

# **Pumps & Accessories**

for Water Treatment & Industry



DosingPump.ir

Your Choice, Our Commitment





# seko

# Globally Present, Locally Active

## A Worldwide Group at your service

Our Global presence ensures that we can support our Customers wherever they are. Supported by teams in over 20 countries, as well as by our accredited Partner Distributor network, we ensure professional, local customer support in over 120 countries, with the added benefit of rapid delivery of goods to meet your needs.

All this backed up and supported by a world-class team of Technical Customer Service, able to provide all the back up or technical support needed. With ISO certificated production sites in Europe, the Americas and Asia, we are close to our customers and fully compliant with all local norms both in terms of our product designs as much as our production facilities.

# How SEKO works for you

# From the spark of an idea, through to the delivery of a solution, SEKO is with you all the way

SEKO supports its customers in every phase of a project, from the inception of an idea or request, through design and testing to launch and installation. Our in-house research, design and development teams work closely with the local teams, drawing on customer and market inputs. Then using state-of-the-art technologies to optimize costs and using our own specifically designed test benches to ensure rigorous, robust testing, we ensure a quality solution is delivered quickly to market.

No matter which processes and applications are planned SEKO has a solution in the cleaning and hygiene of kitchens and laundries and surfaces of all types in applications like Offices and Restaurants, Hospitals and Hotels, Retailers and Schools, Car Washes and Swimming Pools, Cooling Towers, Energy, Food & Beverage, Water & Gas Utilities Potable and Waste Water Treatment.

# Partnership philosophy

Being a privately-owned business means that we are here for the long term and can plan projects with and for our Customers, where both parties benefit. It means we can rapidly take decisions to invest our resources to ensure our optimum solutions are delivered

## Your Business, Our Solutions

Our extensive product range represents a unique combination of design, development and implementation know how. With a wide and ever evolving range of products and ancillaries, we can offer specific and comprehensive solutions for a variety of industrial applications. Our solutions are conceived to fit seamlessly into your operation, optimizing the processes and applications.

Uniquely positioned

SEKO's 3 business units, Cleaning & Hygiene, Water and Industry and Industrial Processes puts us in a unique position to be able to respond to the widest range of business needs, with a broad range that allows you the Customer to deal with just one company, simple.

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# Water-Treatment Applications

# Ever-evolving solutions to safeguard our most precious resource

Water is becoming increasingly scarce, and as a result the water-treatment market has seen rapid growth since the late 1990s. Those working in the sector now encounter increasingly complex challenges, from guaranteeing high water quality to meeting ever-more closely monitored regulations.

From the treatment of water for human consumption to the water used in cooling water treatment and the use of water in myriad industrial processes, SEKO continues to enjoy a strong reputation as a reliable and consistent partner delivering solutions tailored to meet any given need. Exploiting our market experience, we design, develop, test and manufacture solutions and systems that deliver:

## Precision and Consistency

SEKO's systems allow you to manage the total cost of ownership of your system whilst guaranteeing accurate measurement of critical water parameters. Chemically compatible raw materials, chosen for their robustness and durability, are exemplified by our five-year diaphragm guarantee and ATEX certification on selected pumps, providing peace of mind and brand security.

#### Ease of Use and Installation

As a global company, we are attuned to the differing needs of individual markets. This is why, when we design a new product, we ensure that installation is simple and that we use uniform programming language solutions that are intuitive and easy to understand, in whatever language you speak.

## Operational Efficiency

SEKO's pumps offer an exceptional mix of affordability and high performance across solenoid and electromechanical pump applications. These include thoughtful design elements such as adjustable stroke length; single wetted parts options; stabilized power supply; multiple model outputs in a single pump footprint; base or wall mounting and common programming language for a new standard in operational efficiency.



# SEKO Connectivity Platform

## How the Internet of Things (IoT) works

An IoT ecosystem consists of web-enabled smart devices that use embedded processors, sensors and communication hardware to collect, send and act on data they acquire from their environments.

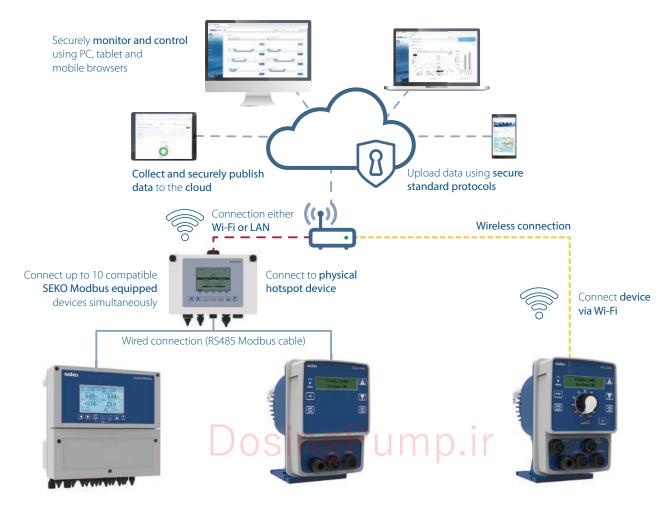
IoT devices share the sensor data they collect by connecting to an IoT gateway or other edge device, where data is either sent to the cloud to be analyzed fully (with analysis and comparison possible), or locally (limited to the data acquired).

Sometimes, these devices communicate with other related devices and act on the information they get from one another. The devices do most of the work without human intervention, although people can interact with the devices, for instance, to set them up, give them instructions or access the data.

#### IoT offers a number of benefits to organizations, enabling them to:

- Monitor their overall business processes
- Improve customer experience
- Save time and money
- Enhance employee productivity

- Integrate and adapt business models
- Make better business decisions
- Generate more revenue



#### SekoWeb & Data on Demand

In today's connected world, customers expect to manage their equipment from a PC, laptop or smart device, using the Internet of Things to access operational information at their convenience. Whether viewing data in real time or analyzing it historically, remote connectivity allows costs to be optimized through targeted maintenance or problem solving, ensuring downtime is kept to a minimum.

Always at the forefront of technological innovation, SEKO has brought IoT to its class-leading controllers and dosing systems\*, connecting plant operators to their equipment like never before.

Via the bespoke SekoWeb platform, users enjoy unparalleled access to live data and can make vital adjustments to their water-treatment operation 24 hours a day from any location worldwide.

Along with significant efficiency improvements, operators benefit from 24/7 awareness of system status for all their equipment across multiple installations, providing complete peace of mind.

Fully scalable, SEKO's systems are set up to allow users from the largest global multi-national to the independent engineering company to maximize their operations and running costs with a solution that ensures data is always available on demand, regardless of the application. Features include:

- Overall operating costs
- Chemical usage
- Programmes
- Parameters set
- Alarm reporting
- Data analysis
- Map geolocation



#### KommBox

Although some SEKO devices have an internal Wi-Fi module that allows them to connect directly to the web, sometimes these systems must be installed in places where Wi-Fi signal is weak. With this in mind, SEKO has developed systems equipped with a wired Modbus interface, which can be connected to an external communication device located where Wi-Fi signal is strong.

This device is known as KommBox, a unit that can be physically connected to all SEKO devices fitted with a Modbus serial port (\*) to provide a Wi-Fi or ethernet interface. Essentially, KommBox is a gateway that acts as a hub between the several Modbus devices present in a plant and the Wi-Fi or LAN channel available – and therefore the web.

KommBox can use any internet connection available in the plant – Wi-Fi or LAN – and, once configured and installed, the connected devices can be accessed directly from the SekoWeb portal from anywhere in the world by users with the appropriate credentials.

KommBox features an intuitive wizard installation system for devices as they are loaded, making the process quick, simple and straightforward. And, once the products have been installed, they are visible in the SekoWeb portal.

(\*) Available on products across the SEKO range, identifiable by this icon.

#### **Features**

- Able to manage up to 10 devices in the same wired Modbus RS485 network
- Wi-Fi board and LAN input use every available internet connection in order to send periodical data to SekoWeb
- Configurable as a hot spot for accessing the internal web server
- Independent 100 240V power supply
- Internal battery for a local clock
- Seven-key user interface
- Backlit three-colour graphic display



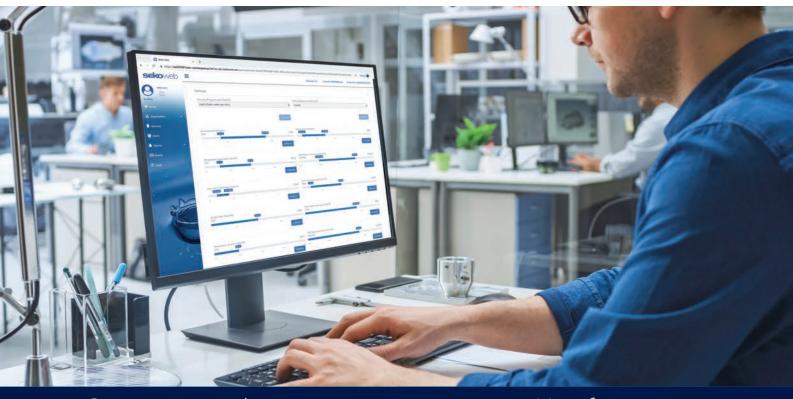
# Introducing SekoWeb

Whether you're a technician or an end user, SEKO has IoT-enabled remote access solutions for achieving and maintaining perfect water quality in your application.

Housing state-of-the-art technology within intuitive interfaces, SekoWeb has been designed with the user in mind to make remote water-treatment plant management quick, easy and cost-effective.







### Connectivity and users



- Monitoring and complete management
- Internet portal accessible via online login or by scanning a product's QR code
- Available as an app for Android and iOS
- For plant installers, technicians and engineers

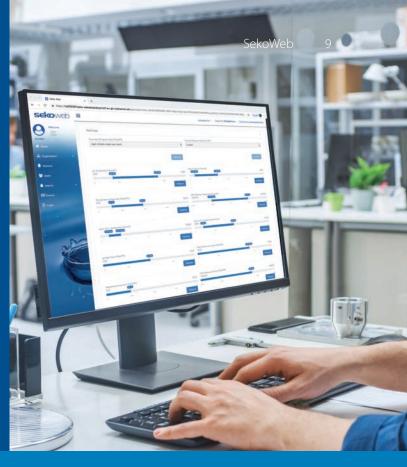
## Main features

- Full access to all settings and parameters from any location
- Connect to multiple installations
- Monitor overall operating costs
- Track chemical consumption
- Adjust programmes
- Access alarm reporting
- Unrestricted data analysis
- Map geolocation



# Professional dosing pump management

By scanning a product's QR code or using their online login, dosing plant technicians can access SekoWeb, where they are able to set up and adjust waterquality parameters remotely for complete management of all their installations.





SekoWeb has been created with engineers in mind: as well as being very powerful, it requires expert technical knowledge to be used. Password protection ensures only authorized users can access the portal.

engineers can make vital dosing adjustments 24/7 making the portal ideal for complete management of professional installations.



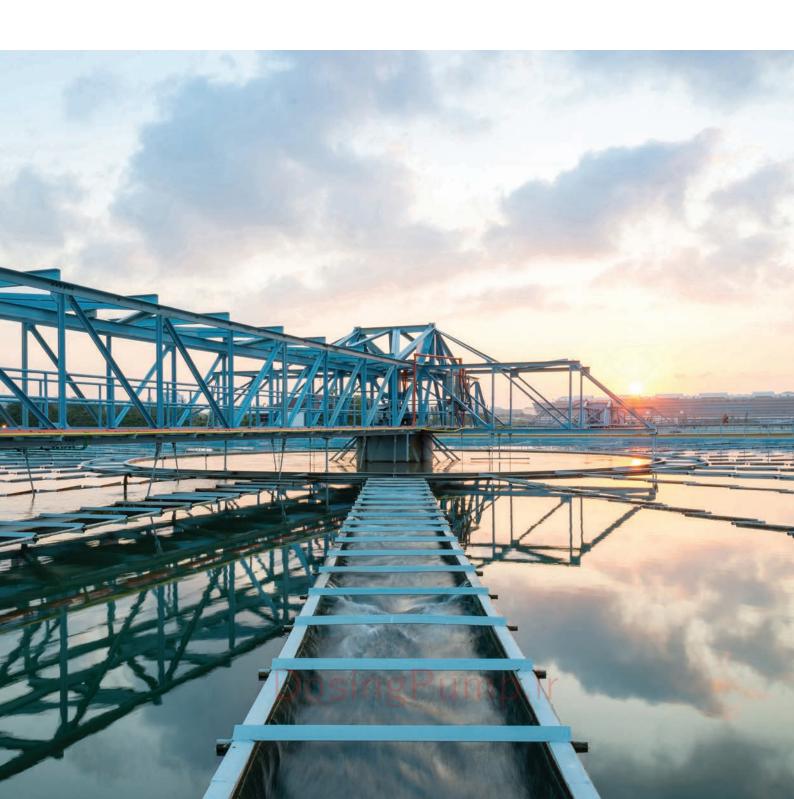
- Full access to parameter settings
- Adjust programmes 24/7
- Access alarm reporting
- Monitor chemical consumption
- Complete data analysis
- Map geolocation







# Solenoid-Driven Dosing Pumps



# Product Overview

		Tekba-R	Tekba	Komba	Tekna	Kompact	Invikta
Performance	Flow rate range [l/h]	2.5 - 110	2.5 - 110	3 - 5	0.4 - 110	3 - 5	0.2 - 5
Performance	Pressure [up to - bar]	20	20	10	20	10	7
	Base mounted	•	•	•			
Installation	Wall mounted				•	•	•
Mode	Bracket for alternative mounting				٠		
	24 VAC				•		•
Power Supply	230 VAC						•
	Wide range 100/240 VAC		•		•		
User	Analogue				•	•	•
Interface	Digital						
Stroke Length Regulation	Mechanical						
	Constant						
	Prop. (pulse- water meter)		•	•	•	•	
Dosage Mode	Prop. mA		•	•	•	•	
Dosage Mode	ppm / batch	•	•		•	•	
	Weekly		•		•	•	
	pH / Rx		•		•	•	
ATEX	Zone 2				•		
Communication	Wi-Fi	•					
Communication	Modbus	•	•		•		
	PVDF standard	•			•		
Pump	PVDF-T standard						•
Head	Auto degassing PVDF	•			•		
	SS316L	•			•		
	FKM-B				•		
O-Rings	EPDM				•		
- Mings	PTFE				•		
	FFKM	•			•		
Installation	PVDF				•		
Kit	PVDF-T				•		•

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# Tekba-R, Tekba & Komba

#### Digital base-mounted dosing pumps

Tekba-R, Tekba and Komba are professional solenoid-driven dosing pumps that share a number of key characteristics while each offering their own unique benefits for specific water-treatment applications.

