	Santoprene
NPR	03	01	A	2	3 (45)	1 (16,7)	230 Vac	Sekobrill
NPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
NPR	0H	0H	M	2	0,5 (7,5)	0,5 (8,8)	100÷240 Vac	Sekobrill

NTS (Dynamik "Season")

Model with Double Regulation: 1 potentiometer for Dosing Time adjustment (from 1 to 20 min), 1 selector for Flow Rate Selection (1 l/h Winter Season, 2 l/h Mid Season, 4 l/h in Summer Season). The pump repeats the set dosage every 24 hours.

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motor.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Max. Flow Rate l/h (ml/min)	Power Supply	Tube Material
NTS	1H	04	M	1	0,1 (1,5)	4 (66,7)	100÷240 Vac	Santoprene

Dynamik Digital Pumps

Family of Pumps with the following General Features:

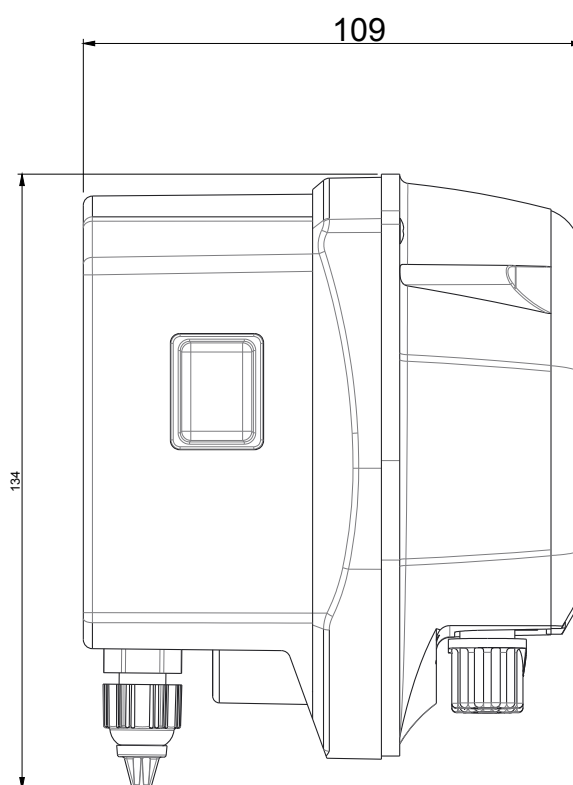
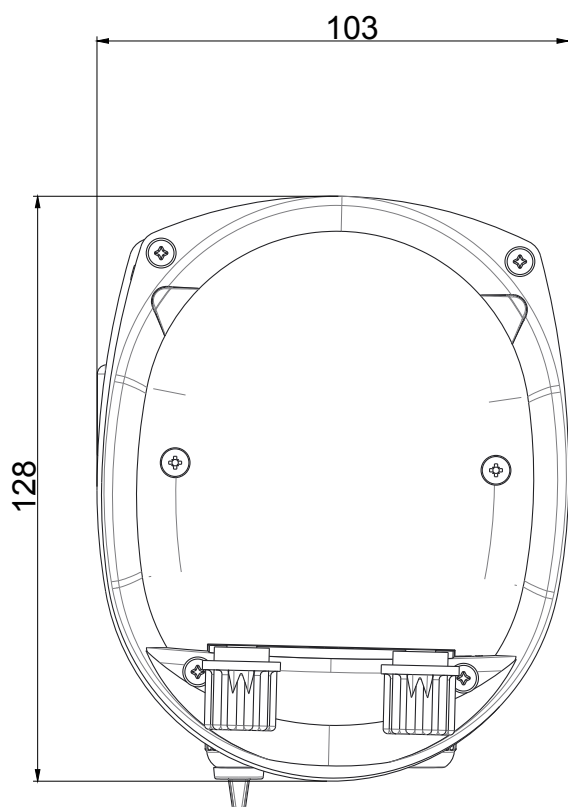
- Digital Interface with 7 segment display.
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF/Priming Button.
- Provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Transaxle technology to assure longer motor and tubing life.
- Level control input on most models.

Applications:

Advanced peristaltic pumps for dosing of essences, chlorine or other chemicals for application in shower foot, SPA pools and many others.



DIMENSIONAL DRAWING



Dynamik Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
SKCK		Dynamik Digital peristaltic pumps, Timed Dosing			
SKCR		Dynamik Digital peristaltic pumps, Conductivity Control Input			
SKFK		Dynamik Digital peristaltic pumps, micro dosing with speed regulation			
SKLR		Dynamik Digital peristaltic pumps, Timed dosing with external trigger			
SKPH		Dynamik Digital peristaltic pumps, pH control Input			
SKRX		Dynamik Digital peristaltic pumps, Redox control Input			
5, 6		Back pressure			
00		0,1 bar			
1H		1,5 bar			
03		3 bar			
7, 8		Flow Rate			
0H		0,4 l/h (6,6 ml/min)			
1H		1,5 l/h (25 ml/min)			
2H		2,5 l/h (41,6 ml/min)			
01		1 l/h (16,7 ml/min)			
04		4 l/h (67 ml/min)			
07		7 l/h (116,7 ml/min)			
10		10 l/h (166,6 ml/min)			
15		15 l/h (250 ml/min)			
9		Power Supply			
A		230 Vac			
B		24 Vac			
D		24 VDC			
M		100÷240 Vac			
Z		24÷240 Vac			
10		Membrane tubes			
1		Santoprene			
2		Sekobrill			
3		Sekoflex			
5		Sekoextra			
6		Sekomed			
11, 12, 13		Customization			
000		No customization			
NPE	00	1H	A	3	000

Dynamik Digital Pumps

SKCK

Models with Activation Time (A) and Pause Time (P) Adjustable by software.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

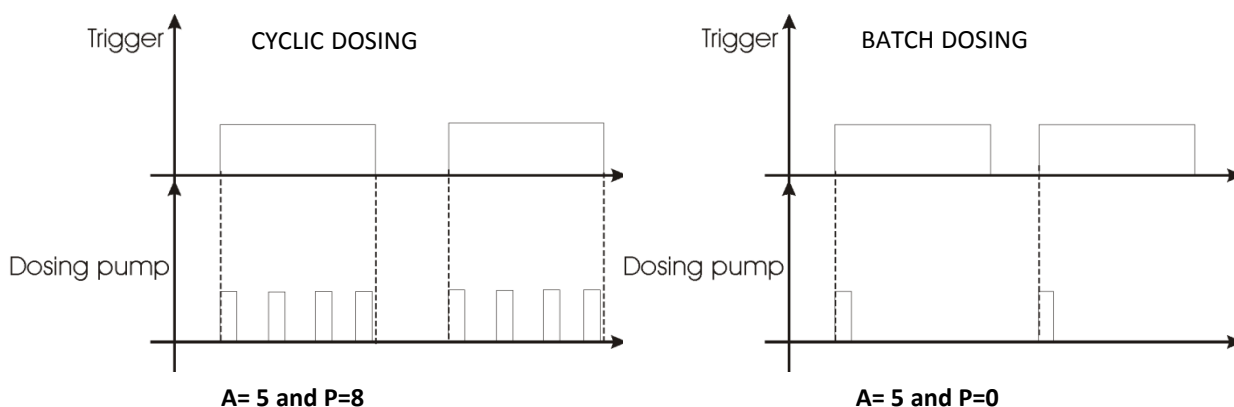
Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Santoprene, Sekobrill, Sekoextra (other materials on request).

The pump waits for a trigger and the display shows "A_on" flashing. When the pump receives a trigger, it starts to dose until the trigger is on according to the set A and P times; if P is set to 0 the pump will run only for the Activation time and then will stop; for example:

Power Supply: 100-240 Vac 50/60 Hz, 24 Vac.



CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCK	1H	1H	M	5	1,5 (22)	1,2 (20)	100÷240 Vac	Sekoextra
SKCK	1H	40	M	1	1,5 (22)	4 (66,7)	100÷240 Vac	Santoprene
SKCK	1H	70	M	1	1,5 (22)	7 (116,7)	100÷240 Vac	Santoprene

SKCR

Models with dosage depending on detected conductivity.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz, 24 Vac 50/60 Hz upon request.

Optional Level Control Input.

OFA Alarm buzzer (optional level) and signals on Set Point.

Reading Range 0.2 mS - 10 mS with +/-10% tolerance.

Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Sekoflex, Sekobrill, Sekoextra (other materials on request).

The pump doses at maximum speed (100%) if the reading is at least 10 SU less than Set Point (1 SU = 0.098 mS) When the conductivity value is exceeded, the SKCR gradually reduces its speed until it stops near the Set Point.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
SKCR	00	10	M	3	0,1 (1,5)	10 (66,7)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKFK

Models with adjustable speed, expressly realized for micro dosage of essences in SPA and Pools.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 2,5 ml/h up to 9,7 l/h.

Level Control Input.

External trigger 20÷240 Vac (Non Stop Dosage when the Trigger is ON).

Motors: Brushed DC motors.

Tubes: Santoprene, Sekoflex, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKFK	1H	01	M	1	1,5 (22)	0,025 (0,42)	100÷240 Vac	Santoprene
SKFK	1H	02	M	1	1,5 (22)	0,15 (2,5)	100÷240 Vac	Santoprene
SKFK	1H	03	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene
SKFK	1H	04	M	1	1,5 (22)	5,4 (90)	100÷240 Vac	Santoprene
SKFK	1H	05	M	1	1,5 (22)	9,7 (161,7)	100÷240 Vac	Santoprene
SKFK	30	05	M	2	3 (45)	9,7 (161,7)	100÷240 Vac	Sekobrill

SKLR

Models with adjustable dosing time, delay time and lockout time; originally created for laundry equipment, they can be used also in any other application where a trigger input is available.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF)

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz or 24 Vac 50/60 Hz upon request.

Max Flow rate: 15 l/h Optional Level Control Input. External trigger 20÷240 Vac .

Motors: Brushed DC motors.

Tubes: Sekoflex, Sekobrill (other materials on request).

Fixed Filter time (5 s), programmable delay time (0-999 seconds), dosing time (0-999 seconds), lock-out time (0-999 minutes).

The pump does not dose during the lock-out time, even if it receives another signal on the signal cable.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKLR	00	15	M	2	0,1 (1,5)	15 (250)	100÷240 Vac	Sekobrill
SKLR	00	15	M	3	0,1 (1,5)	15 (250)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKPH

Models with dosage depending on measured pH value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF) .

Bnc connection for probe pH.

Measure Range pH: 6÷8 pH (resolution: 0.1 pH).

Calibration method pH 1 Point.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 1,5 to 5 l/h

Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKPH	00	05	M	1	0,1 (1,5)	5 (83,3)	100÷240 Vac	Santoprene
SKPH	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKPH	1H	1H	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene

SKRX

Models with dosage depending on measured Rx value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

Bnc connection for ORP probe.

Measure Range ORP: 600÷1000 mV (resolution: 10 mV).

Calibration method: ORP 1 Point (740 mV set point by default).

Power Supply: 90÷265 Vac 50/60 Hz.

Flow rate: 1,5 l/h. Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKRX	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKRX	1H	1H	M	1	1,5 (22,5)	1,5 (25)	100÷240 Vac	Santoprene

Kronos 10 Analogue Pumps

Family of Pumps with the following General Features:

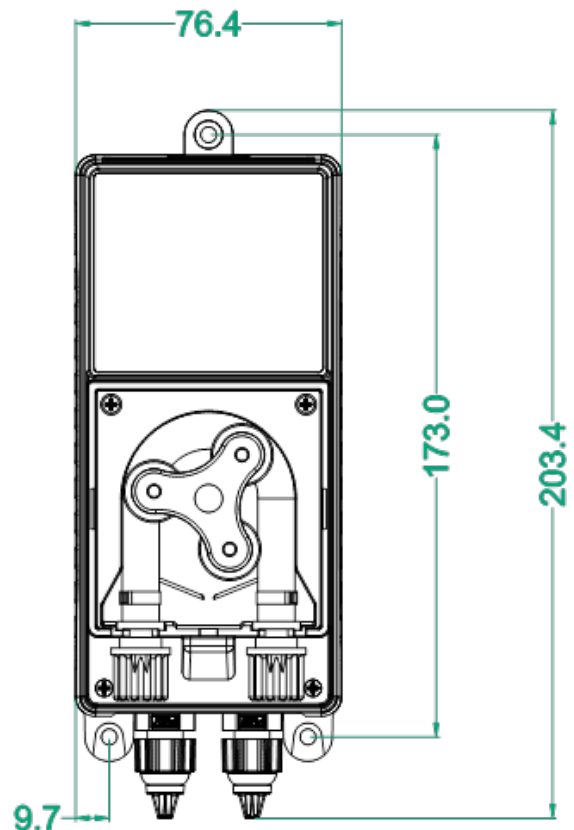
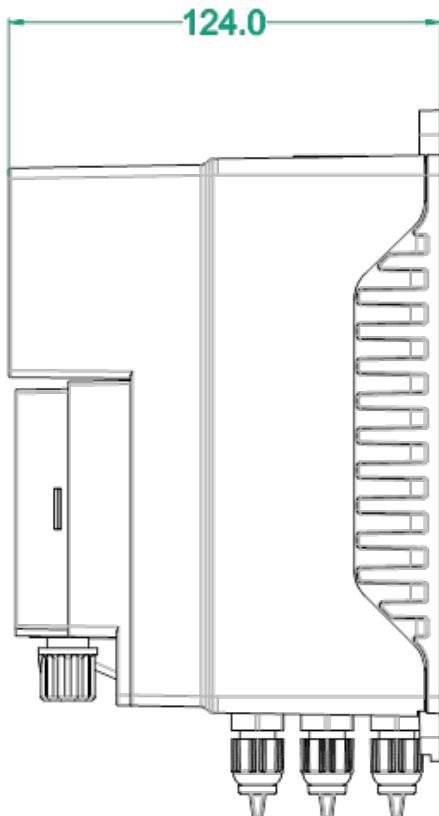
- Analogue Interface with micro controller.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Motors with extended lifetime.