These precise, robust and reliable pumps also benefit from level input on all models and standard seals in FKM-B or EPDM, with special seals available for each model.

seko

alarm

proq



#### Chemical compatibility

PVDF pump head and delivery tubes and fittings plus ceramic ball valves provide pump longevity and compatibility with all principal water-treatment applications.



#### Long-life diaphragm

PTFE diaphragm, guaranteed for 5 years.



#### Ease of installation

Pumps can be installed with the casing closed and without special tools.



#### Electrical safety

All electrical connections are available externally on circular IP65 connectors.





#### Reliable and consistent

As well as protecting the pump itself and the environment, the driving algorithm compensates for power supply fluctuations, enabling precise and accurate dosing in any conditions.





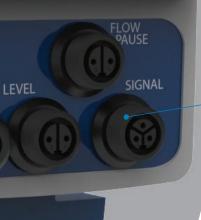
Mechanical stroke adjustment available on Tekba-R version





#### Reduced energy consumption

A stabilized multi power supply (100 - 240 Vac, 50/60 Hz) comes as standard, with its solenoid-driving algorithms, patented by SEKO, helping to reduce energy consumption.





### Simplified cabling

Cable connectors have internal screw terminals, facilitating a clean and professional installation with cables pre-cut to the correct size.

## **Applications**

- Agricultural water treatment
- Food & beverage
- Industrial water treatment
- Potable water treatment
- Wastewater treatment

# Tekba-R

#### Solenoid-driven pumps with mechanical stroke-length regulation

Tekba-R is a range of digital solenoid-driven dosing pumps with mechanical stroke-length regulation. It represents a state of-the-art solution for its reliability, dosing precision and ease of use and has been designed in response to positive customer feedback on the Tekna Series. The Tekba-R Series offers a modern and reliable product, a reference point in the base-mounted dosing pump sector.

- Flow rate range: 2.5 110 l/h, up to 20 bar
- Wetted parts: PVDF, PTFE, FFKM, EPDM, FKM-B and Ceramic



Tekba-R's unique features include a digital interface that allows programming via keyboard and display, while solenoid stroke adjustment can be performed with a mechanical knob for increased dosing precision.

Tekba-R is available in two models. The EML is a constant dosing pump with programmable flow rate, while the EMG is a multifunction pump that includes operating modes timed or proportional to an analogue 4-20mA signal, or to a digital signal such as that generated by a pulse-emitting water meter.

Tekba-R is also available with a Modbus interface, which allows the pump to be integrated into a more complex system in which other Modbus devices are already present. It's also available with a Wi-Fi interface which enables operation via the SekoWeb app or online portal.



#### **Features**

Mechanical stroke length regulation

EML: Constant dosing at the desired flow rate

EMG: Multifunction:

- 4-20mA analogue input
- Frequency input
- Remote ON / OFF input
- · Directly connectable to a water meter
- Dosage in ppm
- Functions 1: N, N: 1, 1: 1
- · Timed dosing

Available with special seals in PTFE or FFKM

Available with Modbus RTU RS485 port

Available with Wi-Fi interface that allows:

- Direct local connection to the pump for its programming via internal webserver
- Connection to a Wi-Fi network for remote Dosing P management via the SekoWeb app or online portal



# Tekba-R key code

EML	Constant flow r	ate. Stroke length	adjustable with a m	echanical knob. V	Vorking frequency (s	strokes per minute	e) adjustable via dig	gital interface. Wit	h level input.	
EMG	Multifunction p	ump. Stroke lengt	h adjustable with a	mechanical knob	o. Working mode to	be set via its digita	l interface.			
	Hydraulics	Pressure [bar]	Flow rate [l/h]	Capacity [cc/stroke]	Ø Hydr Connections IN / EXT. [mm]	Frequency [stroke/min]	Consumption [W]	Weight [kg]	Carton size LxWxH [mm]	
		20	2.5	0.35						
		18	3	0.42	_				290 x 255	
	600	14	4.2	0.58	- 4/6	120	20	3.9	x 220	
		8	7	0.97	_					
		12	4	0.42						
		10	5	0.52	_	160	20	2.4	290 x 255	
	603	8	6	0.63	- 4/6	160	20	3.4	x 220	
		2	8	0.83	_					
		16	7	0.38						
	000	10	10	0.55	416	200	20	4.4	290 x 255	
	800	5	15	0.83	<del>-</del> 4/6	300	20	4.4	x 220	
		1	18	1.00						
		5	20	1.11	_					
	803	4	32	1.78	- 8/10	300	40	4.4	290 x 255	
	003	2	62	3.44		300	40	7.7	x 220	
		0.1	110	6.11						
	Stroke-length regulation									
		М	Mechanical regu	ılation						
			Power supply	Wide range						
			N	100 - 240 Vac 5	0/60 Hz					
				Liquid end			Body	Balls	Diaphragm	
				H			PVDF	Ceramic	PTFE	
				A	Auto	matic degassing	PVDF	Ceramic	PTFE	
							SS316L	SS316L	PTFE	
					Installation kit					
					Н	PVDF				
						O-Ring				
						0	FKM-B			
						1	EPDM			
						2	PTFE			
						3	FFKM			
							Colour		Back	Fror
							00	Standard	RAL7004	RAL50
								Communication		
									No	
								W	Wi-Fi	
								M	Modbus	
									Customization	
									0	Standard
1	1	1	1		1	1				

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# Tekba

#### Base-mounted solenoid-driven dosing pumps

Tekba is a digital base-mounted solenoid-driven dosing pump. It represents the best compromise between reliability, dosing precision and ease of use and has been designed to satisfy the needs of the market. Tekba offers the same features and functions of the Tekba-R range, except its mechanical stroke regulation but with a wider selection of models that enable the series to meet a broader range of applications.

- Flow rate range: 2.5 110 l/h, up to 20 bar
- Wetted parts: PVDF, PTFE, FFKM, EPDM, FKM-B and Ceramic



Alongside the constant and multifunction EML and EMG models, common to the Tekba-R range, the Tekba series includes two purely proportional models: EMM, which manages a 4-20mA input and EMC, which accepts a pulse input.

An EMR instrument-pump is also available, with an input for a pH/ORP probe. The EMG and EMR versions are also available with a Modbus communication port for integrating the pump into a more complex system, or with a Wi-Fi interface that allows the pump to be managed via SekoWeb.



#### **Features**

EML: Constant dosing at the desired flow rate

**EMG:** Multifunction

EMM: Proportional (4-20mA input)

EMC: Proportional (digital pulse input)

EMR: Instrument-pump with pH/ORP input

Available with special seals in PTFE or FFKM

Available with Modbus RTU RS485 port

Available with Wi-Fi interface that allows:

- Direct local connection to the pump for programming via internal webserver
- Connection to a Wi-Fi network, for remote management via the SekoWeb app or online portal

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# Tekba key code

EML		ate. Flow rate adjus			input.					
EMG			de to be set via its o							
EMR				ed pH or redox va	alue. PT100 probe in	put also available t	for thermal compe	ensation.		
EMM		sing to an analogu								
EMC			quency signal (pul:		Ø I b sele		C	\A/=:=l=+	Cti	
	Hydraulics	Pressure [bar]	Flow rate [I/h]	Capacity [cc/stroke]	Ø Hydr Connections IN / EXT. [mm]	Frequency [stroke/min]	Consumption [W]	Weight [kg]	Carton size LxWxH [mm]	
		20	2.5	0.35	_					
	600	18	3	0.42	- 4/6	120	20	3.9	290 x 255	
		14	4.2	0.58	_				x 220	
		8	7	0.97						
		12	4	0.42	_					
	603	10	5	0.52	- 4/6	160	20	3.4	290 x 255 x 220	
		8	6	0.63	_				X 220	
		2	7	0.83						
		16	10	0.38	_					
	800	5	15	0.83	- 4/6	300	20	4.4	290 x 255 x 220	
		1	18	1.00	_					
		5	20	1.11						
		4	32	1.78	_				290 x 255	
	803	2	62	3.44	- 8/10	300	40	4.4	x 220	
		0.1	110	6.11	_					
		Stroke-length	regulation							
		N	Not available							
			Power supply	Wide range						
			N	100 - 240 Vac 50	0/60 Hz					
				Liquid end			Body	Balls	Diaphragm	
				н			PVDF	Ceramic	PTFE	
				Α	Auto	matic degassing	PVDF	Ceramic	PTFE	
				1			SS316L	SS316L	PTFE	
					Installation kit					
					Н	PVDF				
						Seals				
						0	FKM-B			
						1	EPDM			
						2	PTFE			
						3	FFKM			
							Colour		Back	Front
							00	Standard	RAL7004	RAL501
								Communicati		
								0	Standard	
								W	Wi-Fi	
								M	Modbus RTU RS4	85
									Customization	Ctandend
									0	Standard
EMG	800	N	N	н	H	2	00	W	0	

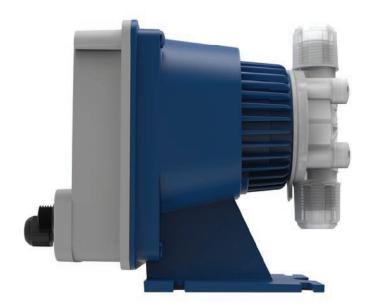
# Komba

#### Compact, base-mounted, solenoid-driven dosing pumps

Komba is a compact base-mounted solenoid-driven digital dosing pump designed specifically for sites where space is at a premium but performance cannot be compromised. Komba's reliability, dosing precision, user-friendliness and ease of installation mean it represents the best solution of its kind in the market today.

- Flow rate range: 3 l/h @ 10bar; 5 l/h @ 8bar
- Wetted parts: PVDF, PTFE, FFKM, EPDM, FKM-B and Ceramic





Komba is available in four models, satisfying a broad range of installation needs.

The DML is a constant dosing pump with programmable flow rate and level input. The DMM and the DMC are proportional dosing pumps; the DMM accepts an analogue 4-20mA signal as input, while the DMC accepts a digital frequency signal, such as one generated by a pulse-emitting water meter.

#### **Features**

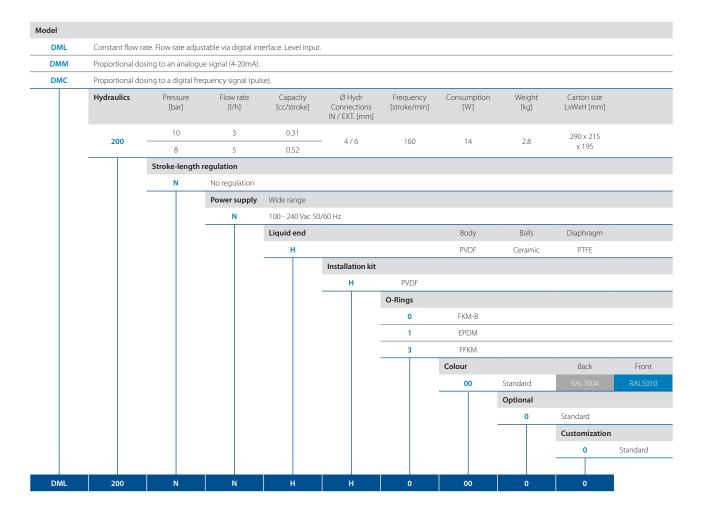
DML: Constant dosing at the desired flow rate

DMM: Proportional (4-20mA input)

**DMC:** Proportional (digital pulse input)

Available with special seals in FFKM

# Komba key code



# Tekna & Kompact

#### Wall-mounted solenoid dosing pumps

Tekna and Kompact offer precise chemical dosing for water-treatment professionals, with multiple models serving distinct applications, from basic requirements to complex high-end processes.

Delivering consistent, repeatable results, Tekna and Kompact are the go-to solution for many potable and wastewater treatment processes, with SEKO's continuous refinement of these systems meaning they always meet the latest local and national legislation.











The installer-friendly bracket enables quick and simple wall mounting.





#### Premium seals

Available with special seals in FFKM or PTFE.





#### Robust and reliable

Robust and reliable for extended service life.

## **Applications**

- Commercial swimming pools
- Cooling water treatment
- Food & beverage
- Industrial water treatment
- Potable water treatment
- Power generation
- Wastewater treatment

# Tekna

#### Wall-mounted solenoid-driven dosing pumps

Tekna is one of the most widespread, well-known and appreciated wall-mounted electromagnetic pump ranges in the world, a range that has evolved over the years by drawing upon the feedback of thousands of users across the globe. The series offers multiple models, with analogue and digital interfaces, able to satisfy every installation need and to offer a reliable and effective solution in any situation.

- Flow rate range: 0.4 110 l/h, up to 20 bar
- Wetted parts: PVDF, SS316L, PTFE, FFKM, EPDM, FKM-B and Ceramic
- Analogue and digital range with constant or proportional dosage







Features

Numerous Tekna models are available, with analogic or digital interface, to satisfy almost any request from the market.

Tekna delivers reduced energy consumption thanks to an embedded stabilized multi-range power supply (100 – 240 Vac, 50/60 Hz). Thanks to the SEKO patented algorithm, the solenoid only draws the power strictly required to activate the pump, based on the actual working conditions, which improves pump efficiency and saves energy. The algorithm also compensates for any fluctuation of the power supply voltage, for giving a precise and accurate dosage in any condition.

Tekna is also available in ATEX standard-compliant versions, with constant or proportional dosage functions and a digital interface. This model comes with an SS316L stainless-steel pump body as standard.

Pump body in PVDF

Kit available in PVDF or PVDF-T

Patented algorithm for driving the solenoid

AKS: Constant, with analogic interface (potentiometer)

AKL: Constant with level, analogic interface

APG: Proportional (4-20mA/pulse), analogic interface

TPG: Multifunction prop. (4-20mA/pulse), digital interface

TPR: Instrument-pump with pH/ORP input, digital interface

TCK: Weekly timed pump, digital interface

Available in ATEX-certificated models (Zone 2)

Models available with 24Vac and 12Vdc power supply

Available with special seals in PTFE or FFKM

Available with auto-degassing pump head in PVDF

Available with Modbus RTU RS485 port for:

 Integrating the pump in a more complex plant, locally managed by a PLC or an industrial PC, where other Modbus devices are already present

 Connect the pump to a KommBox or a KommSpot and, through them, to the internet for management via the SekoWeb app or online portal



# Tekna key code

AKS	Constant flow r	rate, without level in	nput. Flow rate adju	ustable via analog	ic interface (potenti	ometer).			
AKL	Constant flow r	rate, with level inpu	t. Flow rate adjusta	ble via analogic ir	nterface (potentiom	eter).			
APG	Proportional do	sing to an analogue	signal (4-20mA) or	to digital frequenc	y signal (pulse). With	analogic interfa	ce (potentiometers).		
ГРG	Multifunction p	oump. Proportional	dosing to an analo	gue signal (4-20m	nA) or to digital frequ	ency signal (pu	ılse). PPM mode, Tim	er mode, batch m	ode and others. Digital inte
TPR	Instrument-pur	mp. Dosage in acco	ordance with the m	neasured pH or red	dox value. PT100 pro	be input also av	vailable for thermal c	ompensation. Dic	gital interface.
тск				-	rate, and other time				
	Hydraulics	Pressure [bar]	Flow rate [l/h]	Capacity [cc/stroke]	Ø Hydr Connections IN / EXT. [mm]	Frequency [stroke/min]	Consumption [W]	Weight [kg]	Carton size LxWxH [mm]
		20	0.4	0.06	, 6				
		16	0.8	0.11	4 / 7 delivery				295 x 245
	500	10	1.2	0.17	4/6 suction	120	15	3.9	x 185
		6	1.5	0.21	_				
		20	2.5	0.35					
		18	3	0.42	– 4 / 7 delivery		**	2.0	295 x 245
	600	14	4.2	0.58	4/6 suction	120	20	3.9	x 185
		8	7	0.97	_				
		12	4	0.42	_				
	603	10	5	0.52	_ 4/6	160	20	2.4	295 x 245
	603	8	6	0.63	- 4/6 -	160	20	3.4	x 185
		2	8	0.83					
		16	7	0.38	_				
	900	10	10	0.55	- - 4/6	300	20	4.4	295 x 245
	800	5	15	0.83	4/0	300	20	4.4	x 185
		1	18	1.00					
		5	20	1.11					
	803 —	4	32	1.78	- 8/12	300	40	4.4	295 x 245
	003	2	62	3.44	- 0,12	200	70	7.7	x 185
		0.1	110	6.11					
		Power supply	Wide range						
		N	100-240 Vac 50/	60 Hz					
		0	24Vac 50/60 Hz						
		L	12 Vdc						
			Liquid end			Body	Balls	Diaphragm	
			H			PVDF	Ceramic	PTFE	
			A	Aut	omatic degassing	PVDF	Ceramic	PTFE	
				In stall 12 12		SS316L	SS316L	PTFE	
				Installation kit					
				Н	PVDF				
				P	PVDF-T				
				X	With 1.5-bar injec	tion valve			
				0	Without kit (ATE)	only)			
					Seals				
					0	FKM-B			
					1	EPDM			
					2	PTFE			
					3	FFKM			
						Optional			
						0	Standard		
							Optional/custo	mization	
							00	Standard	
							M0	Modbus RTU RS	485
							X0	ATEX certification	on (TPG and TCK only)
1				_			_		

# Kompact

#### Compact wall-mounted solenoid-driven dosing pumps

Kompact is a range of simple, reliable and compact wall-mounted solenoid-driven pumps. Designed to provide an effective response to the differing needs of the market, the series comprises multiple models, both with analogic and digital interfaces, to meet the most common installation conditions.

- Flow rate range: 3 l/h @ 10bar; 5 l/h @ 8bar
- Wetted parts: PVDF, PTFE, EPDM, FKM-B and Ceramic
- Analogue and digital range with constant or proportional dosage



Kompact has been designed as a basic range of solenoid-driven pumps for less demanding applications without compromising on robustness and reliability.

With Kompact, SEKO has struck the perfect balance between using premium components that guarantee full chemical compatibility in multiple applications while ensuring affordability for the operator.

To satisfy every installation need, the range offers five different models, for constant and proportional dosages; three with an analogic interface (potentiometer) and two with a digital interface (keyboard and 2x8 display).



#### **Features**

Pump body in PVDF

Kit available in PVDF or PVDF-T

AMS: Constant, with analogic interface (potentiometer)

AML: Constant with level, analogic interface

AMC: Proportional (pulse), analogic interface

**DPT:** Multifunction prop. (4-20mA/pulse), digital interface

**DRP:** Instrument-pump with pH/ORP input, digital interface

Available with special seals in FFKM

# DosingPump.ir

# Kompact key code

Model									
AMS	Constant flow	rate, without level i	nput. Flow rate ad	justable via analog	jic interface (potent	iometer).			
AML	Constant flow	rate, with level inpu	ıt. Flow rate adjust	able via analogic ir	nterface (potention	neter).			
AMC	Proportional do	sing to a frequency	digital signal (puls	e), analogic interfac	e.				
DPT	Multifunction p	oump. Proportional	dosing to an anal	ogue signal (4-20n	nA) or to digital fred	uency signal (puls	se). PPM mode, Time	er mode, batch m	node and others. Digital interface.
DRP	Instrument-pun	np. Dosage accordi	ng to pH or redox v	alue. PT100 probe i	nput also available fo	or thermal compen	sation. Digital interfa	ce.	
	Hydraulics	Pressure [bar]	Flow rate [I/h]	Capacity [cc/stroke]	Ø Hydr Connections IN / EXT. [mm]	Frequency [stroke/min]	Consumption [W]	Weight [kg]	Carton size LxWxH [mm]
		10	3	0.31					210 x 130
	100	8	5	0.52	<del>-</del> 4/6	160	12	2.7	x 170
		Power supply							
		Α	230 Vac 50 Hz (	AMS only)					
		N	100 - 240 Vac 5	0/60 Hz					
		0	24 Vac 50/60 H	Z					
			Liquid end			Body	Balls	Diaphragm	
			н			PVDF	Ceramic	PTFE	
				Installation ki	t				
				E	PVDF-T				
				Н	PVDF				
				Х	With 1.5-bar inje	ection valve			
					Seals				
					0	FKM-B			
					1	EPDM			
					3	FFKM			
						Optional			
						00	Standard		
							Customization		
							0		
EMR	200	N	н	Е	0	00	0		

# Invikta

#### Compact water-treatment dosing pump

Invikta is among the most compact, easy-to-use and reliable solenoid-driven dosing pumps on the market today. Controlled via microprocessor, Invikta represents the most effective solution for many simple water-treatment applications.



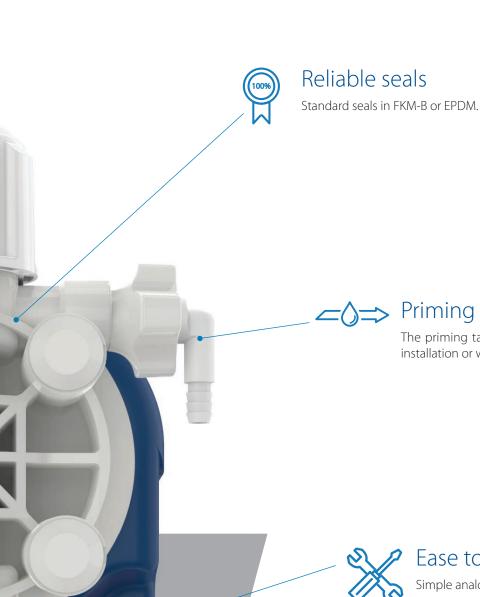
#### Quality construction

The PVDF-T pump body has the same chemical compatibility of PVDF but at an affordable price.









### Priming tap

The priming tap helps to prime the pump at the first installation or when the chemical runs out.



#### Ease to set

Simple analogic interface: potentiometer and LED.

# **Applications**

- Automotive water treatment
- Industrial water treatment
- Potable water treatment
- Swimming pool water treatment
- Wastewater treatment

# Invikta

#### The market's most user-friendly solenoid-driven dosing pumps

Controlled via microprocessor, Invikta represents the most effective solution for many simple water-treatment applications. Due to its small size, Invikta is often used as an OEM pump, integrated in more complex equipment as well as being well suited to some swimming pools and spa applications, car-washes, cooling water treatment, small reverse osmosis systems and many other situations.

- Flow rate range: 0.2 5 l/h, up to 7 bar
- Wetted parts: PVDF-T, PTFE, EPDM, FKM-B and ceramic



The premium components chosen for the Invikta series ensure full chemical compatibility across multiple applications and guarantee long product lifespan. Invikta's PVDF-T pump body, ceramic balls and PTFE diaphragm (guaranteed for five years) reflect SEKO's commitment to product quality, whether affordable or high-end.

Invikta's compact dimensions and a truly minimal electronic control board allow SEKO to offer a cost-effective product that represents the right solution where simple functionality is a priority.

As with all other SEKO solenoid-driven pumps, Invikta is housed within a polypropylene casing and delivers IP65 protection. This provides excellent dust and water resistance, meaning Invikta can be used safely in a multitude of environments.



#### **Features**

Pump body and fittings in PVDF-T

PTFE diaphragm, guaranteed for 5 years

Simple analogic interface: potentiometer and LED

KCS: Constant, without level, with adjustable flow rate

Standard seals in FKM-B or EPDM

Bracket for wall mounting

Bleed tap facilitates priming

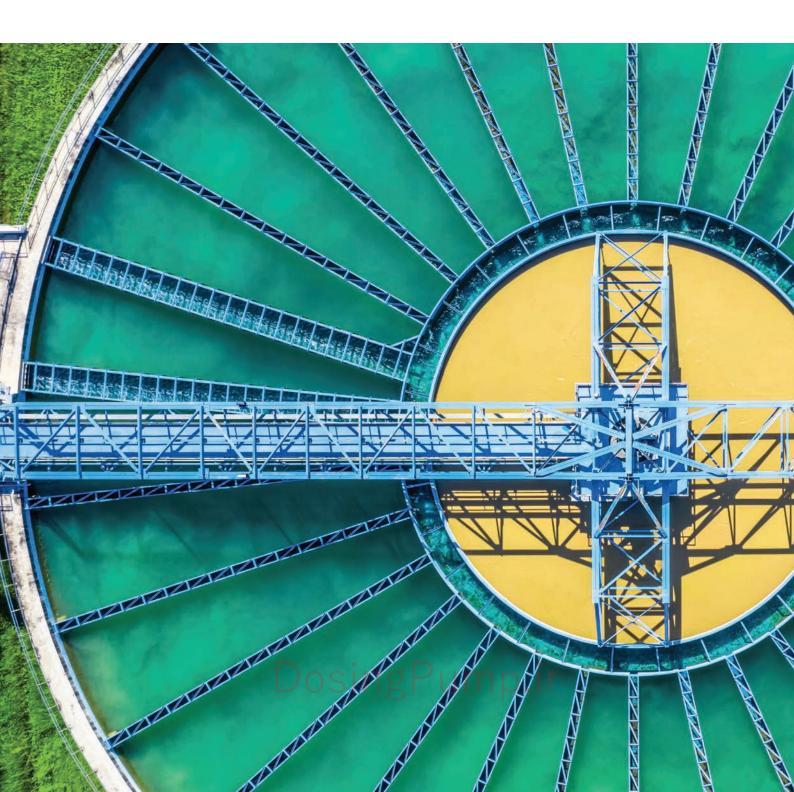
KCS Low-Noise model available for spa applications

# DosingPump.ir

# Invikta key code

KCS	Constant flow	rate, without level ir	nput. Flow rate adj	ustable via analogi	c interface (potenti	ometer).				
	Hydraulics	Pressure [bar]	Flow rate [I/h]	Capacity [cc/stroke]	Ø Hydr Connections IN / EXT. [mm]	Frequency [stroke/min]	Consumption [W]	Weight [kg]	Carton size LxWxH [mm]	
	620	1	0.2	0.17	4/6	20	15	2.5	190 x 130 x 170	Low-noise vers
	630	7	0.6	0.10	4/6	100	15	2.5	190 x 130 x 170	Low-flow vers
	632	7	2	0.33	4/6	100	15	2.5	190 x 130 x 170	
	633	5	5	0.52	4/6	160	15	2.5	190 x 130 x 170	
		Power supply								
		Α	230 Vac 50 Hz							
	N 100 - 240 Vac 50/60 Hz			)/60 Hz	Wide range – Lo	w-noise version or	nly			
		0	24Vac 50/60 Hz							
			Liquid end			Body	Balls	Diaphragm	O-ring	
			VF			PVDF-T	Ceramic	PTFE	FKM-B	
			VE			PVDF-T	Ceramic	PTFE	EPDM	
				Installation kit						
				K	Standard					
				D	Detergent					
				R	Rinse					
				S	Low-noise type -	only injection val	ve			
					Optional					
					00	Standard				
KCS	630	N	VF	К	00					

# Motor-Driven Dosing Pumps



# Product Overview

		Kosmo MM2	Kosmo MM1	Spring with Elektra	Spring PS2	Spring PS1	Spring MS1	Spring MSV
			G		2.0		TO	
Performance	Flow rate range [l/h]	80 - 2,300	9 - 530	1.5 - 1,000	2.5 - 1,000	1.5 - 304	5.5 - 1,200	10 - 120
Periormance	Pressure [up to - bar]	10	12	20	100	20	16	5
	On the base	•	•	•		•	•	
Installation Mode	Bracket for base			•		•	•	
Mode	Bracket for tank				•	•	•	
	3 phase	•	•	•	•	•	•	•
Motor	1 phase					•	•	•
	Servoventilated	•	•		•	•	•	
Stroke Length	Manual	•	•			•	•	•
Regulation	Electric actuator					•	•	
	PVC			•	•	•	•	
Pump Head	PP						•	
(FPM and EPDM seals)	PVDF	•	•				•	•
	SS316L	•	•	•	•	•	•	•
Special Pump Head	SS316L NBR + PTFE piston seals				•			
Proportional Dosing	External signal			•				
Communication	Wi-Fi			•				
Communication	Modbus							

# Among SEKO's pumps, Kosmo offers the highest flow rates

A range of electric motor-driven pumps with mechanical diaphragm liquid ends and mechanical return aimed at delivering exceptional performance across a wide range of flow and pressure environments.