Applications:

General Purpose Intermediate Range pump for low duty applications



DIMENSIONAL DRAWING



Kronos 10 Analogue Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
KXPR		Kronos Analogic peristaltic pumps, Adjustable Speed			
KXPA		Kronos Analogic peristaltic pump, Conductivity Control Input			
		5, 6	Back pressure		
		00	0,1 bar		
		03	3 bar		
		7, 8	Flow Rate		
		01	1 l/h (16,7 ml/min)		
		07	7 l/h (116,7 ml/min)		
		09	9 l/h (150 ml/min)		
		9	Power Supply		
		D	24 VDC		
		M	100÷240 Vac		
		10	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		11, 12, 13	Customization		
		000	No customization		
KXPR	00	07	M	1	000

KXPA

Models with Speed Regulation by potentiometer and Conductivity control Input with conductive probe.

Power Supply: 100÷240 Vac 50/60 Hz.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Flow rate: 9 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPA	00	09	M	1	0,1 (15)	9 (150)	100÷240 Vac	Santoprene

KXPR

Models with Speed Regulation by potentiometer.

Power Supply: 100÷240 Vac 50/60 Hz, 24 VDC.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Optional Level Control Input.

Flow rate: 1 l/h and 7 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
KXPR	00	07	M	1	0,1 (1,5)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 10 Digital Pumps

Family of Pumps with the following General Features:

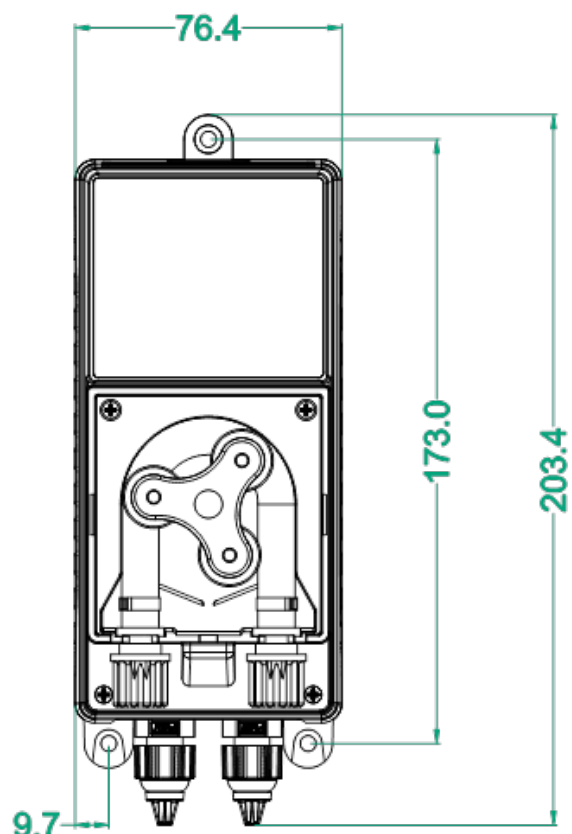
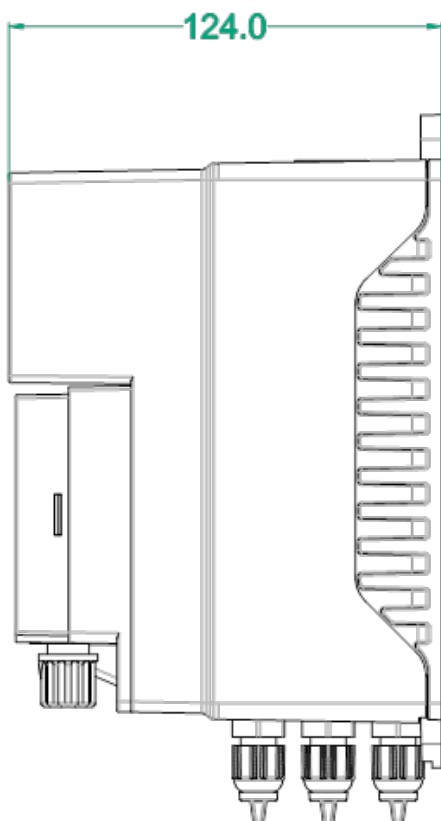
- Digital interface with 7 segments display.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime.
- Optionally equipped with ModBus connection for remote control.

Applications:

General Purpose Intermediate Range pump for low-medium duty applications.



DIMENSIONAL DRAWING



Kronos 10 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function				
KXDR		Kronos 10 Digital, Speed regulation				
KXCR		Kronos 10 Digital, Conductivity Control Input				
		5, 6	Back pressure			
		00	0,1 bar			
		03	3 bar			
		7, 8	Flow Rate			
		01	1 l/h (16,7 ml/min)			
		07	7 l/h (116,7 ml/min)			
		10	10 l/h (166,7 ml/min)			
		9	Power Supply			
		M	100÷240 Vac			
		10	Membrane tubes			
		1	Santoprene			
		2	Sekobrill			
		3	Sekoflex			
		5	Sekoextra			
		6	Sekomed			
		11	Communication			
		0	No Communication			
		I	Isolated ModBus			
		M	Not Isolated ModBus			
		12, 13	Customization			
		00	No customization			
KXCR	00	07	M	1	0	00

KXCR

Models with Conductivity control Input and proportional reaching of the set point (100% until 80% of the set point and 20% with speed gradually decreasing).

Equipped with conductive probe (200 μ S – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motors.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

Tubes: Santoprene (other materials on request).

KXDR

Models with possibility of speed regulation and trigger input signal.

ON/OFF switch and priming function.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXCR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene
KXDR	00	07	M	1	0,1 (15)	7(116,7)	100÷240 Vac	Santoprene

Kronos 20 Digital Pumps

Family of Pumps with the following General Features:

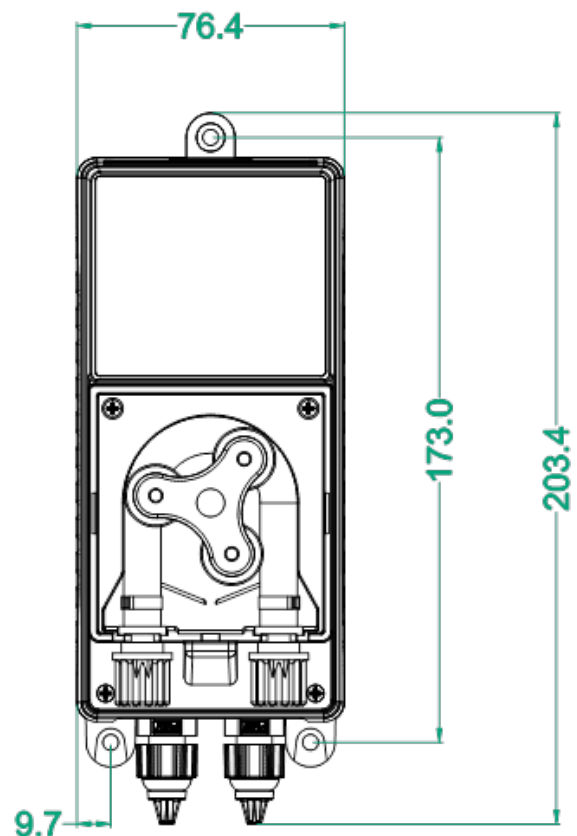
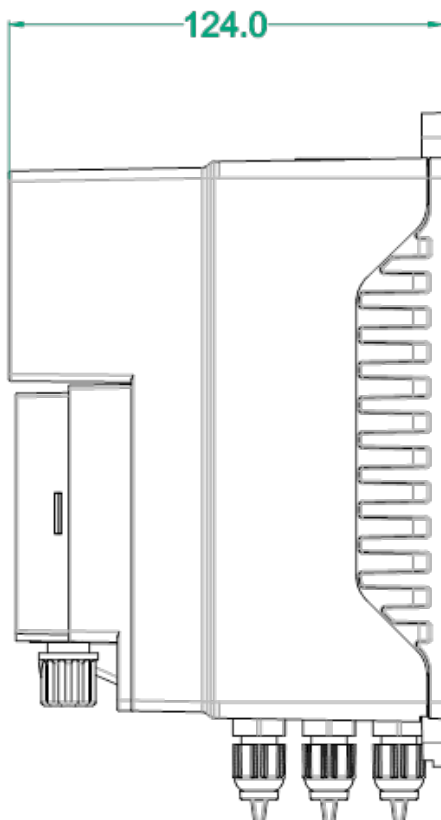
- Digital interface with 2 x 8 Characters LCD Display with backlight
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosage and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime, available with encoders on board, for better dosing accuracy.
- Optionally equipped with ModBus connection for remote control.



Applications:

Intermediate Range pump for medium duty applications

DIMENSIONAL DRAWING



Kronos 20 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function					
KTDR		Kronos 20 Digital, Constant Dosage with Speed Regulation					
KTCR		Kronos 20 Digital, Conductivity Control Input					
5, 6		Back pressure					
00		0,1 bar					
03		3 bar					
7, 8		Flow Rate					
01		1 l/h (16,7 ml/min)					
07		7 l/h (116,7 ml/min)					
10		10 l/h (166,7 ml/min)					
9		Power Supply					
M		100÷240 Vac					
10		Membrane tubes					
1		Santoprene					
5		Sekoextra					
6		Sekomed					
11		Communication					
0		No Communication					
I		Isolated ModBus					
M		Not Isolated ModBus					
12, 13		Customization					
00		No customization					
KTCR		00	10	M	1	0	00

KTCR

Models with Conductivity control Input and proportional reaching of the set point (*)

Equipped with conductive probe (200 µS – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz. Motors: Brushed DC motors.

Max Flow rate: 10 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials can be supplied upon request).

(*)The conductivity pump is intended to dose until the conductivity in the recipient where the pump is dosing reaches a programmed set point. The pump is therefore equipped with a conductive probe with a built-in temperature probe to compensate its readings.

A Proportional Band (like 80%-20% or 50%-50%) can be programmed in the menu of the pump: the pump will dose at its maximum flow rate until reaching the first programmed percentage of the set point, to then linearly decrease its speed down to 0% when the set point is reached, in order to avoid over dosage.

KTDR

Models with possibility of speed regulation and trigger input signal.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KTCR	00	10	M	1	0,1 (15)	10 (166,7)	100÷240 Vac	Santoprene
KTDR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 50 Digital Pumps

The Kronos 50 family is the best among Seko's range of peristaltic pumps. It is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. Due to the advanced technology and materials used, the various models can reach flow rates up to 15 l/h (@0,1 bar) and can dose at back pressures up to 6 bar with a special Sekotech tube.

General Features:

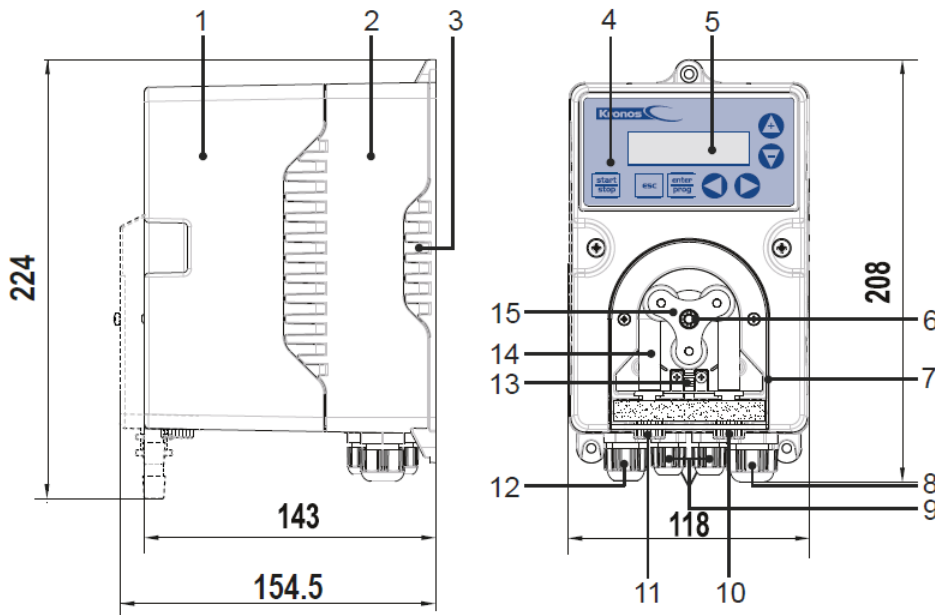
- Digital interface with 2 x 16 Characters LCD Display.
- Multi Power Supply 100÷240 Vac @50/60 Hz.
- IP65 protection degree with a professional looking enclosure made of shock proof and resistant ABS.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- The Stepper Motor guarantee a very accurate, adjustable and silent (< 35 dB) dosing.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Different models available with various functions (constant dosage, proportional dosage, conductivity mode).



Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.