Ideal when you need high flow rates at medium/low discharge pressures

The Kosmo range comprises two principal models, MM1 and MM2, and is designed to be compact and robust. Kosmo offers great performance across a wide range of flow rates as low as 3.5 l/h up to 2300 l/h. This makes Kosmo ideal for low discharge pressures in applications such as water treatment, food production and clean-in-place.







Ideal for prolonged, continuous usage

As with all SEKO pumps Kosmo is designed using materials chosen for their robustness and chemical compatibility and is conceived to work for long periods of continuous operation thanks to the benefits derived from its variable eccentric system. SEKO's Kosmo PTFE diaphragm is directly linked to the mechanism's moving parts meaning Kosmo can easily deal with high suction head conditions.

All components feature permanent lubrication, using ball bearings for the principal moving parts to help prevent overheating and extend the pump's life, with the added benefit of quiet running.



### A wide range of applications

Suitable for a wide range of applications including a variety of water-treatment processes, Kosmo can be effectively used in any of the following:

- Potable water treatment (injection of coagulants, flocculating agents, sodium hypochlorite, lime slurry, acid, bases, caustic soda, activated carbon and more)
- Domestic or industrial wastewater treatment, boiler feed water and cooling water
- Chemical treatment, electrolytic (electro-plating) treatments: addition of degreasing agents, cleaning agents, nickel electroplating and chemical nickel plating, copper plating and tinning





# Kosmo MM2

#### Mechanical-return diaphragm dosing pump

- Flow rate range: 80 2,300 l/h, up to 10 bar
- Wetted parts: SS316L, PVDF, PTFE, FPM, EPDM and ceramic





Kosmo MM2 series pumps provide superior dosing performance for the most demanding applications. Constructed in hard-wearing metal with a cast-aluminium housing, Kosmo MM2 can handle the largest output with flow rates as high as 2,300 l/h, at pressures up to 10 bar.

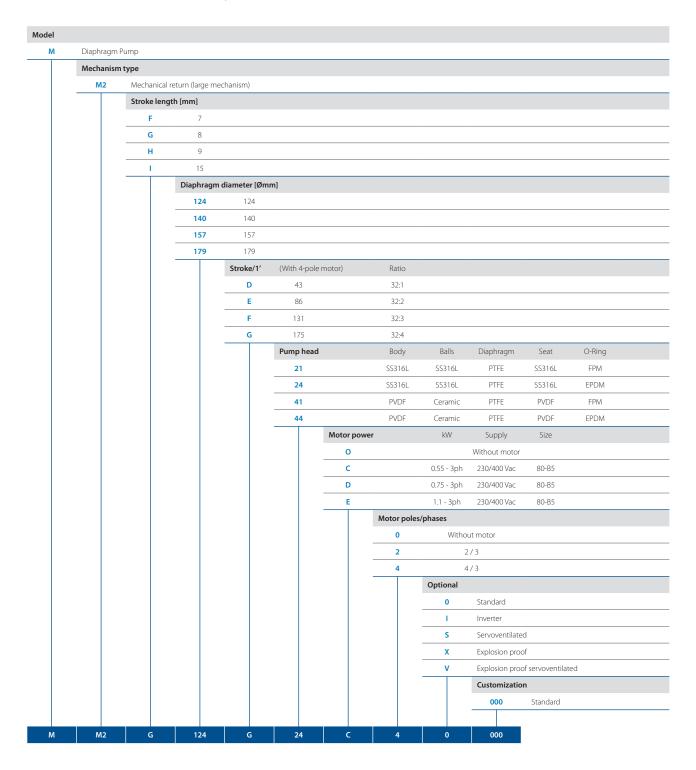
As with all SEKO pumps Kosmo is designed using materials chosen for their robustness and chemical compatibility and is conceived to work for long periods of continuous operation thanks to the benefits derived from its variable eccentric system. SEKO's Kosmo PTFE diaphragm is directly linked to the mechanism's moving parts, meaning Kosmo makes use of the motor's power both in the suction and delivery phases which allows it to deal with high suction head conditions.

All components feature permanent lubrication, using ball bearings for the principal moving parts to help prevent overheating and extend pump life with the added benefit of quiet-running operation.

### Specification

	Diameter	Stroke length	Frequency	Flow rate	Max pressure	Conne	ctions	Motor/3ph	Weight	Size
Model	[mm]	[mm]	[stroke/1']	[l/h]	[bar]	SS316L	PVDF	[kW/pole]	[kg]	LxWxH [mm]
MM2F124D**C40000		7	43	80						
MM2F124F**C40000	124	/	131	250	10	BSPf 3/4"	BSPf 3/4"		56	
MM2G124G**C40000		- 8		450				0.55 / 4		
MM2G140G**C40000	140	0	175	600	00-	DCDC 1	00061"	r	60	700 x 500 x 750
MM2H157G**C40000	157	9		1,000	1181	BSPf 1"	BSPf 1"	I	60	
MM2I179F**D40000	179	15	131	1,600	4	BSPf 1"1/2	BSPf 1"1/2	0.75 / 4	. 60	
MM2I179G**E40000	1/9	15	175	2,300		DOTE I 72	DOP1 I 72	1.1 / 4	68	

## Kosmo MM2 key code



# DosingPump.ir

# Kosmo MM1

#### Mechanical-return diaphragm dosing pump

- Flow rate range: 9 530 l/h, up to 12 bar
- Wetted parts: SS316L, PVDF, PTFE, FPM, EPDM and ceramic





Featuring characteristics and functions very similar to those of the MM2 models, the MM1 systems of the Kosmo range have smaller dimensions and can be used effectively where the required flow rates are lower, but it is necessary to work at slightly higher pressures. In fact, these pumps can handle flow rates of up to 530 l/h and can work at pressures up to 12 bar.

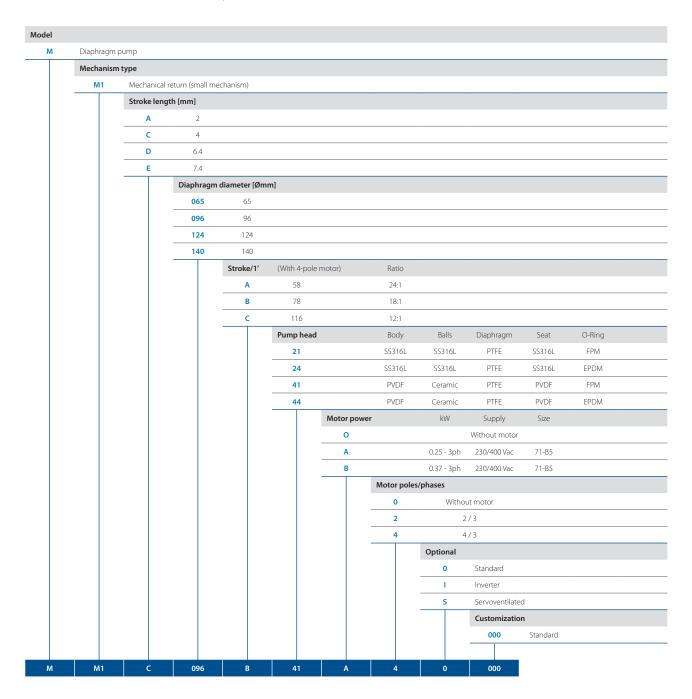
These models are manufactured from materials that deliver superior robustness and chemical compatibility and are designed to operate continuously for long periods, thanks in part to the benefits of the variable eccentric system. The PTFE diaphragm is directly connected to the mechanism and this allows the pump to exploit the power of the motor both in suction and delivery phases, allowing it to work even in high suction head conditions.

All components benefit from permanent lubrication, using ball bearings for the principal moving parts that help prevent overheating and extend pump life with the added benefit of quiet running.

#### Specification

Model	<b>Diameter</b> [mm]	Stroke length [mm]	Frequency [stroke/1']	Flow rate [l/h]	Max pressure [bar]	Conne SS316L	ections PVDF	Motor/3ph [kW/pole]	<b>Weight</b> [kg]	Carton size LxWxH [mm]
MM1065A**A40000	65	2	116	9	12	BSPf 1/4"	8x12 PE hose	0.25 / 4	16	
MM1C096B**A40000	96	4	70	53	10 -	BSPf 3/8"	DN 10	0.25 / 4	16	
MM1D124B**B40000	124	6.4	78	170		BSPf 3/4"	DN 20			450 x 300 x 550
MM1D124B**B20000	124	0.4	156	340	E.	D3F1 3/4	DIN 20	0.37 / 4	20	
MM1E140B**B20000	140	7.4	130	530	- 5	BSPf 1."	DN 25			

#### Kosmo MM1 key code



# Spring Pumps: Motor-driven dosing pumps need to be robust, reliable and able to run without supervision

Featuring a spring return mechanism in an aluminium housing, these pumps always deliver robust, affordable and efficient power.

They offer flexibility in stroke length and motor speed which are separately controllable. Available both in plunger piston and in mechanically actuated diaphragm versions, SEKO's Spring pumps can be used almost universally in low-pressure applications with the additional benefit of being a zero-leakage solution (membrane version).





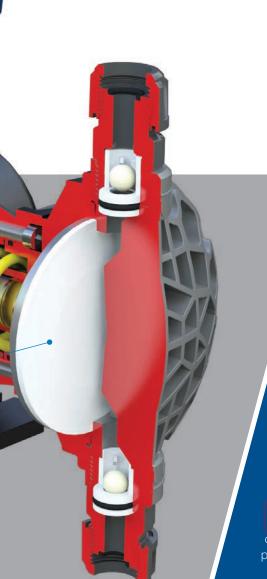


SEKO's entry-level offering in motor-driven pumps is the Spring series, a range of pumps based on the spring return principle. Three sizes of mechanism and a wide selection of models with varying performance profiles allow the user to find the appropriate solution for almost any application, offering accurate dosing under varying pressure conditions.



#### Optional extras

All models are also available in the Elektra version which integrates an inverter, with 4-20mA and pulse inputs, and menus and functions typical of proportional dosing pumps





#### A wide range of applications

Suitable for a wide range of applications including various water-treatment processes, Spring can be effectively used in any of the following applications:

**Potable water treatment** (injection of coagulants, flocculating agents, sodium hypochlorite, lime slurry, acid, bases, caustic soda and activated carbon)

Domestic or industrial wastewater treatment, boiler feed water and cooling water

**Chemical treatment, electrolytic (electro-plating)** treatments: addition of degreasing agents, cleaning agents, nickel electroplating and chemical nickel plating, copper plating and tinning

# Spring PS2

#### Spring-return plunger piston dosing pump

- Flow rate range: 40 1,000 l/h, up to 20 bar
- Wetted parts: SS316L, PVC, PTFE, FPM, EPDM and ceramic

The PS2 series of piston dosing pumps offers multiple combinations of pump head, motor power and stroke lengths that enable it to be arranged in several hydraulic configurations, making the range suitable for multiple applications.

PS2 pumps have a spring-return mechanism in a robust aluminium housing, and each model can be configured with two different stroke rates. To adjust the flow rate of the pump, the stroke length can be adjusted manually or even automatically, by using the AKTUA Kit controlled by a 4-20mA signal or by a pulse-emitting water meter.

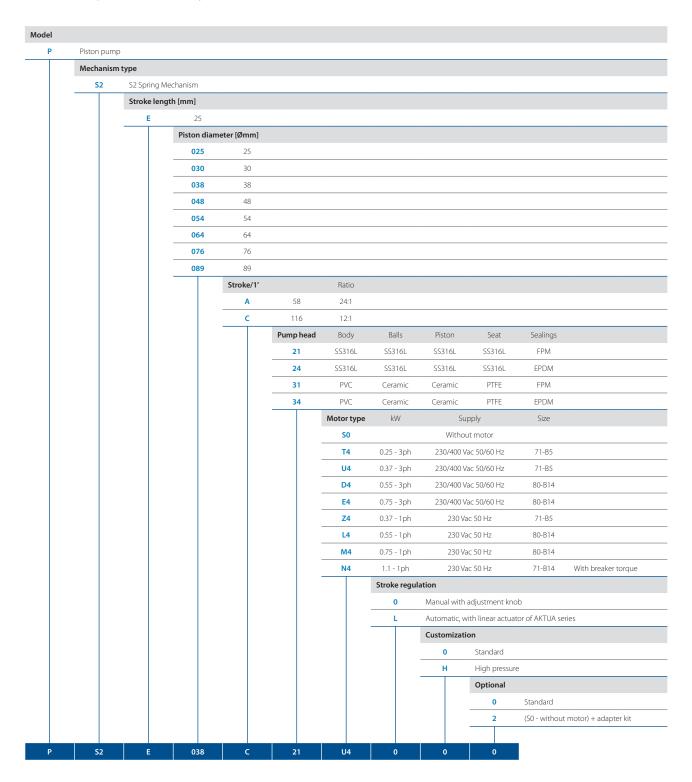
PS2 pumps are available with a 3-phase or a single-phase electric motor, both with IP55 protection.



#### Specification

	Diameter	Stroke length	Frequency	Flow rate	Max pres	sure [bar]	Conne	ections	Motor	Weigh	it [kg]	Carton size
Model	[mm]	[mm]	[stroke/1']	[l/h]	SS316L	PVC	SS316L	PVC	[kW/pole]	SS316L	PVC	[mm]
PS2E025A**T4000	- 25		58	40	20	10	BSPf 3/8"	BSPf 3/8"	0.25/4 (T4)	15.5	14.5	
PS2E025C**T4000	23		116	80	20	10	D3F1 3/0	D3PI 3/0	0.23/4 (14)	15.5	14.3	
PS2E030A**T4000	30		58	55	- 20	10	BSPf 3/8"	BSPf 3/8"	0.25/4 (T4)	15.5	14.5	
PS2E030C**T4000	30		116	112	20	10	D3F1 3/0	D3F1 3/6	0.23/4 (14)	15.5	14.5	
PS2E038A**U4000	- 38		58	90	20	10	BSPf 1/2"	BSPf 1/2"	0.37/4 (U4)	18.5	15.5	
PS2E038C**U4000	30		116	180	20	10	D3F1 1/2	D3P1 1/2	0.37/4 (04)	10.5	15.5	520 x 350
PS2E048A**D4000	40		58	140	20	10	BSPf 1/2"	BSPf 1/2"	0.55/4 (D4)	18.5	15.5	x 590
PS2E048C**D4000	40	48 25	116	284	20	10	D3F1 1/2	D3P1 1/2	0.55/4 (D4)	10.5	15.5	
PS2E054A**D4000	- 54	23	58	40	15	10	BSPf 1/2"	BSPf 1/2"	0.55/4 (D4)	20.5	16.0	
PS2E054C**D4000	24		116	80	15	10	DJF1 1/2	D3F1 1/2	0.55/4 (D4)	20.5	10.0	
PS2E064A**E4000	64		58	250	10	10	BSPf 3/4"	BSPf 3/4"	0.75/4 (E4)	21.5	16/5	
PS2E064C**E4000	04		116	505	10	10	D3F1 3/4	D3P1 3/4	U.75/4 (E4)	21.3	10/3	
PS2E076A**E4000	76		58	365	SIL	ngh	DCDf 1"	DCDf 1"	0.75 (4.(54)	28.5	18.5	
PS2E076C**E4000	/0		116	730	0/11	181	BSPf 1"	BSPf 1"	0.75/4 (E4)	26.5	16.5	650 x 300
PS2E089A**E4000	- 89		58	495	-	5	BSPf 1"	BSPf 1"	0.75 (4./54)	20.5	19.0	x 560
PS2E089C**E4000	89		116	1,000	5	5	BONT I.	BOLL I.	0.75/4 (E4)	30.5	19.0	

#### Spring PS2 key code



# DosingPump.ir

# Spring PS1

#### Spring-return plunger piston dosing pump

- Flow rate range: 1.5 304 l/h, up to 20 bar
- Wetted parts: SS316L, PVC, PTFE, FPM, EPDM and Ceramic

The PS1 series is designed for applications that require lower flow rates than the PS2 series while offering multiple combinations of pump head, motor power and piston stroke length. This achieves multiple hydraulic characteristics for adapting to a large number of applications.

Like PS2, each model can be configured with two different stroke rates and is available with 3-phase or single-phase motors, both with IP55 protection.

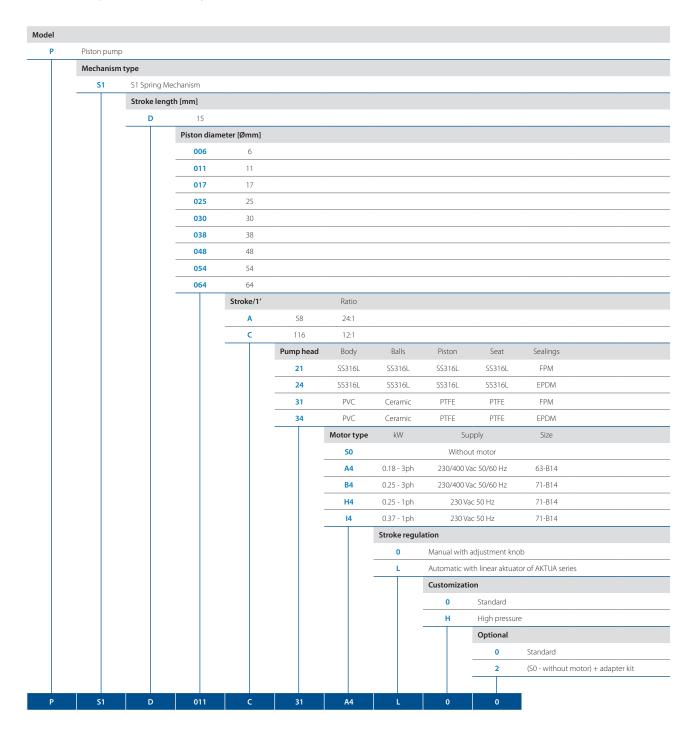
Versions with a 12 Vdc motor are available that achieve flow rates between 34 and 350 l/h at pressure up to 20 bar.



#### Specification

	<b>5</b> : .	Stroke	_	El .	Max pres	sure [bar]	Conne	ections		Weigh	t [kg]	Carton size
Model	<b>Diameter</b> [mm]	length [mm]	Frequency [stroke/1']	Flow rate [l/h]	SS316L	PVC	SS316L	PVC	<b>Motor</b> [kW/pole]	SS316L	PVC	[mm]
PS1D006A**A4000	- 6		58	1.5	- 20	10	BSPf 1/4"	BSPf 1/4"	0.18/4 (A4)	10.0	8.5	
PS1D006C**A4000	0		116	3	20	10	B3PI 1/4	B3PI 1/4	U.18/4 (A4)	10.0	6.5	
PS1D011A**A4000	- 11		58	5	- 20	10	BSPf 1/4"	BSPf 1/4"	0.18/4 (A4)	10.0	8.5	
PS1D011C**A4000	11		116	10	20	10	D3F1 1/4	D3F1 1/4	U.16/4 (A4)	10.0	0.0	
PS1D017A**A4000	- 17		58	11	- 20	10	BSPf 3/8"	BSPf 3/8"	0.18/4 (A4)	10.0	8.5	435 x 295
PS1D017C**A4000	17		116	22	20	10	03113/0	D3F1 3/6	0.16/4 (A4)	10.0	6.5	x 520
PS1D025A**A4000	- 25		58	25	- 20	10	BSPf 3/8"	BSPf 3/8"	0.18/4 (A4)	10.0	8.5	
PS1D025C**A4000	25		116 50	50	20	10	D3F1 3/0	D3F1 3/0	U.16/4 (A4)	10.0	0.3	
PS1D030A**B4000	- 30	25	58	35	- 20	10	BSPf 3/8"	BSPf 3/8"	0.25/4 (B4)	11.5	10.0	
PS1D030C**B4000	30	25	116	70	20	10	03F1 3/6	D3F1 3/6	0.23/4 (04)	C.11	10.0	
PS1D038A**B4000	- 38		58	55	17	10	BSPf 3/8"	BSPf 3/8"	0.25/4 (B4)	13.0	10.0	
PS1D038C**B4000	30		116	110	17	10	03113/0	03113/0	0.23/ 4 (04)	15.0	10.0	_
PS1D048A**B4000	- 48		58	85	- 10	10	BSPf 1/2"	BSPf 1/2"	0.25/4 (B4)	13.0	10.0	
PS1D048C**B4000	40		116	170	10	10	D3F1 1/2	D3F1 1/2	0.23/4 (04)	13.0	10.0	520 x 350
PS1D054A**B4000	- 54		58	110	SIL	) g F	BSPf 1/2"	BSPf 1/2"	_0.25/4 (B4)	15.0	10.5	x 590
PS1D054C**B4000	54		116	220		181	DDF1 1/2	D3F1 1/2	0.23/4 (04)	0.61	10.5	
PS1D064A**B4000	- 64		58	152	- 6	4	BSPf 3/4"	BSPf 3/4"	0.25/4 (B4)	16.0	15	
PS1D064C**B4000	04		116	304	O	4	03113/4	03113/4	U.Z3/4 (D4)	10.0	13	

#### Spring PS1 key code



## DosingPump.ir

# Spring MS1

#### Spring-return mechanical diaphragm dosing pump

- Flow rate range: 5.5 500 l/h, up to 16 bar
- Wetted parts: SS316L, PVC, PP, PVDF, PTFE, FPM, EPDM and ceramic

The MS1 series offers multiple combinations of pump head motors, stroke lengths and materials that allows operators the chance to select the optimal combination appropriate to the specific application in hand.

Being membrane pumps, they represent an absolutely safe and leak-free solution to be used wherever chemical leaks, that are typical of plunger piston pumps, are not acceptable.

To change the flow rate of the pump, the stroke length can be adjusted manually with a knob or even automatically by using the AKTUA kit controlled by a 4-20mA signal or by a pulse emitter water meter.

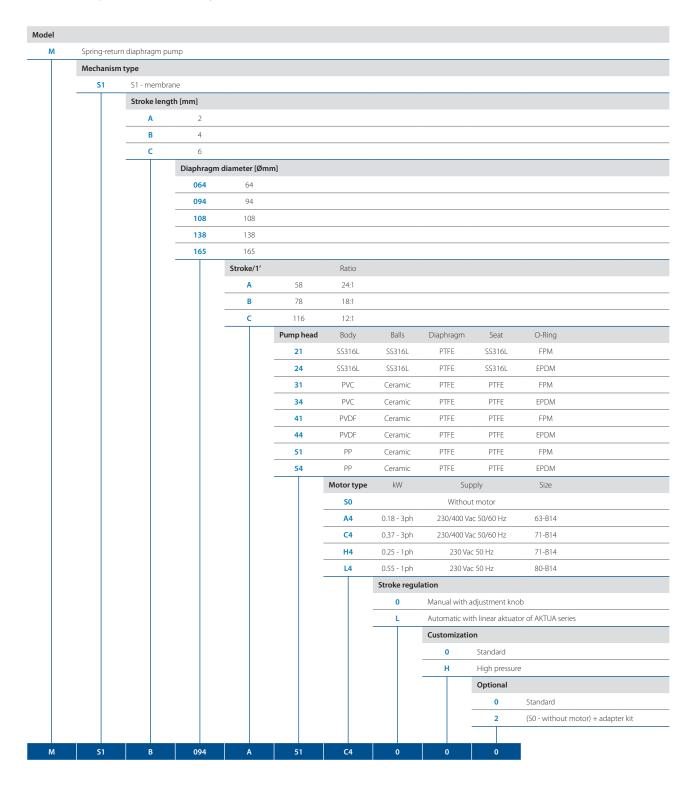
Spring MS1 pumps can be supplied with a single or three-phase electric motor with IP55 protection, as well as with a DC motor working at 12 Vdc range that allows the pump to achieve flow rates between 23 and 620 l/h at pressure up to 16 bar.



#### Specification

-													
	Diameter	Stroke length	Frequency	Flow rate	Max	c pressure [	bar]	Conne	ections	Motor	Weigh	nt [kg]	Carton size
Model	[mm]	[mm]	[stroke/1']	[l/h]	SS316L	PP/PVC	PVDF	SS316L	Other	[kW/pole]	SS316L	Other	[mm]
MS1A064A**A4000			58	5.5									
MS1A064B**A4000	64		78	8	16	16	16	BSPf 1/4"	BSPf 1/4"	0.18/4 (A4)	10.5	8.5	
MS1A064C**A4000		2	116	11									
MS1A094A**A4000		2	58	20									
MS1A094B**A4000	94		78	26	16	16	16	BSPf 3/8"	BSPf 1/4"	0.18/4 (A4)	11.0	8.5	
MS1A094C**A4000			116	40									
MS1B108A**A4000	_		58	60									
MS1B108B**A4000	108	4	78	80	10	10	10	BSPf 3/8"	BSPf 3/8"	0.18/4 (A4)	13.5	10.0	520 x 350 x 590
MS1B108C**A4000			116	120									
MS1C138A**C4000	_		58	155				BSPf 3/4"	BSPf 3/4"				
MS1C138B**C4000	138		78	220	7	7	7	D3F1 3/4	D3F1 3/4	0.37/4 (C4)	18.5	12.5	
MS1C138C**C4000	6	116	310	121	n	J P	BSPf 1"	BSPf 1"					
MS1C165A**C4000	_	0	58	230	5	5	5	G I					
MS1C165B**C4000	165		78	330	,	,		BSPf 1"	BSPf 1"	0.37/4 (C4)	22.0	13.5	
MS1C165C**C4000			116	500	3	3	3						

#### Spring MS1 key code



# DosingPump.ir

# Spring MSV

#### Spring-return diaphragm dosing pump

- Flow rate range: 10 120 l/h, up to 5 bar
- Wetted parts: SS316L, PVDF, PTFE, FPM, EPDM and ceramic

MSV pumps are the latest addition to the Spring range. These diaphragm dosing pumps are designed to ensure reliable and effective long-term dosing of chemicals at an affordable cost. They feature motorized mechanisms with high-performance, high-efficiency motors, mounted vertically over their PP casing to save space, especially where pumps are installed adjacent to one another.