DIMENSIONAL DRAWING



1	Housing: upper section	9	PCBs 7
2	Housing: central section	10	Discharge connector
3	Housing: bottom section	11	Suction connector
4	Control keys	12	PCB 9
5	LCD display	13	Hose rupture monitoring
6	Ball bearing	14	Pump hose
7	Transparent cover	15	Rotor
8	PCB 11		

Kronos 50 Digital Pumps

KEY CODE

1, 2, 3, 4	Family, Function					
KRFM	Kronos 50 Digital peristaltic pump, Full Mode					
KRFF	Kronos 50 Digital peristaltic pump, Full Full					
KRIR	Kronos 50 peristaltic pump, Inductive Conductivity Mode Set Point Dosing					
KRCR	Kronos 50 peristaltic pump, Conductivity Mode Set Point Dosing					
KREC	Kronos 50 peristaltic pump, Cooling Towers					
KKFM	Kronos 50 Digital peristaltic pump, Full Mode					
KSFM	Kronos 65 Digital peristaltic pump, Full Mode					
	5, 6	Back pressure				
	00	0,1 bar				
	1H	1,5 bar				
	02	2 bar				
	03	3 bar				
	04	4 bar				
	06	6 bar				
	7, 8	Flow Rate				
	02	2 l/h (33,3 ml/min)				
	04	4 l/h (66 ml/min)				
	08	8 l/h (133,3 ml/min)				
	10	10 l/h (166,7 ml/min)				
	15	15 l/h (250 ml/min)				
	25	25 l/h (416,7 ml/min)				
	9	Power Supply				
	M	100÷240 Vac				
	10	Membrane tubes				
	1	Santoprene				
	3	Sekoflex				
	5	Sekoextra				
	6	Sekomed				
	7	Sekotech				
	8	Sekofort				
	A	Pharmapure				
	11	Communication				
	0	No Communication				
	I	Isolated ModBus				
	M	Not Isolated ModBus				
	12, 13	Customization				
	00	No customization				
KRFM	02	10	M	1	0	00

Kronos 50 Digital Pumps

KRFM

Kronos FM pump has a multi-function setting; there are six different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time)

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical, starting from its density;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time.

Reversible direction.

Tube break alarm system integrated.

Flow rates: 0,02÷15 l/h, @3÷0,1 bar.

Tubes: Santoprene, Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFM	00	15	M	1	0,1 bar	15 (250,0)	100÷240 Vac	Santoprene
KRFM	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFM	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra
KRFM	1H	10	M	5	1,5 bar	10 (166,7)	100÷240 Vac	Sekoextra

KRFF

Kronos FF pump has a multi-function setting; there are seven different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

0-10V Mode - The pump doses proportionally to a signal of 0-10V; it's possible to set the V (Volt) input value corresponding to 0% dosing and the V input value corresponding to the pump maximum flow rate.

Reversible direction.

Remote Stop Possibility.

Tube break alarm system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar or 0,002 ÷ 2 l/h @ 3bar

Tubes: Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFF	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFF	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra

Kronos 50 Digital Pumps

KRIR

Kronos IR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity inductive probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.20 – 50.00 mS; The pump doses @ 100% if conductivity is lower than a programmable Set Point percent (default 80%); If mS value is higher than fixed percent, the pump proportionally decreases the speed down to 0%.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRIR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KRCR

Kronos CR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.10 – 14.99 mS. It's possible to set the mS Set Point corresponding to 0% dosing (desired conductivity). The pump doses @100% if conductivity is lower than a programmable Set Point percent (default 80%). If mS value is higher than fixed percentage, the pump proportionally decreases the speed down to 0% (at the programmed Set Point).

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar.

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRCR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

Kronos 50 Digital Pumps

KREC

Kronos EC-Cond pump has been specifically designed for application in cooling towers; 3 operating modes are selectable:

PPM Dosing - Dosage amount calculated to maintain the selected Concentration of chemical;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time

Timer Dosing Mode - The pump doses in Time without external trigger (ON/OFF Time selectable)

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Dosing by relay action.

Conductivity Measures 0,1÷15,0 mS, Accuracy ±0.1 mS

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KREC	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KKFM

Kronos KK FM pump is a special version of Kronos 50 pump; it has the six different following configurations:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 2l/h @ 2bar, 2 l/h @6 bar , 8 l/h @3 bar, 4 l/h @4 bar.

Tubes: Sekotech (allows secure operation in harsh conditions), Sekofort, Pharmapure.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KKFM	03	08	M	7	3 bar	8 l/h	100÷240 Vac	Sekotech
KKFM	06	02	M	7	6 bar	2 l/h	100÷240 Vac	Sekotech
KKFM	03	02	M	8	3 bar	2 l/h	100÷240 Vac	Sekofort
KKFM	04	04	M	A	4 bar	4 l/h	100÷240 Vac	Pharmapure

Kronos 65 Digital Pumps

The Kronos 65 family is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. The Kronos 65 has a bigger head size (65 mm vs 50 mm), and due to the advanced technology and materials used, it can reach flow rates up to 25 l/h (@0,1 bar) and can dose at back pressures up to 3 bar always in safe operation.

General Features:

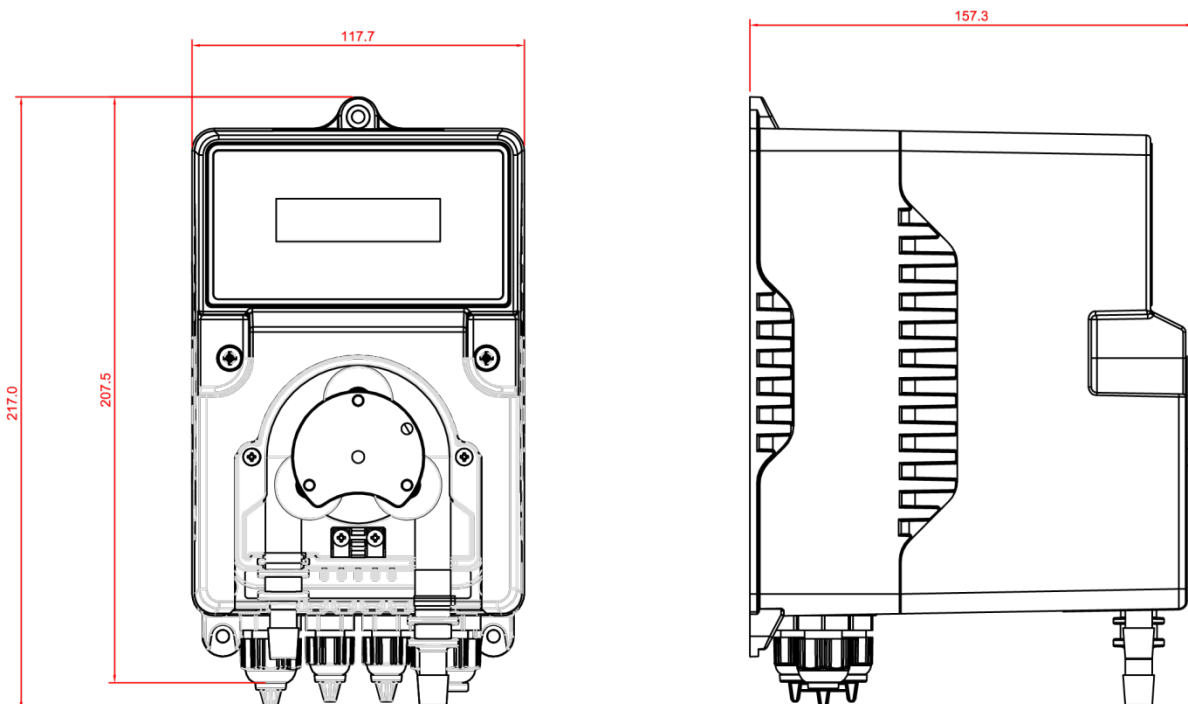
- Digital Interface with 2 x 16 characters LCD display.
- Multi power supply 100÷240 Vac @50/60 Hz, stepper motor, 3 rollers.
- Flow rate up to 25 l/h (@ 0,1 bar).
- Speed regulation 0,1...100%.
- Back Pressures up to 3 bar.
- Sekoflex tubing 6,35 x 12,7
- Tube breakage detection system.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.



DIMENSIONAL DRAWING



KSFM

Six different configuration modes:

Manual Mode, mA Mode, PPM Mode, 1:N Mode, N:1 Mode, Batch Mode.

Integrated Tube breakage detection system.

Flow rates: safely up to 25 l/h @0,1 bar.

Tubes: Sekoflex (other tubes can be supplied upon request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KSFM	00	25	M	3	0,1 bar	25 (416,7)	100÷240 Vac	Sekoflex

A large, dynamic splash of clear blue water with many bubbles, filling the right side and bottom of the page. The water is captured in motion, creating a sense of freshness and purity.

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.

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Peristaltic Pumps



Your Choice,
Our Commitment

Peristaltic Pumps operating principles and advantages

Peristaltic Pumps were introduced in the mid 50's of last century. In the first years after their introduction, these products didn't encounter a big success because the hoses used at that time were subject to quick damages and ruptures. When alternative and high performance plastic materials used for tubes were found, the peristaltic pumps began to have a huge diffusion in many kind of processes.

Their operating principle is very simple: a fluid is pumped up through the suction action created by the alternate compression and relaxation of a flexible hose, executed by apposite rollers. Upon restitution of the hose or tube a strong vacuum is formed drawing product into the pump. The medium to be pumped does not come into contact with any moving part and is totally contained within a flexible hose.

Benefits

Peristaltic pumps provide excellent solutions to solve pumping problems, especially when the product being pumped is particularly abrasive, corrosive or viscous.

Low maintenance costs

Their lack of valves, seals and glands makes them inexpensive to maintain; the only maintenance item is the hose or tube, a relatively low cost item that can be easily changed in a short time.

Dry running and self-priming

Peristaltic pumps do not require pumped fluid to be continually present.

The recovery of the hose or tube creates a powerful self-priming action and allows the pumps to move liquids containing entrapped air or that can off gas.

Reversible

Peristaltic pumps are reversible if driven by apposite programmed circuits.

Accurate dosing

The pumps are accurate in dosing; they have a repeatability of $\pm 3\%$ and metering capabilities of $\pm 5\%$.

No slip

The pumps have no internal backflow giving accurate dosing without slip.

Hygienic

The pumps, if provided with specific hose FDA compliant, can be used in food, beverages and pharmaceutical industry, because the dosed medium doesn't come in contact with parts different from the hose.

Low cost of ownership

Their cost of ownership is definitely lower than the one of other kind of pumps.

Peristaltic Pumps fields of application

The typical fields of application of the peristaltic pumps are in the Cleaning & Hygiene world, particularly in the ware washing and in the laundries, where these pumps are used as single systems or integrated in combined systems to dose the chemicals used for Glass/Dish or clothing cleaning. Seko is already a leading company in these fields with its wide range of pumps born for these purposes.

This catalogue shows the range of Seko's single pumps that can be used (and already are) in the Water Treatment field and in many other Industrial Processes.

Here following some examples of Water treatment and Industrial processes where Seko's peristaltic pumps are already widely used:

Swimming Pools

The quality of the water from a health, aesthetic, and safety point of view is the main characteristic in dealing with swimming pools.

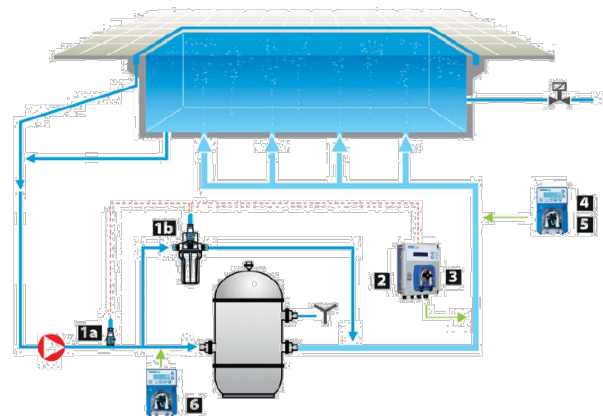
In this application peristaltic pumps are mainly used to dose pH inhibitors, chlorine inhibitors, algae inhibitors or flocculants inhibitors. The pumps we can offer for this application vary from the basic PE pumps to the Analogue or digital DYNAMIC pumps (these two mainly for residential pools), to the very high range KRONOS 50 and 65 pumps, equipped with stepper motors for total speed regulation (used also in public swimming pools or in waterparks).

Key

1 Probe holder **a** standard - **b** on demand

2 Measuring Instruments

3 Dosing pump for pH inhibitor



4 Dosing pump for chlorine inhibitor

5 Dosing pump for algae inhibitor

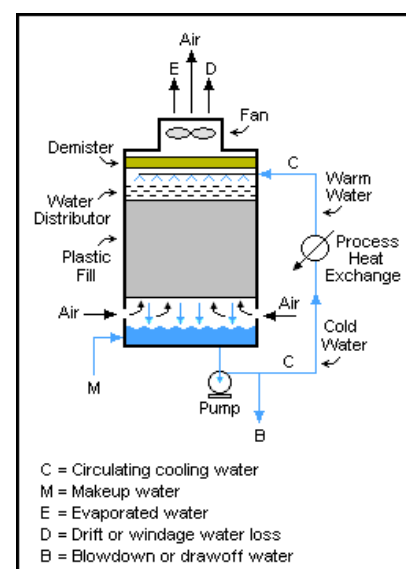
6 Dosing pump for flocculant inhibitor

Cooling Towers

Cooling towers are heat removal devices used to transfer process waste heat to the atmosphere, using cold water as heat removal medium. The cool water absorbs heat from the hot process streams which need to be cooled or condensed, and the absorbed heat warms the circulating water (C).

The warm water returns to the top of the cooling tower and trickles downward over the fill material inside the tower.

The cooling water has to be anyway treated and the Dosing Pumps in this case are used for Biocide, Algaecides, Chlorine chemical products and for Anti Scale Products, in combination with Seko's control instruments for pH, ORP, EC measuring.