Thanks to its double-camshaft mechanical structure, the pump offers high levels of stability while maintaining quiet operation and exceptionally accurate flow rates.

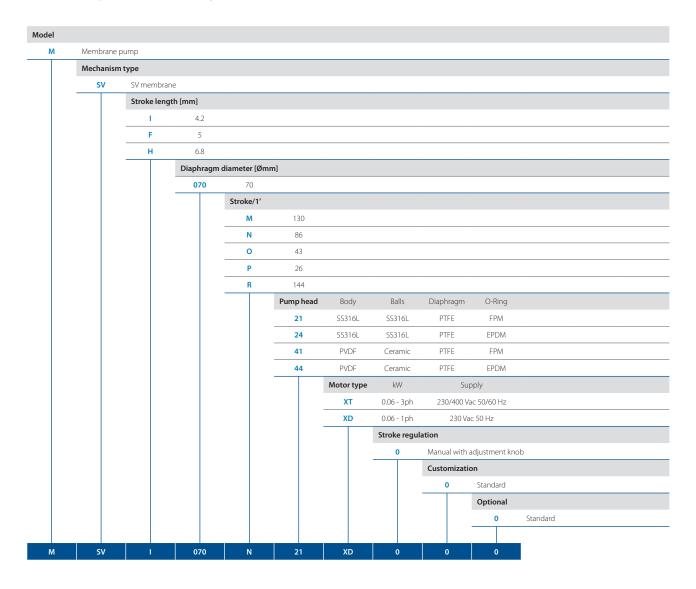
Adaptable to a wide range of uses, Spring MSV stands as an excellent compromise between cost and a high dosing accuracy across a wide variety of liquids, sludge and chemicals.



#### Specification

		Stroke	_	-1	Max pres	sure [bar]	Conr	nections			
Model	<b>Diameter</b> [mm]	<b>length</b> [mm]	Frequency [stroke/1]	Flow rate [l/h]	SS316L	PVDF	SS316L	PVDF	<b>Motor</b> [kW/pole]	<b>Weight</b> [kg]	Carton size LxWxH [mm]
MSVI070P**XD000			26	10							
MSVI0700**XD000		4.2	43	20							
MSVI070N**XD000	70	4.2	86	40	5	5 -5	BSPf 3/8"	) out	0.06/4 (XD)	9.5	370 x 280
MSVI070M**XD000	70		130	60	91118	5' '	BSPI 3/8	8x12	0.06/4 (XD)	9.5	x 470
MSVF070R**XD000		5	144	90							
MSVH070R**XD000		6.8	144	120	3	3					

#### Spring MSV key code



# Spring with Elektra

Spring pumps with electronic control for proportional dosing

# SEKO brings connectivity to mechanical dosing

SEKO's latest product development extends the modern benefits of proportional dosing and remote connectivity to the world of mechanical dosing pumps

Elektra builds on the SEKO Spring range of motor-driven pumps which have long been recognized for their affordability, low total cost of operation and ease of maintenance.

To these well-known features, Elektra adds all the advantages offered by the possibility of linking the pump dosage to parameters detected in the field, such as a flow rate or a chemical measurement converted into a 4-20 mA signal. In addition, Elektra allows the user to remotely monitor, manage and programme their pump via the internet from any location for a new standard in operational efficiency.



#### Key Features

#### Digital control

Multiple operating modes - timed, batch, manual, proportional from analogue or digital signals: 1:N, N:1

Intelligent graphic display – shows red, yellow or green backlight, according to the current operating function

Electronic control unit interface can be fixed in multiple positions to facilitate operation/installation

#### IoT connection

Local or remote programming and monitoring of the pump via any internetconnected device including smartphone, tablet or PC

Wireless local connection to the pump is possible even if there is no Wi-Fi at the installation site

Data on demand grants secure remote data management and programming of the pump via the SekoWeb portal or app, from any location worldwide



# Spring with Elektra

Motor-driven pumps with spring return, electronic control and IoT

seko

0

Elektra

0

Batch: 42.2L

Time: 00:05:59



#### Smart graphic display -

Offers not only a graphic intuitive interface, but also changes colour according to operating function.



Red - shows alarm mode



**Yellow** - shows the control unit is connecting to a smart device



**Green** - shows after the successful completion of a calibration process



#### Simple fast programming

Elektra's controller allows quick and easy programming from any smart device or laptop, both remotely as well as from the display.



# Manual adjustment of stroke length

Provides the ultimate in accuracy when combined with the digital dosing of Elektra's controller.



#### External connectors

Elektra's external connectors allow the pump to be connected to its accessories and signals from the field without opening its case. The screw terminals available in the plugs supplied allow technicians to cut the connection cables to the right length, directly in the field, and to make clean installations without the need for special tools.

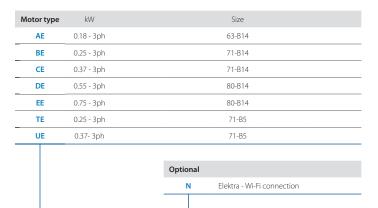
#### Spring with Elektra technical features

Like all Spring pumps, those equipped with Elektra are based on a spring-return mechanism housed in a sturdy aluminium case, and always provide robust, and effective power. Elektra enhances these benefits by allowing users to link the dosage to signals from the field, and to monitor and to programme the pump both locally and via the internet through any smart device or PC.

#### Hydraulic characteristics

Model	Flow rate [l/h]	Max pressure [bar]	Frequency [stroke/1']	Stroke length [mm]	Diaphragm diameter [mm]	Ingress protection rating
MS1A/B/C Diaphragm pump	up to 500	up to 16	1 - 116	2 - 4 - 6	up to 165	IP55
PS1 D Piston pump	up to 304	up to 20	1 - 116	15	up to 64	IP55
PS2 E Piston pump	up to 1,000	up to 20	1 - 116	25	up to 89	IP55

# Spring with Elektra key code





# Spring with Elektra

#### Motor-driven pumps with spring return, electronic control and IoT

#### Data on Demand

In a world that is increasingly connected, Elektra brings the benefits of data on demand, essential to running an efficient operation across potentially complex installations. Designed to manage operating costs of plants and installations that are continuously under financial pressure, Elektra helps improve cost management and provides peace of mind driven by the knowledge of consistently-precise dosing and control.

#### Direct connection

Even if there is no Wi-Fi network at the installation site, the technician present can connect directly with their smartphone, tablet or PC to Elektra's built-in Wi-Fi hub in order to programme the pump and check its status.

#### Remote connection, via the internet

Where there is a Wi-Fi network, Elektra can use the same communication module integrated in its controller to connect to the internet and exchange data with the cloud, thus allowing the pump to be managed remotely from anywhere in the world, through the portal or the SekoWeb app. Qualified technicians will therefore be able to quickly obtain historical and realtime data on the operation of the pump and be notified in the event of alarms or warnings generated by the system. This allows scheduled maintenance to be planned and reported anomalies to be actioned immediately by reprogramming from remote the dosing parameters of the pump.



#### Modbus RTU over RS485 serial port

Modbus standard protocol means cross-device connection and communication, allowing the user to create a wired network of standard Modbus devices. Elektra can become part of bigger plant, made of several industrial devices, all controlled by a local controller such as a PC or PLC.



## Wi-Fi for a direct connection and for connecting to the internet

Elektra's integrated Wi-Fi interface allows both local direct connection to the pump from any smart device, and the connection of the pump to a Wi-Fi network, so making the pump able to exchange data on the cloud and to be monitored and programmed remotely via the internet, through the SekoWeb portal or app.



#### Elektra web interface

Whether you are operating locally or remotely, the Elektra web interface provides the operator with:

**Instant values:** displays overview of the real-time status of the system including pump operating mode, pump status and alarm status.

Graphs and levels: displays the time graphs of the several pump parameters chosen for monitoring by the user.

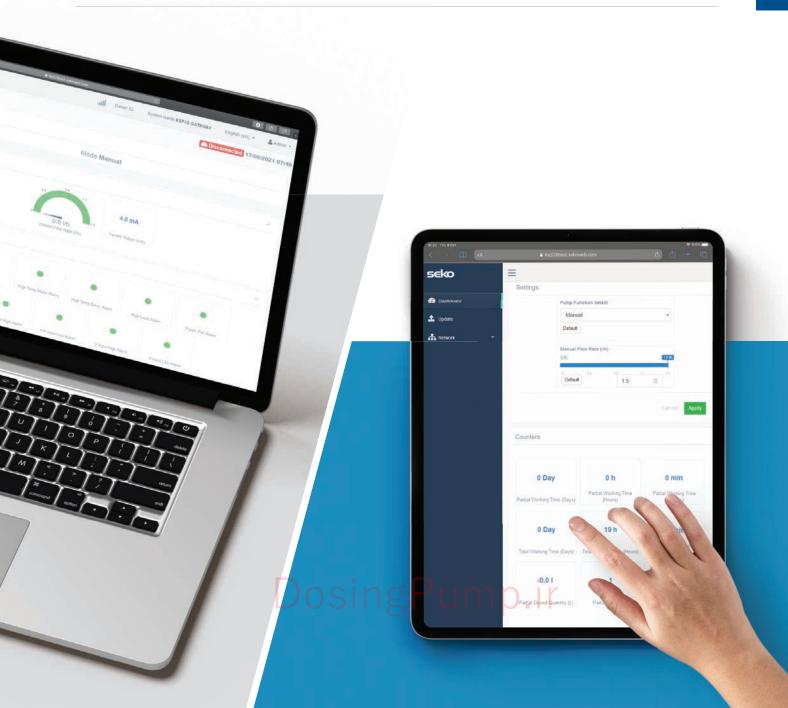
**Alarms:** displays the active alarms. If the pump has been registered in the portal and is being accessed through SekoWeb, it is possible to view the log of all the received alarms with date, time and type.

**General settings:** a section where the user can set the operating mode of the pump and adjust dosing parameters.

Statistics/counters: provides an overview of the statistics of the system under control.

**Advanced settings:** available only to users with appropriate permissions, this allows them to set other advanced device parameters and to stop, start and pause the pump remotely.

When accessing the local pages of the internal webserver, further sections are available for updating pump firmware and setting network parameters to connect the device to the internet.



# Spring PS2 HP

#### Spring plunger piston-return dosing pump for high pressure

- Flow rate range: 2.5 12 l/h, up to 100 bar
- Wetted parts: SS316L, PTFE, NBR

The PS2 series of high-pressure piston dosing pumps can adapt to a large number of applications. Like other variants in the Spring pump series, PS2-HP has a spring-return mechanism in a sturdy aluminium housing but is equipped with special pump bodies, expressly recommended for high-pressure applications that allow this range to dose with backpressures up to 100 bar.

This model has two stroke rates. Stroke lengths can be set manually with a knob, or automatically, by using the AKTUA Kit, which can adjust the dosage proportionally to a 4-20mA or a pulse signal. To achieve the given performance, these pumps need to be actuated by a powerful 3-phase motor, provided with an IP55 protection classification.

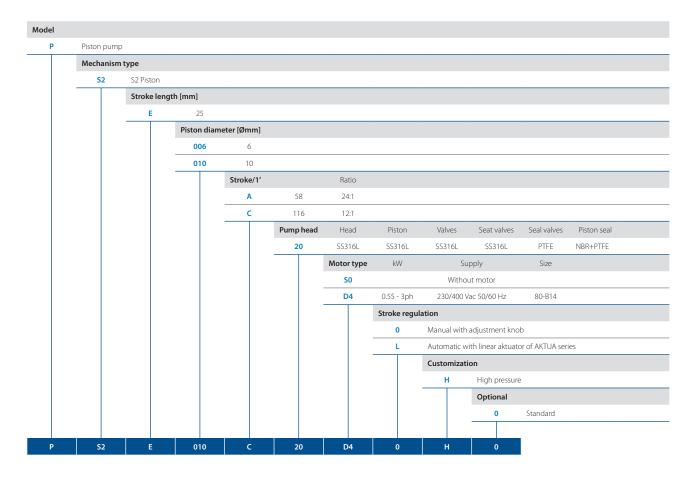
Spring PS2 HP has been designed for use in applications requiring an economic and practical solution for dosing small amounts of product at high pressure, up to 100 bar: in a boiler, for example.



#### Specification

Model	Piston Diameter [mm]	Stroke length [mm]	Frequency [stroke/1']	Flow rate	Max pressure [bar]	Connections	Motor [kW/pole]	<b>Weight</b> [kg]	Carton size LxWxH [mm]
PS3E006A20D4000	6		58	2.5	o Pii	mn	Ir		
PS3E006C20D4000	O	25	116	5 1	100	BSPm 1/4"	0.55/4 (D4)	10	435 x 295 x 520
PS3E010A20D4000	- 10	23	58	6	100	DOFIII 1/4	0.55/4 (D4)	10	433 X 293 X 320
PS3E010C20D4000	10		116	12					

#### Spring PS2 HP key code



# Spring MS1 AVS

#### Spring-return diaphragm pump with Assisted Vacuum System®

- Flow rate range: 450 1,200 l/h, up to 4.5 bar
- Wetted parts: SS316L, PVC, PP, PVDF, PTFE, FPM, EPDM and ceramic

The AVS (Assisted Vacuum System®) helps overcome the typical functional limitations of pumps with a spring return. The increase in performance is made possible thanks to a high number of strokes/min without compromising diaphragm lifespan.

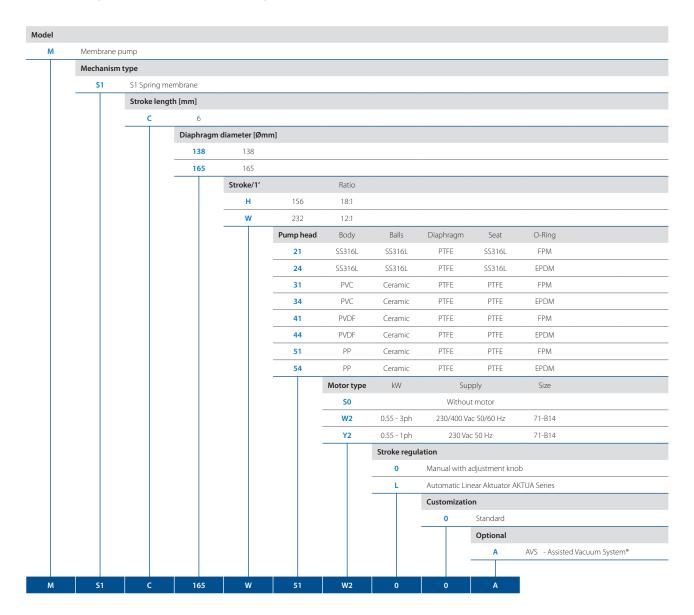
This means that Spring MS1 AVS can reach a flow rate of 1,200 l/h whilst keeping noise and mechanical stress at a reduced level. Each model can be configured with two different stroke rates and can be supplied with a single or three-phase 2-pole electric motor with IP55 protection.



#### Specification

Model	Diameter	Stroke length	Frequency	Flow rate	Max pressure	Connections	Motor	Weig	<b>ht</b> [kg]	Carton size
	[mm]	[mm]	[stroke/1/]	[l/h]	[bar]	'iim	[kW/pole]	SS316L	Other	LxWxH [mm]
MS1C138H**W2000	138		156	450	181	αп		18.5	12.5	
MS1C138Q**W2000	138	6	232	750	4.5	BSPF 1"	0.55/2 (W2)	18.5	12.5	520 x 350 x 590
MS1C165Q**W2000	165		232	1,200	2			22.0	13.5	

#### Spring MS1 AVS key code



# Peristaltic dosing pumps

for water treatment



# Product Overview

		Kronos 65	Kronos 50	Kronos 20
	IP65 enclosure box	•		•
	LCD display	16x2	16x2	8x2
	Motor	Stepper	Stepper	Brushed DC
Features	Tube breakage detection system			
reatures	pH / ORP input			•
	Installation kit, Ceramic foot filter • FPM injection valve • PVC suction tube • PE delivery tube			
	HX: with pH / ORP  • Built-in controller meter			
	FM: proportional:  • Digital frequency signal (pulse)	•		
Model Type	Analogic signal (4-20mA) FF: proportional full: Digital frequency signal (pulse) Analogic signal (4-20mA) Voltage signal (0-10V)		·	
	EC: for cooling towers  Conductivity input for drain control Dosage proportional to water flow Specific Cooling Tower menu			
	Santoprene	•		
	SekoExtra			
Tube	SekoMed			
	SekoFort			
	HP-San			

# Accessories

### Kronos Series

#### Multi-application peristaltic pumps

Kronos is a range of durable and robust peristaltic pumps suited to multiple applications within the cleaning and hygiene and water-treatment industries. Easy to install and requiring minimal maintenance, the whole Kronos range is designed to deliver a "fit and forget" solution that provides convenience and reliability for busy operators.



#### Stepper motor\*

Unprecedented dosing precision down to 0.01% of maximum flow



#### Simplified maintenance

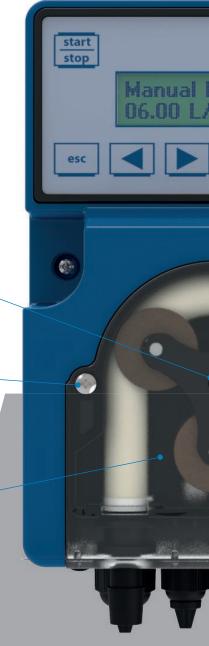
Designed to ensure main connections remain fixed during servicing



#### Advanced motor control

Eliminates vibration and friction for quiet running and extended lifespan







#### Intuitive menu and special functions

Access tube life data to facilitate maintenance planning





#### Three-roller system

Limits tube stretching, while reverse rotation feature empties tubes between doses for reduced degradation



#### Chemical compatibility

Kronos accepts a wide range of peristaltic tubing to ensure exceptional chemical compatibility in every application

\*Available on selected models

#### **Applications**

The versatile Kronos Series is suited to multiple water-treatment applications, including:

- Drinking water
- Irrigation systems
- Cooling towers
- Swimming pools
- Wastewater

## Kronos 65

#### The peristaltic Kronos pump with a higher flow rate

Among the Kronos pumps, Kronos 65 offers the highest flow rate, up to 25 l/h at low pressures.

- Flow rate range: 25 l/h 0.1 bar
- Tube: Santoprene



Kronos 65 is available in the FM model, which features proportional dosage and accepts an analogue 4-20mA signal or a digital frequency signal such as that generated by a pulse-emitting water meter. The pump then doses at a flow rate proportional to this signal, according to the programmed ratio.

Of course, the user can also configure the pump in constant mode and, in this case, the pump will dose at the programmed flow rate in the presence of an external activation trigger.

The pump is equipped with a powerful stepper motor and is provided with a 65mm peristaltic head.

The integrated "Tube Break Alarm" mechanism is able to identify chemical leakage inside the peristaltic head and block dosage.

The durable ABS case with IP65 protection allows the pump to be used even in applications where it may be subject to small water splashes or dust.

#### **Features**

Direct driving stepper motor

Santoprene peristaltic tube

PTFE rollers mounted on ball bearings

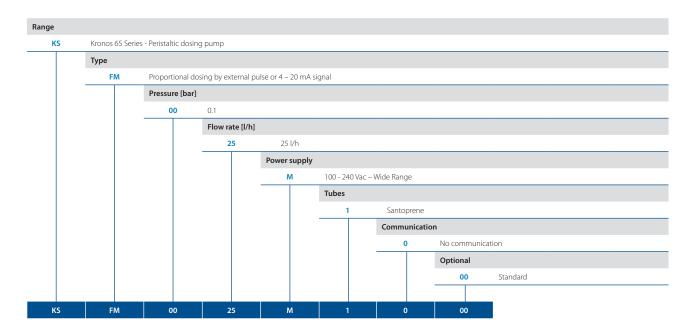
Intuitive digital interface: 7 keys and a 2x16 LCD display

FM: Proportional dosing with 4-20mA/pulse input

Wall-mounting bracket



#### Kronos 65 key code



#### Model Type FM

Proportional dosing: The pump accepts as input an analogic 4-20mA signal, or a digital frequency signal and doses at a flow rate proportional to this signal, according with the programmed ratio. A pulse-emitting water meter can be connected directly to the digital signal input and, in this case, the pump will dose at a flow-rate that will be proportional to the flow-rate of the water in the pipeline.

### Kronos 50

#### Peristaltic dosing pumps for water and industrial applications

As with the other Kronos pumps, Kronos 50 is equipped with a stepper motor that provides infinitely adjustable (0.1-100%) and silent dosing. Its advanced technology and materials mean the various models can reach flow rates of up to 15 l/h (at 0.1 bar) and can dose at back pressures up to 4 bar with a special HP-San tube.

- Flow rate range: 2 15 l/h, up to 4 bar
- Tube: Santoprene SekoExtra SekoMed Sekofort HP-San



The digital programming of parameters via keyboard and display ensures a fast set up and final check on the programming data. The easy and intuitive menu enables a simple setting of the various options without the risk of forgetting anything. The internal menu also allows users to check statistics on the life of the tube and the operating life of the pump.

#### **Features**

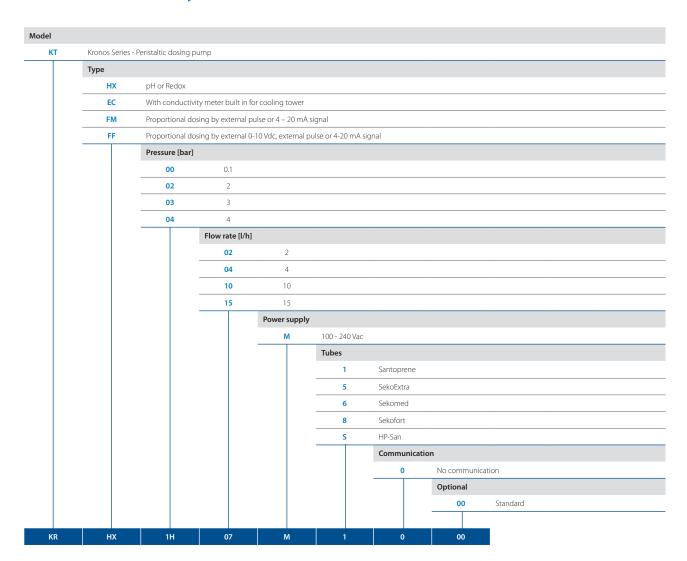
Potable water treatment (injection of coagulants, flocculating agents, sodium hypochlorite, lime slurry, acid, bases, caustic soda and activated carbon)

Domestic or industrial wastewater treatment, boiler feed water and cooling water

Chemical treatment, electrolytic (electro-plating) treatments: addition of degreasing agents, cleaning agents, nickel electroplating and chemical nickel plating, copper plating and tinning



#### Kronos 50 key code



#### Model Type EC

#### with conductivity meter built in for cooling towers

Three basic functions: anti-scaling proportional dosing via external pulse signal; open drain valve for blow down function via conductivity feedback measure; disable drain action after chemical dosing via software setting.

#### Model Type HX

#### with pH/ORP controller meter built in

One basic function: proportional chemical dosing by pH or redox analysis. The pump has galvanized electrical insulation.

#### Model Type FM

Two basic functions: proportional dosing by external pulse or 4 – 20 mA signal. The pump has galvanized electrical insulation. Special version with SekoFort tube for mineral oil and with HP-San tube for high pressure.

#### Model Type FF

Three basic functions: proportional dosing by external 0-10 Vdc, pulse or 4-20 mA signal. The pump has galvanized electrical insulation.

### Kronos 20

#### Peristaltic dosing pumps for water and industrial applications

Kronos 20 is a higher-level professional pump suitable for use in medium-duty applications, operating a single function - proportional chemical dosing. Reading either pH or ORP, the pump features fully galvanized electrical insulation.

- Flow rate range: 7 l/h 1.5 bar
- Tube: Santoprene



#### **Applications**

Kronos Series meets the needs of water and industry applications.

To date, Kronos finds can be found in the following areas:

- Drinking water applications
- Irrigation systems
- Cooling tower applications
- · Swimming pools
- Flocculent dosing systems
- Priming of chemical products that release gas easily

Kronos is easy to install, with a fastener system that facilitates maintenance of the electronic circuitry, reducing cost and complexity by eliminating the need to remove connections that have already been made.

All parts of the mechanism have permanent lubrication, using ball bearings for the principal moving components that helps prevent overheating and extends the pump life with the added benefit of low-decibel operation.

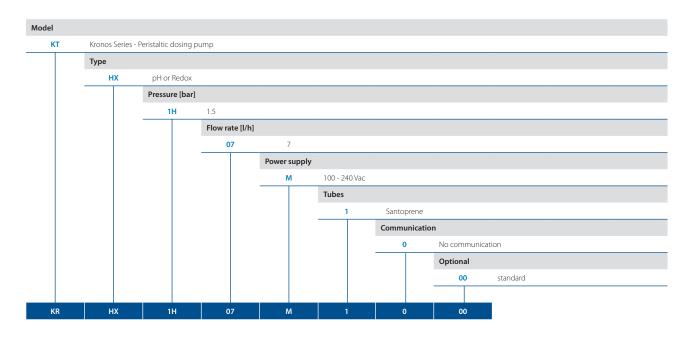
#### **Features**

Potable water treatment (injection of coagulants, flocculating agents, sodium hypochlorite, lime slurry, acid, bases, caustic soda and activated carbon)

Domestic or industrial wastewater treatment, boiler feed water and cooling water

Chemical treatment, electrolytic (electro-plating) treatments: addition of degreasing agents, cleaning agents, nickel electroplating and chemical nickel plating, copper plating and tinning

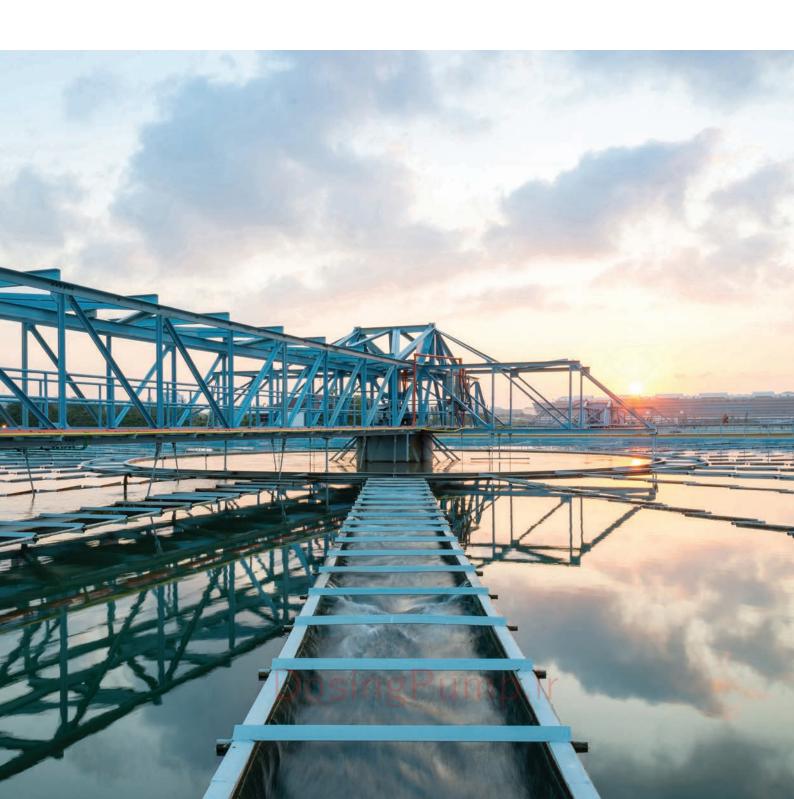
#### Kronos 20 key code



# Model Type HX with pH/ORP controller meter built in

One basic function: proportional chemical dosing by pH or redox analysis. The pump has galvanized electrical insulation.