Peristaltic Pumps fields of application

Drinking Water

The quality of the water coming from surface sources or from ground has to be checked and consequently adapted to National public health ministers requirements before coming to public fountains and houses.

In this application peristaltic pumps are mainly used to dose chlorine inhibitors, algae inhibitors to make water potable as for law requirements. DYNAMIC and KRONOS pumps are suitable for this job if activated by water meter pulse senders or chlorine measuring instruments.



Other Possible Applications In Industrial Processes

Oenology: Wine Additives/Wine Filtration Tanks Cleaning Systems

Dosage of enzymes and additives in the wine treatment process.

Dosage of chemicals for wine filtration tanks cleaning.

Car Washing Equipment

Dosage of detergents and other washing additives.

Printing Industry

Dosage of UV and water based inks into flexographic machines; The adjustability of the flow rate, the possibility of pumping also inks with solids pigments, the low speed handling of the peristaltic pump make it the ideal solution for this application.

Aquariums

Dosage of salt water into calcium reactors, dosage of enzymes and nutrients for fishes, dosage of additives to maintain the pure water quality necessary for aquariums' life.

Agriculture

Dosage of disinfectants, enzymes and fertilizers in agricultural business.

Laboratories

Dosage of cleaning agents for medical equipment.

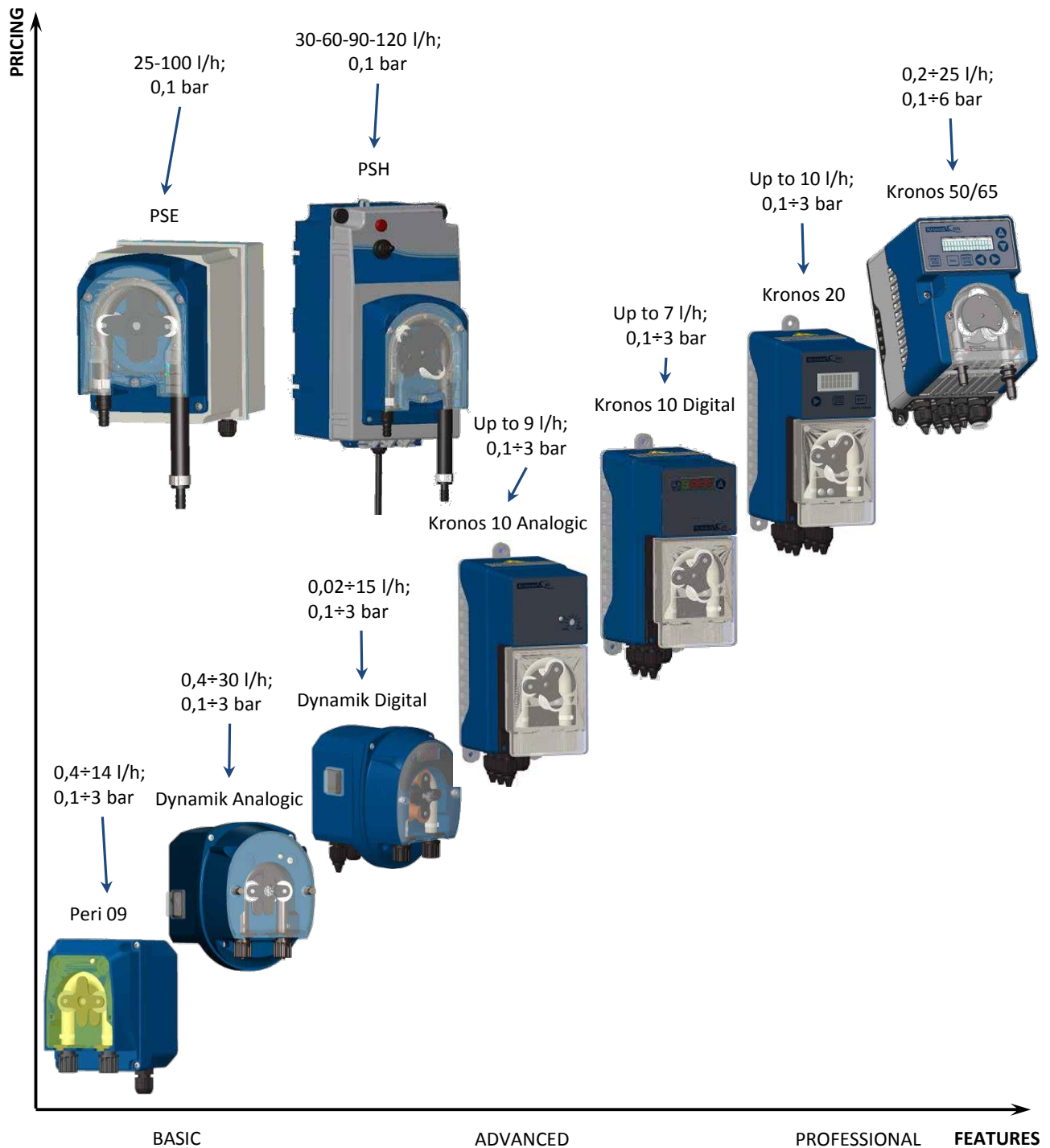
Waste Water Treatment On Board Of Vessels

Dosage of chemicals to treat the waste waters generated on board of small vessels.

The previous are only some examples of application fields between the many possibilities to use Seko peristaltic pumps in industrial processes.

Seko Full Range of Pumps

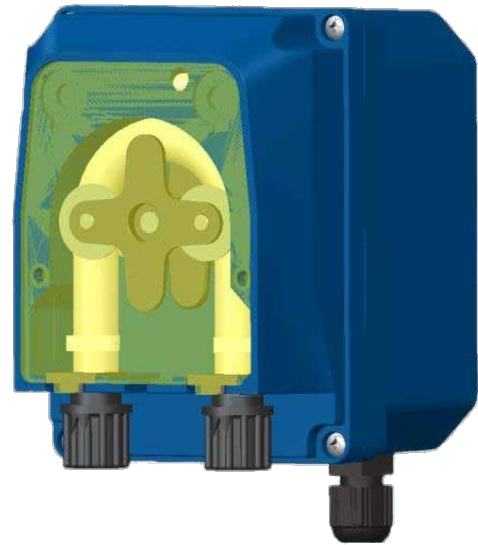
Here following an overview on Seko range of Peristaltic Pumps that can be used in Water Treatment and Industrial Applications:



Peri 09 Pumps

Family of Pumps with the following General Features:

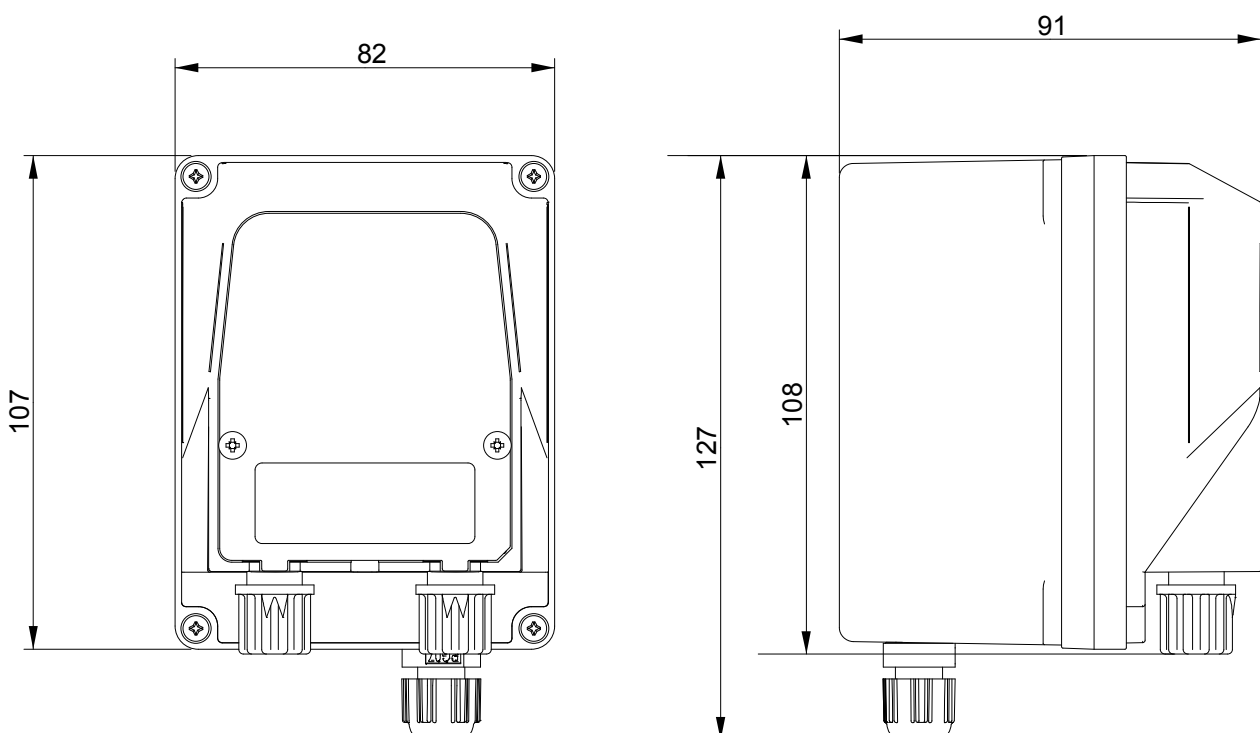
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.



Applications:

Often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).

DIMENSIONAL DRAWING



Peri 09 Pumps

KEY CODE

1, 2, 3	Family, Function				
PPE	Peri09 peristaltic pumps, Fixed Flow rate				
PPR	Peri09 peristaltic pumps, Speed Regulation				
PPM	Peri09 peristaltic pumps, Timed Dosing				
	4, 5	Back pressure			
	00	0,1 bar			
	0H	0,5 bar			
	1H	1,5 bar			
	03	3 bar			
	6, 7	Flow Rate			
	0H	0,4 l/h (6,6 ml/min)			
	1H	1,5 l/h (25 ml/min)			
	2H	2,5 l/h (41,6 ml/min)			
	03	3 l/h (50 ml/min)			
	04	4 l/h (67 ml/min)			
	05	5 l/h (83,3 ml/min)			
	06	6 l/h (100 ml/min)			
	07	7 l/h (116,7 ml/min)			
	10	10 l/h (166,6 ml/min)			
	14	14 l/h (233,3 ml/min)			
	18	18 l/h (300 ml/min)			
	8	Power Supply			
	A	230 Vac			
	B	24 Vac			
	D	24 VDC			
	M	100÷240 Vac			
	9	Membrane tubes			
	1	Santoprene			
	2	Sekobrill			
	3	Sekoflex			
	5	Sekoextra			
	6	Sekomed			
	8	Sekofort			
	9	Sekolast			
	10, 11, 12	Customization			
	000	No customization			
PPM	03	1H	A	1	000

Peri 09 Pumps

Available Models

PPE

Models with Fixed Flow Rate.

2 Rollers.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 14 l/h.

Tubes: Santoprene or Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPE	00	0H	A	1	0,1 (1,5)	0,4 (6,6)	230 Vac	Santoprene
PPE	00	1H	A	1	0,1 (1,5)	1,5 (25)	230 Vac	Santoprene
PPE	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPE	00	04	D	1	0,1 (1,5)	4 (67)	24 VDC	Santoprene
PPE	00	05	A	1	0,1 (1,5)	5 (83,3)	230 Vac	Santoprene
PPE	00	06	A	1	0,1 (1,5)	6 (100)	230 Vac	Santoprene
PPE	00	07	D	1	0,1 (1,5)	7 (116,7)	24 VDC	Santoprene
PPE	00	14	D	1	0,1 (1,5)	14 (233,3)	24 VDC	Santoprene
PPE	1H	1H	A	2	1,5 (22)	1,5 (25)	230 Vac	Sekobriill
PPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPE	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill

PPM

Models with Dosing Time Adjustable through a potentiometer from 0s to 30s.

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,4 l/h up to 10 l/h.

Tubes: Santoprene, Sekobriill (other materials on request).

Power Supply: 230 Vac 50/60 Hz or 24 Vac.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPM	00	0H	A	2	0,1 (1,5)	0,7 (11,7)	230 Vac	Sekobriill
PPM	00	03	A	1	0,1 (1,5)	3 (50)	230 Vac	Santoprene
PPM	00	10	A	1	0,1 (1,5)	10 (166,7)	230 Vac	Santoprene
PPM	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobriill
PPM	03	1H	A	2	3 (45)	1,5 (25)	230 Vac	Sekobriill
PPM	03	2H	A	2	3 (45)	2,6 (43)	230 Vac	Sekobriill

Peri 09 Pumps

PPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%
2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1 l/h up to 18 l/h.

Tubes: Santoprene, Sekobrill, Sekolast, Sekoextra (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Max Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PPR	00	04	A	1	0,1 (1,5)	4 (67)	230 Vac	Santoprene
PPR	00	04	M	1	0,1 (1,5)	4 (67)	24÷240 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	230 Vac	Santoprene
PPR	00	07	A	1	0,1 (1,5)	7 (116,7)	24÷240 Vac	Santoprene
PPR	00	18	A	1	0,1 (1,5)	18 (300)	230 Vac	Santoprene
PPR	00	18	M	1	0,1 (1,5)	18 (300)	24÷240 Vac	Santoprene
PPR	0H	01	M	2	3 (45)	1 (16,67)	100÷240 Vac	Sekobrill
PPR	03	01	A	2	3 (45)	1 (16,67)	230 Vac	Sekobrill
PPR	03	01	M	2	3 (45)	1 (16,67)	24÷240 Vac	Sekobrill
PPR	03	03	A	9	3 (45)	3 (50)	230 Vac	Sekolast
PPR	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill

PSE Pumps

Family of Pumps with the following General Characteristics:

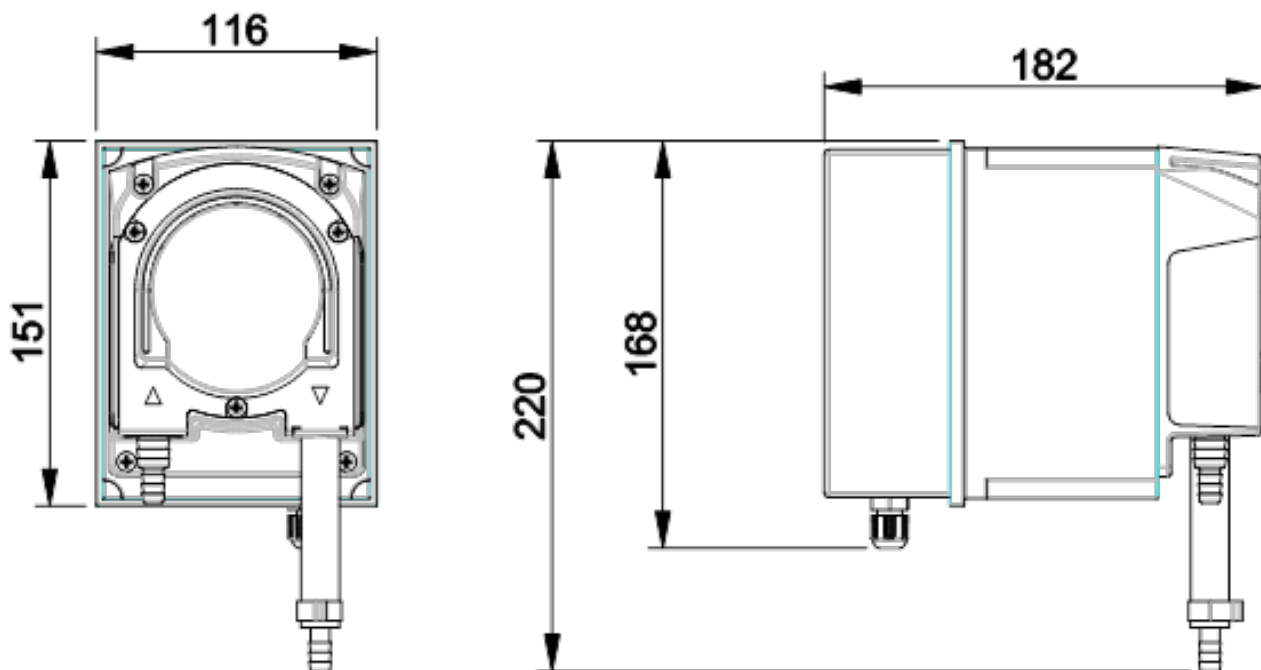
- Bigger Pump size (bell diameter 85 mm) for high flow rate.
- Analogue Interface.
- IP54 protection degree.
- Fixing bracket available for quick wall fixing.
- 230 Vac Power Supply, 66 W Power Consumption.
- Constant Dosage, continuous run not admitted.
- Flow Rates 25 or 100 l/h.
- It can be equipped with PTFE rollers for special applications. such as Chlorine Dosage in swimming pools.



Applications:

PSE peristaltic pumps are mainly used for condensate removal. They are particularly suitable for air conditioners, evaporators, refrigerated display cases.

DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSE	00	25	A	1	0,1 (15)	25 (416,7)	230 Vac	Santoprene
PSE	00	25	A	2	0,1 (15)	25 (416,7)	230 Vac	Sekobrill
PSE	0	100	A	1	0,1 (15)	100 (1667)	230 Vac	Santoprene

PSH Pumps

Family of Pumps with the following General Characteristics:

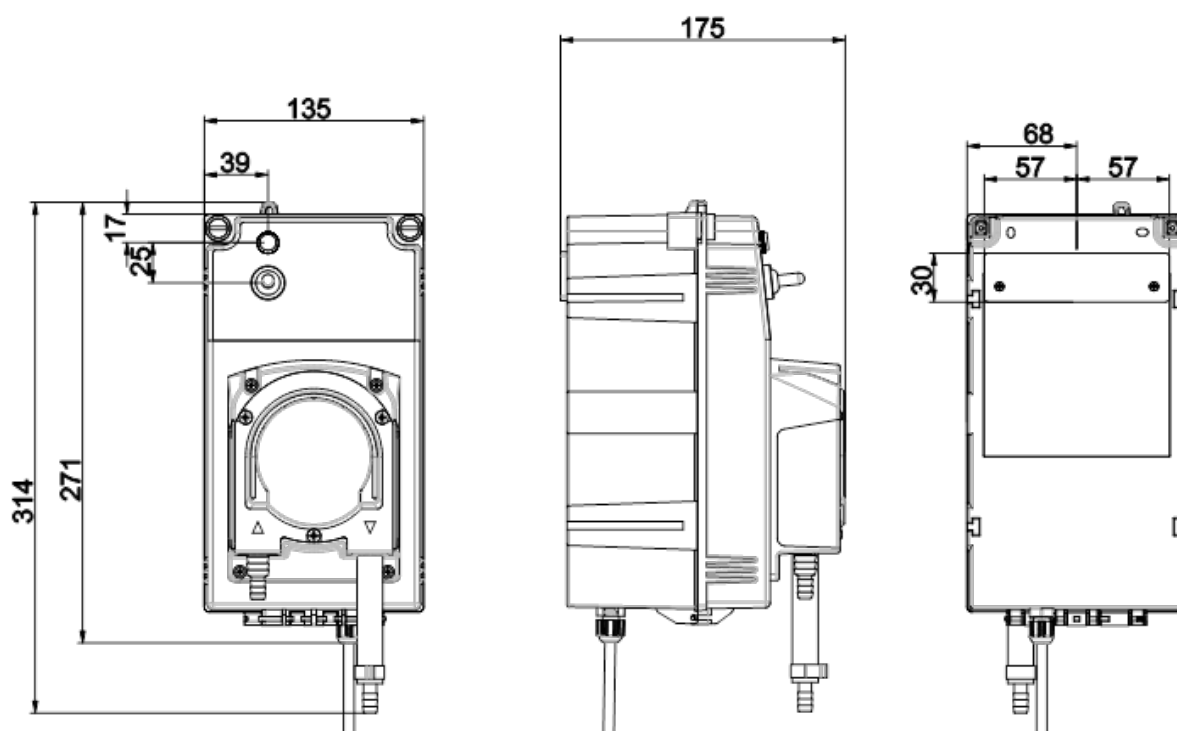
- Bigger Pump size (bell diameter 85 mm) for high flow rates.
- Analogue Interface (but the pump is always controlled by micro).
- IP65 protection degree guaranteed by its enclosure in PP.
- Fixing bracket available for quick wall fixing.
- Multi Power Supply 100÷240 Vac @ 50/60 Hz.
- Constant Dosage with selectable speed.
- Selectable Flow Rate via jumper on circuit board (30-60-90 or 120 l/h).
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

All kind of applications where high flow rates are needed, without strong backpressures at delivery.



DIMENSIONAL DRAWING



AVAILABLE MODELS

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
PSH	00	0H	M	1	0,1 (15)	30-60-90-120	100÷240 Vac	Santoprene
PSH	00	0H	M	2	0,1 (15)	30-60-90-120	100÷240 Vac	Sekobrill
PSH	00	0H	M	3	0,1 (15)	30-60-90-120	100÷240 Vac	Sekoflex

Dynamik Analogue Pumps

Family of Pumps with the following General Features:

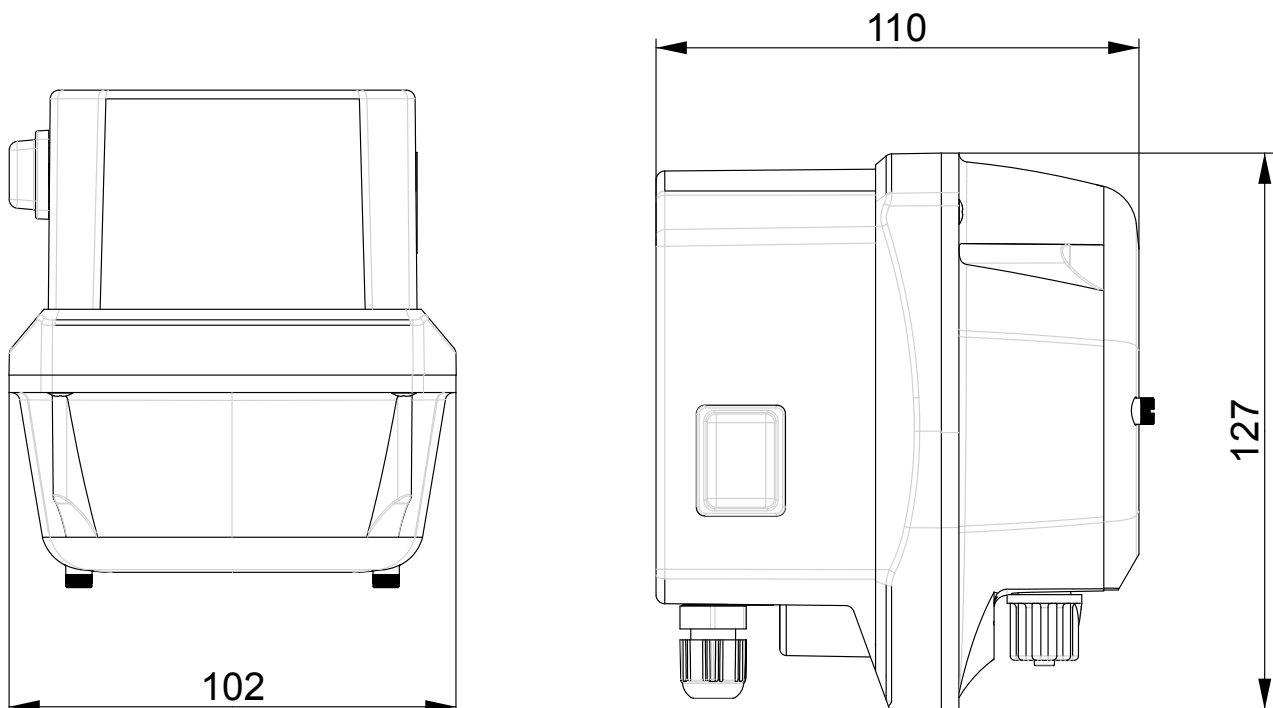
- Analogue Interface (but the pump is always controlled by micro)
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF Switch.
- It can be provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE rollers for special applications such as Chlorine Dosage in swimming pools.
- Available on request with transaxle technology to assure longer motor and tubing life.

Applications:

often used for dosage of Chlorine in Domestic Above Ground pools (from 1 to 110 m.c.).



DIMENSIONAL DRAWING



Dynamik Analogue Pumps

KEY CODE

1, 2, 3	Family, Function				
NPE	Dynamik peristaltic pumps, Fixed Flow rate				
NPR	Dynamik peristaltic pumps, Speed Regulation				
NPM	Dynamik peristaltic pumps, Timed Dosing				
NTS	Dynamik "Season" peristaltic pumps, Time/Speed regulation				
	4, 5	Back pressure			
	00	0,1 bar			
	0H	0,5 bar			
	1H	1,5 bar			
	03	3 bar			
	6, 7	Flow Rate			
	0H	0,4 l/h (6,6 ml/min)			
	1H	1,5 l/h (25 ml/min)			
	2H	2,5 l/h (41,6 ml/min)			
	01	1 l/h (16,7 ml/min)			
	04	4 l/h (67 ml/min)			
	07	7 l/h (116,7 ml/min)			
	18	18 l/h (3000 ml/min)			
	28	28 l/h (466,7 ml/min)			
	30	30 l/h (500 ml/min)			
	8	Power Supply			
	A	230 Vac			
	B	24 Vac			
	D	24 VDC			
	M	100÷240 Vac			
	9	Membrane tubes			
	1	Santoprene			
	2	Sekobrill			
	3	Sekoflex			
	5	Sekoextra			
	6	Sekomed			
	10, 11, 12	Customization			
	000	No customization			
NPE	00	1H	A	3	000

AVAILABLE MODELS

NPM

Models with Dosage Adjustable through a potentiometer from 0s to 30 s.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 24 Vac, 24 V DC.

Motors: Brushed DC motors.

Max Flow Rates: from 1,5 l/h up to 2,6 l/h.

Tubes: Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPM	03	1H	M	2	3 (45)	1,5 (25)	100÷240 Vac	Sekobrill
NPM	03	2H	A	2	3 (45)	2,6 (43,3)	230 Vac	Sekobrill

Dynamik Analogue Pumps

NPE

Models with Fixed Flow Rate.

2 Rollers.

Power Supply: 230 Vac 50/60 Hz, 100÷240 Vac 50/60 Hz.

Motors: Synchronous AC motors or Brushed DC motors.

Flow Rates: from 0,4 l/h up to 28 l/h.

Tubes: Santoprene, Sekoflex or Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPE	00	03	A	3	0,1 (1,5)	3 (50)	230 Vac	Sekoflex
NPE	00	1H	A	3	0,1 (1,5)	1,5 (25)	230 Vac	Sekoflex
NPE	00	28	A	2	0,1 (1,5)	28 (467)	100÷240 Vac	Sekobrill
NPE	03	0H	A	2	3 (45)	0,4 (6,66)	230 Vac	Sekobrill
NPE	1H	1H	A	1	1,5 (22)	1,5 (25)	230 Vac	Santoprene

NPR

Models with Flow Rate Adjustable through a potentiometer from 12% to 100%

2 Rollers.

Motors: Brushed DC motors.

Max Flow Rates: from 0,5 l/h up to 30 l/h.

Tubes: Santoprene, Sekobrill, Sekoflex (other materials on request).

Power Supply: 100-240 Vac 50/60 Hz, 230 Vac 50/60 Hz, 24 Vac, 24 V DC

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
NPR	00	04	A	1	0,1 (1,5)	4 (66,7)	230 Vac	Santoprene
NPR	00	04	M	3	0,1 (1,5)	4 (66,7)	100÷240 Vac	Sekoflex
NPR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
NPR	00	18	M	1	0,1 (1,5)	28 (467)	100÷240 Vac	Santoprene
NPR	00	30	M	1	0,1 (1,5)	30 (500)	100÷240 Vac	Santoprene
NPR	03	01	A	2	3 (45)	1 (16,7)	230 Vac	Sekobrill
NPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
NPR	0H	0H	M	2	0,5 (7,5)	0,5 (8,8)	100÷240 Vac	Sekobrill

NTS (Dynamik "Season")

Model with Double Regulation: 1 potentiometer for Dosing Time adjustment (from 1 to 20 min), 1 selector for Flow Rate Selection (1 l/h Winter Season, 2 l/h Mid Season, 4 l/h in Summer Season). The pump repeats the set dosage every 24 hours.

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motor.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Max. Flow Rate l/h (ml/min)	Power Supply	Tube Material
NTS	1H	04	M	1	0,1 (1,5)	4 (66,7)	100÷240 Vac	Santoprene

Dynamik Digital Pumps

Family of Pumps with the following General Features:

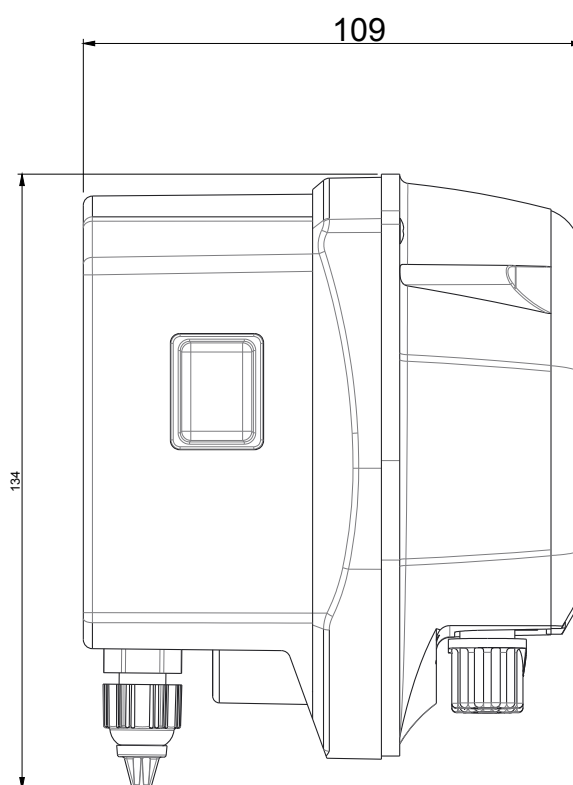
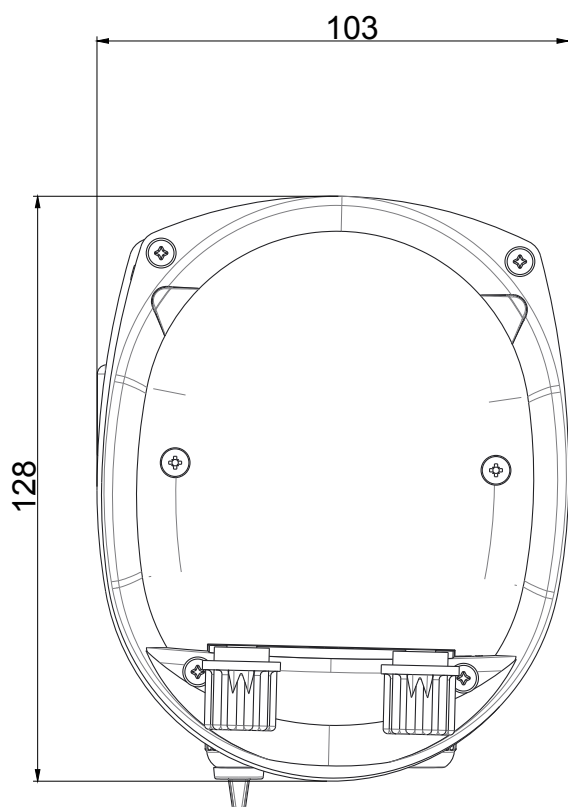
- Digital Interface with 7 segment display.
- IP65 protection degree guaranteed by its enclosure in PP with fiber glass.
- Insulation Class 2 (no need of grounding connection).
- Compact design makes it suitable to all kind of applications.
- Equipped with built in ON/OFF/Priming Button.
- Provided with fixing wall bracket for quick installation.
- Wide range of Power Supply, Flow Rates, Tubes to fit all the needs.
- It can be equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Transaxle technology to assure longer motor and tubing life.
- Level control input on most models.



Applications:

Advanced peristaltic pumps for dosing of essences, chlorine or other chemicals for application in shower foot, SPA pools and many others.

DIMENSIONAL DRAWING



Dynamik Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
SKCK		Dynamik Digital peristaltic pumps, Timed Dosing			
SKCR		Dynamik Digital peristaltic pumps, Conductivity Control Input			
SKFK		Dynamik Digital peristaltic pumps, micro dosing with speed regulation			
SKLR		Dynamik Digital peristaltic pumps, Timed dosing with external trigger			
SKPH		Dynamik Digital peristaltic pumps, pH control Input			
SKRX		Dynamik Digital peristaltic pumps, Redox control Input			
		5, 6	Back pressure		
		00	0,1 bar		
		1H	1,5 bar		
		03	3 bar		
		7, 8	Flow Rate		
		0H	0,4 l/h (6,6 ml/min)		
		1H	1,5 l/h (25 ml/min)		
		2H	2,5 l/h (41,6 ml/min)		
		01	1 l/h (16,7 ml/min)		
		04	4 l/h (67 ml/min)		
		07	7 l/h (116,7 ml/min)		
		10	10 l/h (166,6 ml/min)		
		15	15 l/h (250 ml/min)		
		9	Power Supply		
		A	230 Vac		
		B	24 Vac		
		D	24 VDC		
		M	100÷240 Vac		
		Z	24÷240 Vac		
		10	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		3	Sekoflex		
		5	Sekoextra		
		6	Sekomed		
		11, 12, 13	Customization		
		000	No customization		
NPE	00	1H	A	3	000

Dynamik Digital Pumps

SKCK

Models with Activation Time (A) and Pause Time (P) Adjustable by software.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

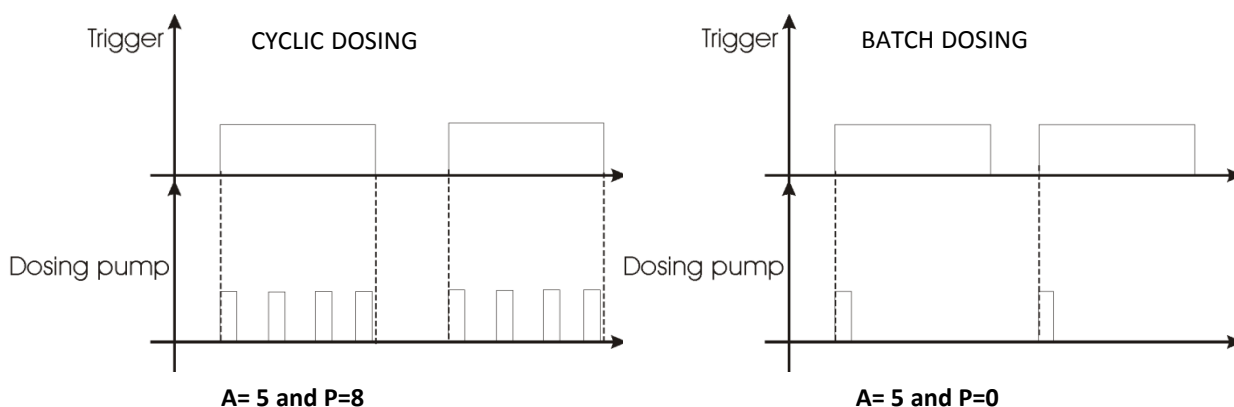
Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Santoprene, Sekobrill, Sekoextra (other materials on request).

The pump waits for a trigger and the display shows "A_on" flashing. When the pump receives a trigger, it starts to dose until the trigger is on according to the set A and P times; if P is set to 0 the pump will run only for the Activation time and then will stop; for example:

Power Supply: 100-240 Vac 50/60 Hz, 24 Vac.



CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCK	1H	1H	M	5	1,5 (22)	1,2 (20)	100÷240 Vac	Sekoextra
SKCK	1H	40	M	1	1,5 (22)	4 (66,7)	100÷240 Vac	Santoprene
SKCK	1H	70	M	1	1,5 (22)	7 (116,7)	100÷240 Vac	Santoprene

SKCR

Models with dosage depending on detected conductivity.

Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz, 24 Vac 50/60 Hz upon request.

Optional Level Control Input.

OFA Alarm buzzer (optional level) and signals on Set Point.

Reading Range 0.2 mS - 10 mS with +/-10% tolerance.

Motors: Brushed DC motors.

Flow rate: different flow rates selectable by programming menu.

Tubes: Sekoflex, Sekobrill, Sekoextra (other materials on request).

The pump doses at maximum speed (100%) if the reading is at least 10 SU less than Set Point (1 SU = 0.098 mS) When the conductivity value is exceeded, the SKCR gradually reduces its speed until it stops near the Set Point.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKCR	00	07	M	3	0,1 (1,5)	7 (116,7)	100÷240 Vac	Sekoflex
SKCR	00	10	M	3	0,1 (1,5)	10 (66,7)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKFK

Models with adjustable speed, expressly realized for micro dosage of essences in SPA and Pools.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 2,5 ml/h up to 9,7 l/h.

Level Control Input.

External trigger 20÷240 Vac (Non Stop Dosage when the Trigger is ON).

Motors: Brushed DC motors.

Tubes: Santoprene, Sekoflex, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKFK	1H	01	M	1	1,5 (22)	0,025 (0,42)	100÷240 Vac	Santoprene
SKFK	1H	02	M	1	1,5 (22)	0,15 (2,5)	100÷240 Vac	Santoprene
SKFK	1H	03	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene
SKFK	1H	04	M	1	1,5 (22)	5,4 (90)	100÷240 Vac	Santoprene
SKFK	1H	05	M	1	1,5 (22)	9,7 (161,7)	100÷240 Vac	Santoprene
SKFK	30	05	M	2	3 (45)	9,7 (161,7)	100÷240 Vac	Sekobrill

SKLR

Models with adjustable dosing time, delay time and lockout time; originally created for laundry equipment, they can be used also in any other application where a trigger input is available.

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF)

2 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz or 24 Vac 50/60 Hz upon request.

Max Flow rate: 15 l/h Optional Level Control Input. External trigger 20÷240 Vac .

Motors: Brushed DC motors.

Tubes: Sekoflex, Sekobrill (other materials on request).

Fixed Filter time (5 s), programmable delay time (0-999 seconds), dosing time (0-999 seconds), lock-out time (0-999 minutes).

The pump does not dose during the lock-out time, even if it receives another signal on the signal cable.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKLR	00	15	M	2	0,1 (1,5)	15 (250)	100÷240 Vac	Sekobrill
SKLR	00	15	M	3	0,1 (1,5)	15 (250)	100÷240 Vac	Sekoflex

Dynamik Digital Pumps

SKPH

Models with dosage depending on measured pH value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF) .

Bnc connection for probe pH.

Measure Range pH: 6÷8 pH (resolution: 0.1 pH).

Calibration method pH 1 Point.

Power Supply: 100÷240 Vac 50/60 Hz.

Flow rates from 1,5 to 5 l/h

Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKPH	00	05	M	1	0,1 (1,5)	5 (83,3)	100÷240 Vac	Santoprene
SKPH	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKPH	1H	1H	M	1	1,5 (22)	1,5 (25)	100÷240 Vac	Santoprene

SKRX

Models with dosage depending on measured Rx value, created for use in Swimming Pools.

Dosage method ON-OFF (Set Point adjustable).

3 positions Switch to select Priming Mode (MOM), Run Mode (ON) or Stand By Mode (OFF).

Bnc connection for ORP probe.

Measure Range ORP: 600÷1000 mV (resolution: 10 mV).

Calibration method: ORP 1 Point (740 mV set point by default).

Power Supply: 90÷265 Vac 50/60 Hz.

Flow rate: 1,5 l/h. Motors: Brushed DC motors.

Tubes: Santoprene (other materials on request).

2 Rollers in Bronze filled PTFE suitable to swimming pool application.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
SKRX	0H	1H	M	1	0,5 (7,5)	1,5 (25)	100÷240 Vac	Santoprene
SKRX	1H	1H	M	1	1,5 (22,5)	1,5 (25)	100÷240 Vac	Santoprene

Kronos 10 Analogue Pumps

Family of Pumps with the following General Features:

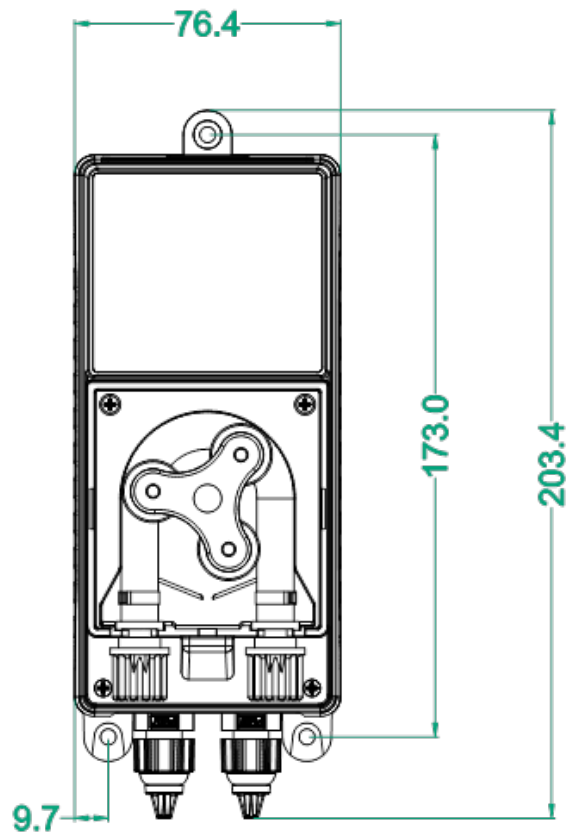
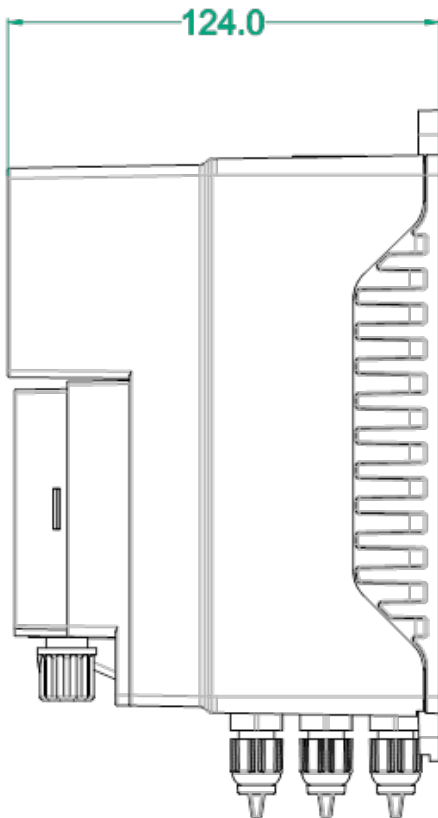
- Analogue Interface with micro controller.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- Motors with extended lifetime.

Applications:

General Purpose Intermediate Range pump for low duty applications



DIMENSIONAL DRAWING



Kronos 10 Analogue Pumps

KEY CODE

1, 2, 3, 4		Family, Function			
KXPR		Kronos Analogic peristaltic pumps, Adjustable Speed			
KXPA		Kronos Analogic peristaltic pump, Conductivity Control Input			
		5, 6	Back pressure		
		00	0,1 bar		
		03	3 bar		
		7, 8	Flow Rate		
		01	1 l/h (16,7 ml/min)		
		07	7 l/h (116,7 ml/min)		
		09	9 l/h (150 ml/min)		
		9	Power Supply		
		D	24 VDC		
		M	100÷240 Vac		
		10	Membrane tubes		
		1	Santoprene		
		2	Sekobrill		
		11, 12, 13	Customization		
		000	No customization		
KXPR	00	07	M	1	000

KXPA

Models with Speed Regulation by potentiometer and Conductivity control Input with conductive probe.

Power Supply: 100÷240 Vac 50/60 Hz.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Flow rate: 9 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPA	00	09	M	1	0,1 (15)	9 (150)	100÷240 Vac	Santoprene

KXPR

Models with Speed Regulation by potentiometer.

Power Supply: 100÷240 Vac 50/60 Hz, 24 VDC.

ON/OFF Switch, 3 Rollers, Brushed DC motors.

Optional Level Control Input.

Flow rate: 1 l/h and 7 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene, Sekobrill (other materials on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXPR	03	01	M	2	3 (45)	1 (16,7)	100÷240 Vac	Sekobrill
KXPR	00	07	M	1	0,1 (1,5)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 10 Digital Pumps

Family of Pumps with the following General Features:

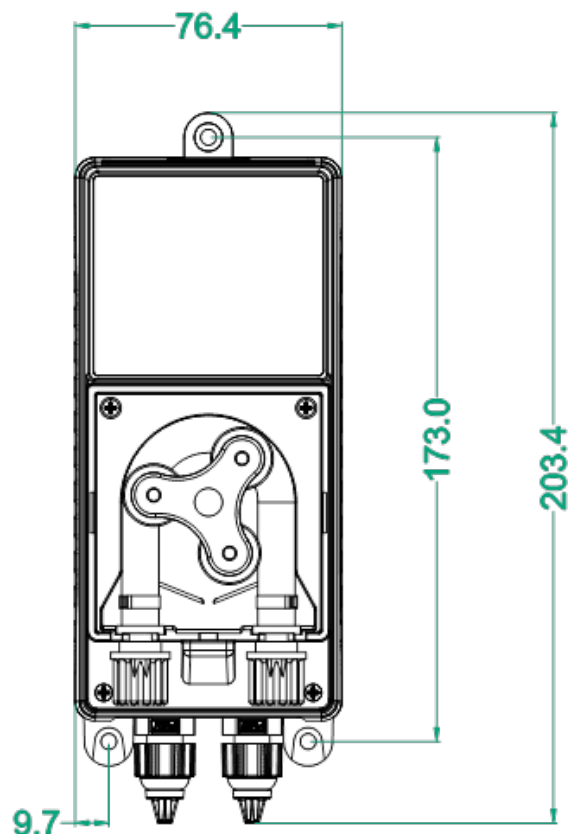
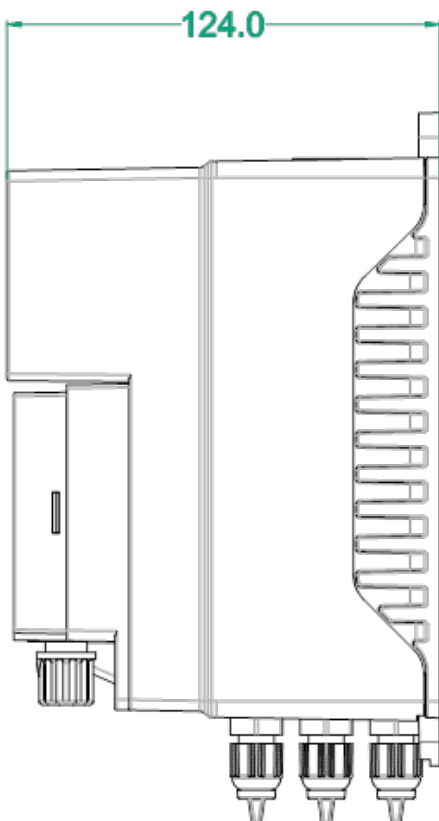
- Digital interface with 7 segments display.
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime.
- Optionally equipped with ModBus connection for remote control.

Applications:

General Purpose Intermediate Range pump for low-medium duty applications.



DIMENSIONAL DRAWING



Kronos 10 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function				
KXDR		Kronos 10 Digital, Speed regulation				
KXCR		Kronos 10 Digital, Conductivity Control Input				
		5, 6	Back pressure			
		00	0,1 bar			
		03	3 bar			
		7, 8	Flow Rate			
		01	1 l/h (16,7 ml/min)			
		07	7 l/h (116,7 ml/min)			
		10	10 l/h (166,7 ml/min)			
		9	Power Supply			
		M	100÷240 Vac			
		10	Membrane tubes			
		1	Santoprene			
		2	Sekobrill			
		3	Sekoflex			
		5	Sekoextra			
		6	Sekomed			
		11	Communication			
		0	No Communication			
		I	Isolated ModBus			
		M	Not Isolated ModBus			
		12, 13	Customization			
		00	No customization			
KXCR	00	07	M	1	0	00

KXCR

Models with Conductivity control Input and proportional reaching of the set point (100% until 80% of the set point and 20% with speed gradually decreasing).

Equipped with conductive probe (200 µS – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz.

Motors: Brushed DC motors.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

Tubes: Santoprene (other materials on request).

KXDR

Models with possibility of speed regulation and trigger input signal.

ON/OFF switch and priming function.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KXCR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene
KXDR	00	07	M	1	0,1 (15)	7(116,7)	100÷240 Vac	Santoprene

Kronos 20 Digital Pumps

Family of Pumps with the following General Features:

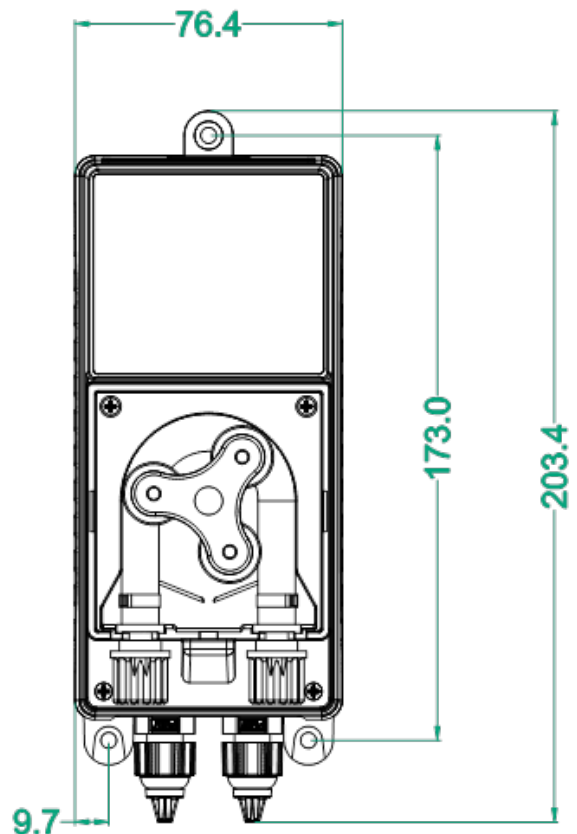
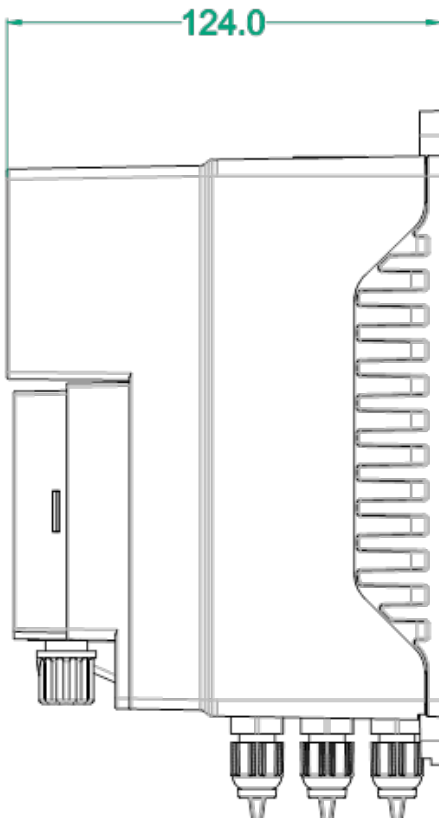
- Digital interface with 2 x 8 Characters LCD Display with backlight
- IP65 protection degree with a square and technical enclosure in PP with fiber glass.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- Snap in transparent frontal cover.
- Always three rollers, for a more constant dosage and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.
- DC Motors with extended lifetime, available with encoders on board, for better dosing accuracy.
- Optionally equipped with ModBus connection for remote control.



Applications:

Intermediate Range pump for medium duty applications

DIMENSIONAL DRAWING



Kronos 20 Digital Pumps

KEY CODE

1, 2, 3, 4		Family, Function					
KTDR		Kronos 20 Digital, Constant Dosage with Speed Regulation					
KTCR		Kronos 20 Digital, Conductivity Control Input					
5, 6		Back pressure					
00		0,1 bar					
03		3 bar					
7, 8		Flow Rate					
01		1 l/h (16,7 ml/min)					
07		7 l/h (116,7 ml/min)					
10		10 l/h (166,7 ml/min)					
9		Power Supply					
M		100÷240 Vac					
10		Membrane tubes					
1		Santoprene					
5		Sekoextra					
6		Sekomed					
11		Communication					
0		No Communication					
I		Isolated ModBus					
M		Not Isolated ModBus					
12, 13		Customization					
00		No customization					
KTCR		00	10	M	1	0	00

KTCR

Models with Conductivity control Input and proportional reaching of the set point (*)

Equipped with conductive probe (200 µS – 15 mS).

ON/OFF Switch and Priming Function.

3 Rollers.

Power Supply: 100÷240 Vac 50/60 Hz. Motors: Brushed DC motors.

Max Flow rate: 10 l/h, adjustable in the range 16%÷100%

Tubes: Santoprene (other materials can be supplied upon request).

(*)The conductivity pump is intended to dose until the conductivity in the recipient where the pump is dosing reaches a programmed set point. The pump is therefore equipped with a conductive probe with a built-in temperature probe to compensate its readings.

A Proportional Band (like 80%-20% or 50%-50%) can be programmed in the menu of the pump: the pump will dose at its maximum flow rate until reaching the first programmed percentage of the set point, to then linearly decrease its speed down to 0% when the set point is reached, in order to avoid over dosage.

KTDR

Models with possibility of speed regulation and trigger input signal.

Max Flow rate: 7 l/h, adjustable in the range 16%÷100%.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KTCR	00	10	M	1	0,1 (15)	10 (166,7)	100÷240 Vac	Santoprene
KTDR	00	07	M	1	0,1 (15)	7 (116,7)	100÷240 Vac	Santoprene

Kronos 50 Digital Pumps

The Kronos 50 family is the best among Seko's range of peristaltic pumps. It is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. Due to the advanced technology and materials used, the various models can reach flow rates up to 15 l/h (@0,1 bar) and can dose at back pressures up to 6 bar with a special Sekotech tube.

General Features:

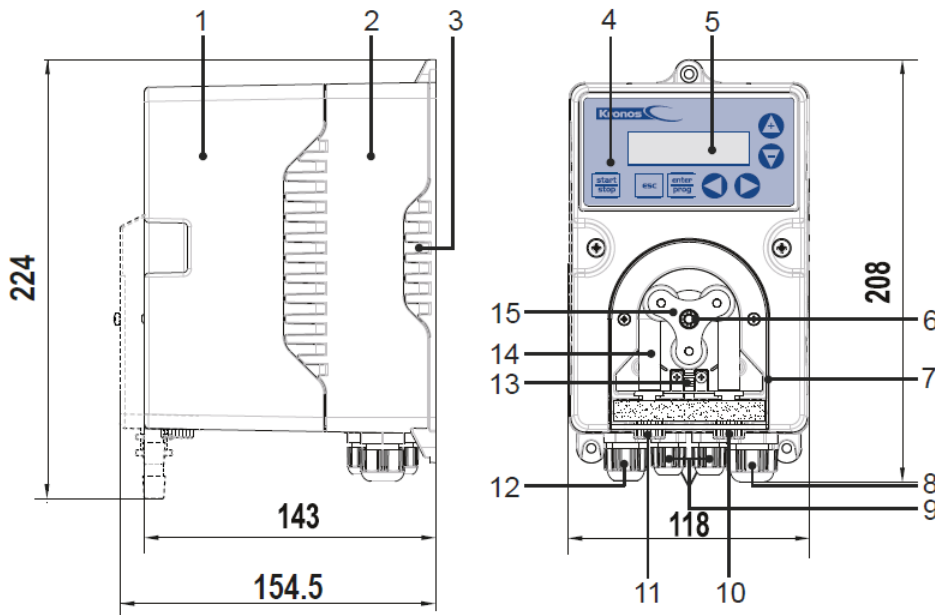
- Digital interface with 2 x 16 Characters LCD Display.
- Multi Power Supply 100÷240 Vac @50/60 Hz.
- IP65 protection degree with a professional looking enclosure made of shock proof and resistant ABS.
- Both external eyelets for direct wall fixing and brackets with "snap in" feature.
- The Stepper Motor guarantee a very accurate, adjustable and silent (< 35 dB) dosing.
- Always three rollers, for a more constant dosing and an extended tube life.
- Wheels holder always mounted on a ball bearing, to ensure longer life of the whole pump.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosing in swimming pools.
- Different models available with various functions (constant dosage, proportional dosage, conductivity mode).



Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.

DIMENSIONAL DRAWING



1	Housing: upper section	9	PCBs 7
2	Housing: central section	10	Discharge connector
3	Housing: bottom section	11	Suction connector
4	Control keys	12	PCB 9
5	LCD display	13	Hose rupture monitoring
6	Ball bearing	14	Pump hose
7	Transparent cover	15	Rotor
8	PCB 11		

Kronos 50 Digital Pumps

KEY CODE

1, 2, 3, 4	Family, Function					
KRFM	Kronos 50 Digital peristaltic pump, Full Mode					
KRFF	Kronos 50 Digital peristaltic pump, Full Full					
KRIR	Kronos 50 peristaltic pump, Inductive Conductivity Mode Set Point Dosing					
KRCR	Kronos 50 peristaltic pump, Conductivity Mode Set Point Dosing					
KREC	Kronos 50 peristaltic pump, Cooling Towers					
KKFM	Kronos 50 Digital peristaltic pump, Full Mode					
KSFM	Kronos 65 Digital peristaltic pump, Full Mode					
	5, 6	Back pressure				
	00	0,1 bar				
	1H	1,5 bar				
	02	2 bar				
	03	3 bar				
	04	4 bar				
	06	6 bar				
	7, 8	Flow Rate				
	02	2 l/h (33,3 ml/min)				
	04	4 l/h (66 ml/min)				
	08	8 l/h (133,3 ml/min)				
	10	10 l/h (166,7 ml/min)				
	15	15 l/h (250 ml/min)				
	25	25 l/h (416,7 ml/min)				
	9	Power Supply				
	M	100÷240 Vac				
	10	Membrane tubes				
	1	Santoprene				
	3	Sekoflex				
	5	Sekoextra				
	6	Sekomed				
	7	Sekotech				
	8	Sekofort				
	A	Pharmapure				
	11	Communication				
	0	No Communication				
	I	Isolated ModBus				
	M	Not Isolated ModBus				
	12, 13	Customization				
	00	No customization				
KRFM	02	10	M	1	0	00

Kronos 50 Digital Pumps

KRFM

Kronos FM pump has a multi-function setting; there are six different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time)

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical, starting from its density;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time.

Reversible direction.

Tube break alarm system integrated.

Flow rates: 0,02÷15 l/h, @3÷0,1 bar.

Tubes: Santoprene, Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFM	00	15	M	1	0,1 bar	15 (250,0)	100÷240 Vac	Santoprene
KRFM	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFM	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra
KRFM	1H	10	M	5	1,5 bar	10 (166,7)	100÷240 Vac	Sekoextra

KRFF

Kronos FF pump has a multi-function setting; there are seven different configurations, as following:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

0-10V Mode - The pump doses proportionally to a signal of 0-10V; it's possible to set the V (Volt) input value corresponding to 0% dosing and the V input value corresponding to the pump maximum flow rate.

Reversible direction.

Remote Stop Possibility.

Tube break alarm system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar or 0,002 ÷ 2 l/h @ 3bar

Tubes: Sekomed, Sekoextra (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRFF	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed
KRFF	03	02	M	5	3 bar	2 (33,3)	100÷240 Vac	Sekoextra

Kronos 50 Digital Pumps

KRIR

Kronos IR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity inductive probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.20 – 50.00 mS; The pump doses @ 100% if conductivity is lower than a programmable Set Point percent (default 80%); If mS value is higher than fixed percent, the pump proportionally decreases the speed down to 0%.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRIR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KRCR

Kronos CR pump has a accurate dosing adjustment, either manually or externally by means of the conductivity probe signal:

Cond Mode - The pump doses proportionally to a signal of 0.10 – 14.99 mS. It's possible to set the mS Set Point corresponding to 0% dosing (desired conductivity). The pump doses @100% if conductivity is lower than a programmable Set Point percent (default 80%). If mS value is higher than fixed percentage, the pump proportionally decreases the speed down to 0% (at the programmed Set Point).

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar.

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KRCR	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

Kronos 50 Digital Pumps

KREC

Kronos EC-Cond pump has been specifically designed for application in cooling towers; 3 operating modes are selectable:

PPM Dosing - Dosage amount calculated to maintain the selected Concentration of chemical;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time

Timer Dosing Mode - The pump doses in Time without external trigger (ON/OFF Time selectable)

Infinite adjustment of the metering output either manually or externally via 0/4-20 mA signals.

Dosing by relay action.

Conductivity Measures 0,1÷15,0 mS, Accuracy ± 0.1 mS

Priming function (full speed).

Reversible direction.

Tube breakage detection system integrated.

Over Flow Alarm function available.

Temperature probe compensation.

Flow rates: 0,010 ÷ 10 l/h @ 2bar

Tubes: Sekomed (others on request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KREC	02	10	M	6	2 bar	10 (166,7)	100÷240 Vac	Sekomed

KKFM

Kronos KK FM pump is a special version of Kronos 50 pump; it has the six different following configurations:

Manual Mode - Constant dosage (with possibility to insert a ON, OFF and delay time);

mA Mode - Dosage Proportional to (0) 4÷20 mA or 20÷4(0) mA Analogue signal;

PPM Mode - Dosage amount calculated to maintain the selected Concentration of chemical;

1:N Mode - Pump doses following the pulses number to the related input. One input pulse generates 1 second of dosing at set speed % (N);

N:1 Mode - Pump doses following the pulses number to the related input. N input pulses generate 1 second of dosing at 1% of max speed;

Batch Mode - Pump doses the selected quantity when UP button is pressed or when a pulse is read on input, within the selected dosing time;

Reversible direction.

Tube breakage detection system integrated.

Flow rates: 2l/h @ 2bar, 2 l/h @6 bar , 8 l/h @3 bar, 4 l/h @4 bar.

Tubes: Sekotech (allows secure operation in harsh conditions), Sekofort, Pharmapure.

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KKFM	03	08	M	7	3 bar	8 l/h	100÷240 Vac	Sekotech
KKFM	06	02	M	7	6 bar	2 l/h	100÷240 Vac	Sekotech
KKFM	03	02	M	8	3 bar	2 l/h	100÷240 Vac	Sekofort
KKFM	04	04	M	A	4 bar	4 l/h	100÷240 Vac	Pharmapure

Kronos 65 Digital Pumps

The Kronos 65 family is equipped with a Stepper motor, that makes the dosage infinitely adjustable (0,1...100%) and silent. The Kronos 65 has a bigger head size (65 mm vs 50 mm), and due to the advanced technology and materials used, it can reach flow rates up to 25 l/h (@0,1 bar) and can dose at back pressures up to 3 bar always in safe operation.

General Features:

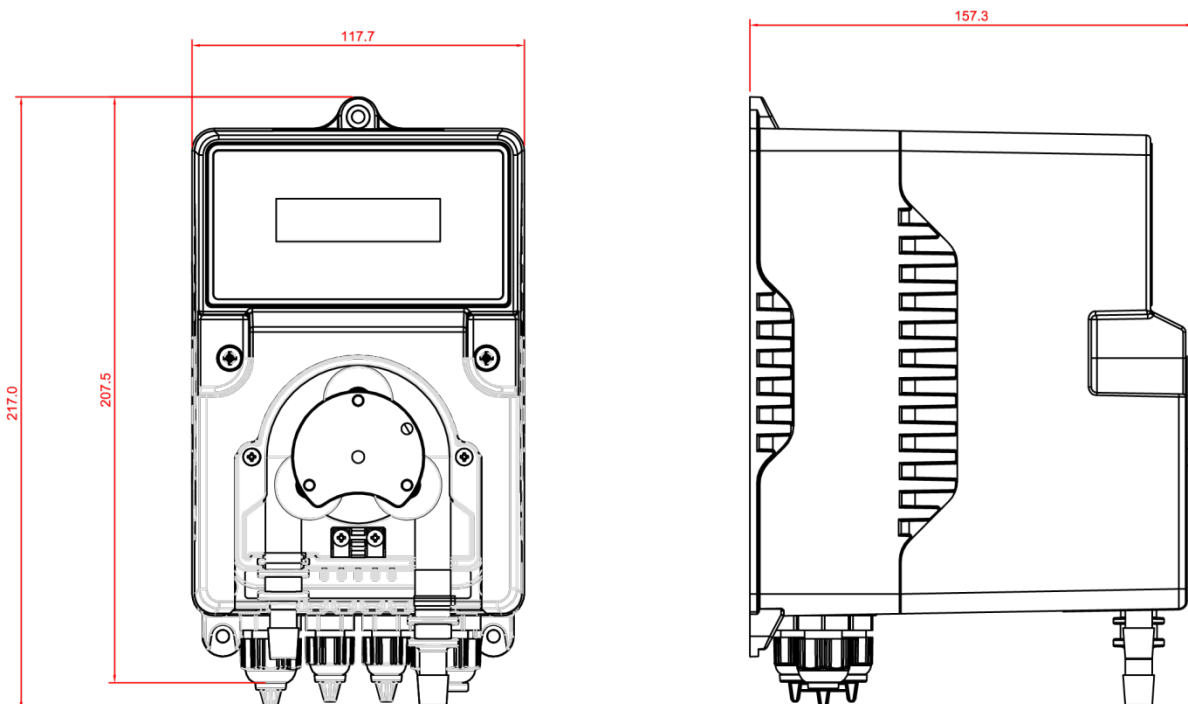
- Digital Interface with 2 x 16 characters LCD display.
- Multi power supply 100÷240 Vac @50/60 Hz, stepper motor, 3 rollers.
- Flow rate up to 25 l/h (@ 0,1 bar).
- Speed regulation 0,1...100%.
- Back Pressures up to 3 bar.
- Sekoflex tubing 6,35 x 12,7
- Tube breakage detection system.
- Optionally equipped with PTFE Bronze filled rollers for special applications such as Chlorine Dosage in swimming pools.

Applications:

Very High Range pump for all kinds of heavy duty applications, especially in Cooling Towers, Water parks, Large Swimming Pools.



DIMENSIONAL DRAWING



KSFM

Six different configuration modes:

Manual Mode, mA Mode, PPM Mode, 1:N Mode, N:1 Mode, Batch Mode.

Integrated Tube breakage detection system.

Flow rates: safely up to 25 l/h @0,1 bar.

Tubes: Sekoflex (other tubes can be supplied upon request).

CODE					VALUES			
Family	Back Pressure	Flow Rate	Power Supply	Tube	Back Pressure bar (psi)	Flow Rate l/h (ml/min)	Power Supply	Tube Material
KSFM	00	25	M	3	0,1 bar	25 (416,7)	100÷240 Vac	Sekoflex

A large, dynamic splash of clear blue water with many bubbles, filling the right side and bottom of the page. The water is captured in motion, creating a sense of freshness and purity.

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.

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The SEKO logo, consisting of the word "seko" in a bold, lowercase, blue sans-serif font. The letters are closely spaced and have a modern, clean appearance.

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