# Product Overview

	AF0007	AF0018	AF0030	AF0055	AF0060	AF0090	AF0100	AF0120
PP	•	•	•	•	•	•		
PVDF+CF		•	•	•	•	•		
POMc	•	•						
ALU				•	•		•	
SS316		•		•	•			
Fluid connections	1/4″BSP	3/8"BSP	1/2" BSP	1/2" BSP	1/2" BSP	3/4" BSP	3/4" BSP	1"BSP
Air connection	4 mm	6 mm	6 mm	1/4" BSP	1/4" BSP	3/8" BSP	3/8" BSP	3/8″BSP
Max flow rate	7 l/m	20 l/min	35 l/min	55 l/min	65 l/min	100 l/min	120 l/min	120 l/min
Max air pressure	6 bar	7 bar	7 bar	8 bar				
Max delivery head	60 m	70 m	70 m	80 m				
Max suction lift dry	3 m	5 m	5 m	5 m	5 m	5 m	5 m	5 m
Max suction lift wet	9.8 m	9.8 m	9.8 m	9.8 m	9.8 m	9.8 m	9.8 m	9.8 m
Max solid passing	2 mm	2.5 mm	3 mm	3.5 mm	3.5 mm	4 mm	4 mm	4 mm
Noise level	62 dB	65 dB	65 dB	70 dB	72 dB	72 dB	72 dB	72 dB
Max viscosity	5,000 cps	10,000 cps	15,000 cps	20,000 cps	20,000 cps	15,000 cps	25,000 cps	25,000 cps
Displacement per stroke	18 cc	30 cc	65 cc	140 cc	140 cc	200 cc	200 cc	200 сс

	AF0160	AF0170	AF0171	AF0250	AF0252	AF0400	AF0700	AF1000
PP								•
PVDF+CF		•	•		•	•	•	•
POMc								
ALU	•			•			•	•
SS316								•
Fluid connections	1″BSP	1"BSP <b>DN25</b>	1"BSP	1 1/4" BSP	1 1/4″BSP	1 1/2″BSP <b>DN40</b>	2" BSP <b>DN50</b>	2" BSP <b>DN80</b>
Air connection	1/2″BSP	1/2″BSP	1/2″BSP	1/2″BSP	1/2″BSP	1/2"BSP	3/4" BSP	3/4" BSP
Max flow rate	170 l/min	170 l/min	170 l/min	250 l/min	250 l/min	380 l/min	700 l/min	1,050 l/min
Max air pressure	8 bar	8 bar	8 bar	8 bar	8 bar	8 bar	8 bar	8 bar
Max delivery head	80 m	80 m	80 m	80 m	80 m	80 m	80 m	80 m
Max suction lift dry	6 m	5 m	5 m	6 m	5 m	5 m	5 m	5 m
Max suction lift wet	9.8 m	9.8 m	9.8 m	9.8 m	9.8 m	9.8 m	9.8 m	9.8 m
Max solid passing	7.5 mm	7.5 mm	7.5 mm	7.5 mm	7.5 mm	8 mm	8.5 mm	12 mm
Noise level	75 dB	75 dB	75 dB	75 dB	75 dB	78 dB	78 dB	82 dB
Max viscosity	35,000 cps	35,000 cps	35,000 cps	35,000 cps	35,000 cps	40,000 cps	50,000 cps	55,000 cps
Displacement per stroke	700 cc	700 cc	700 cc	700 cc	700 cc	1,200 cc	3,050 cc	9,750 cc

# SEKO's Duotek pumps are renowned for their flexibility in pumping difficult liquids at low pressure and flow.

SEKO's Duotek pumps come in many sizes and material choices. Almost every type of liquid, from highly-corrosive acids through high-viscosity paints and adhesives to food and drink products, can be pumped. The range of applications is virtually limitless.

#### Performance

- Variable flow and head pressures; easy to adjust without sophisticated controls
- Portable and compact for multi-location use, optionally with trolley
- Handles liquids with solid particles; ideal for abrasive and viscous media
- Special air system; lube-free, non-stall, non-freeze
- Wide range of sizes and materials suited to variety of conditions and chemical fluids
- Efficient performance; high flow rates through optimal casing designs
- Self-priming dry up to six metres; works in suction lift applications
- Efficient air distribution design with low air consumption
- Can be customized to specific applications; multiple porting options available along with interface options
- Safe "dead head" function against closed discharge without pump damage

#### Reliability

- 100% wet tested after final assembly; deadheading, priming, and sealing
- All-plastic air system; strong and corrosion resistant in harsh environments
- Dry-run without damaging the pump or system; seal-less design
- Serviceability: quickly and easily maintained without any special tools

#### Security

- All versions ATEX certified; conductive plastic pumps available
- Special air exhaust; designed to operate at low noise levels
- Fully submersible; can be immersed completely according to fluid compatibility
- All-bolted construction provides maximum leak resistance and safety

#### Markets and Applications

Air-operated double-diaphragm pumps are among the most versatile liquid transfer solutions on the market. They can be used in a variety of installations in numerous applications.

- Automotive Agriculture Mechanical Chemical Ceramic Food
   Biodiesel Ceramic Textile & Leather Paint and Varnish Naval & Petrochemical
- Pulp & Paper Mining Pharmaceutical & Cosmetic Galvanic Oil & Gas
- Water Treatment Printing Inks





#### Product range

#### Duotek

PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow rate from 8 - 1,000 l/min Connection from 1/4" - 3"

#### C € € [H[





Features **remote control** PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow rate from 8 - 700 I/min Connection 1/4" - 2"







#### Duotek Drum

Empties drums and tanks PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow rate 8 - 160 l/min Connection 1/4" - 1"







#### Duotek Twin

Features double inlet/outlet PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow rate from 8 - 700 l/min Connection 1/4" - 2"







#### Why choose Duotek?















	_						-
Dry-Running	AODD	Centrifuga	al Lobe	Gear	Screw	Peristaltic	Piston
Variable Flow & Head Control	<b>✓</b>	~	~	~	!	!	~
Deadhead Safely	<b>✓</b>	~	!	!	!	!	!
Dry-Running	<b>✓</b>	×	×	×	×	×	×
Dry Self-Priming	<b>~</b>	×	×	~	×	~	!
No Mechanical Alignment	<b>~</b>	×	×	×	×	×	X
No Electrical Installation	<b>✓</b>	×	×	×	×	×	×
Portability	<b>~</b>	<b>~</b>	!	!	!	~	!
Submersible	<b>~</b>	!	×	×	×	×	!
Seal-less	<b></b>	l <sub>r</sub>	<u> </u>	!	. !	!	!
Cavitation Tolerance	D081	n & F	7 UN		<b></b>	!	!
Low Shear & Degradation	<b>~</b>	×	~	~	!	!	!

#### Materials - Pump Casing



Polypropylene Wide chemical compatibility. General purpose.



PVDF+CF Conductive PVDF: Strong chemical resistance to acids. High temperature resistance. Groundable.



POMc Acetal: Wide range of solvent and hydrocarbons resistance. Good level of abrasion resistance.



Aluminium Wide range of solvent and hydrocarbons resistance. Good level of abrasion resistance.



SS316 Stainless steel 316: High level of corrosion and abrasion resistance.

#### Materials

#### Diaphragm











NBR Good for petroleum-based fluids, water, oils, hydrocarbons and mild chemicals. EPDM OK with caustic solutions, dilute acids, ketones and alcohols. Good abrasion resistance. PTFE Widest chemical compatibility, extreme corrosion resistance, non-adhesive, high heat resistance. **HYTREL** Good low temperature properties. Good abrasion resistance. **SANTOPRENE** Solutions and dilute acids.

#### **Ball Check**









NBR Good for petroleum-based fluids, water, oils, hydrocarbons and mild chemicals. **EPDM** OK with caustic solutions, dilute acids, ketones and alcohols. Good abrasion resistance. PTFE Widest chemical compatibility, extreme corrosion resistance, non-adhesive, high heat resistance. SS High level of corrosion and abrasion resistance. Good for viscous fluids.











POLYPROPYLENE Wide chemical compatibility. General purpose.

**PVDF** Strong chemical resistance to acids. High temperature resistance.

**ALUMINIUM** Wide range of solvent and hydrocarbons resistance. Good level of abrasion resistance.

SS High level of corrosion and abrasion resistance.

PE with high molecular weight: High level of abrasion resistance

#### O-rings









**VITON** High heat resistance. Good resistance to aggressive chemicals and hydrocarbons. NBR Good for petroleum-based fluids, water, oils, hydrocarbons and mild chemicals. **EPDM** OK with caustic solutions, dilute acids, ketones and alcohols. Good abrasion resistance. PTFE Widest chemical compatibility, extreme corrosion resistance, non-adhesive, high heat resistance.

### Duotek AODD key code

_	Туре	aphragm Pumps									
	00	Zone 2 ATEX									
-	1	Series	Flow rate	Connect	ions [BSP]	* Suc lift max	Del head max	Solid passing	Displac/cycle	Viscosity max	
		Jelles	[l/m]	Fluid	Air			[0mm]	[cc]		
		0007	7	1/4"	4mm	[m] 3	[m] 60	2	18	[cps] 6,000	
		0018	20	3/8"	411111	-	00	2.5	30	10,000	
		0030	35	3/0	6mm		70	3	65	15,000	
		0055	55	1/2"*				3	0.5	13,000	
		0060	65	1//2	1/4"			3.5	140	20,000	
		0090	100			_					
		** 0100	100	3/4"*	3/8"			4	200	15,000	
		0120	120	1"*	3/0			4	200	25,000	
		** 0160	170	1"*						23,000	
		0170	170	DN25 - 1"	-	,	80				
		0171	170	1"*	-		00	7.5	700	35,000	
		** 0250	250	'	1/2"			7.5	700	33,000	
		0252	250	1″1/4 *						<u> </u>	
		0400	380	DN40 - 1"1/2	-			8	1,200	40,000	
		0700	700	DN50 - 2"		-		8.5	3,050	50,000	
		1000	1,050	DN80 - 3"	3/4"			10	7,000	55,000	
		1000						10	7,000	33,000	
			Body Material P	Polypropylene -	L Glace Eibra						
			К К								
			A	PVDF + Carbon Aluminium	rible						
			s	SS 316							
			M	POM							
				Air Diaphragm							
				H	Hytrel						
				M	Santoprene						
				D	EPDM						
				N	NBR						
					Fluid Diaphra	agm					
					Т	PTFE					
					X	Without diaphra	arm PTEE				
						Balls					
						Т	PTFE				
						S	SS 316				
						D	EPDM				
						N	NBR				
							Motor poles/ph	nases			
							P	Polypropylene			
							К	PVDF pure			
							s	AISI 316			
							Α	Aluminium			
							M	POMc			
							Z	PE			
								O-Rings			
								D	EPDM		
								v	FPM		
								т	PTFE		
								N	NBR		
									Customization		
									1	BSP threaded	
									2	Flanged	
									4	Twin connection	
									5	NPT threaded	
									6	Reinforcement ring	1
									7	Extra connections	
										Customization	
											None
											Ext. control with sole
											Ext. control without s
	00	0007	Р	N	Т_	T	P	Т	<b>=</b> 1	E	

<sup>\*</sup> FLANGED: add the cost of the related KIT \*\* Casing in Aluminium ONLY

### Duotek



#### Air-operated double-diaphragm pumps

Air-operated double-diaphragm pumps have long been recognized as the most flexible pumps for handling difficult liquids at relatively low pressures and flows in a virtually limitless range of applications. SEKO AODD pumps come in many sizes and materials of construction. Almost every type of liquid, from highly-corrosive acids through high-viscosity paints and adhesives to food and drink products, can be pumped.

Made in PP, PVDF, ALUMINIUM, SS316, POMc Flow rate from 8 l/min to 1,000 l/min Connection from ¼" to 3" ATEX certification for zone 2 EX II 3/3 GD c IIB T135°C

#### Technical features



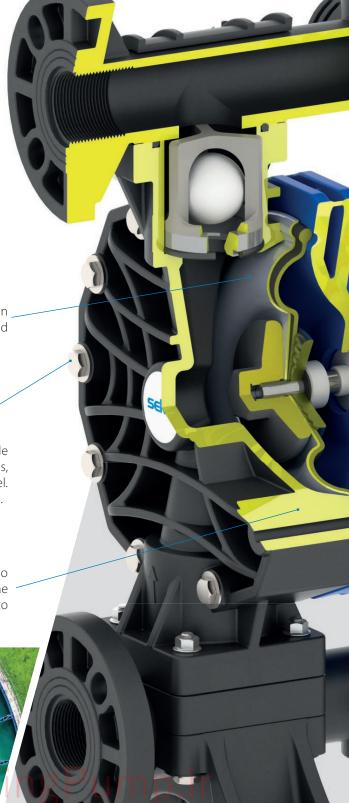
Long-lasting diaphragm construction ensures consistent performance and extended operating life.



Special exhaust chamber with double silencer to expand diffusion passages, reduce icing and ensure low noise level. Air consumption is significantly lowered.



Special pinch clamping design to minimize wear and increase life of the diaphragm. Provides a uniform seal to avoid leakage.







#### Technical data

Fluid connections	1/4" BSP
Air connection	4 mm
Max flow rate	7 l/min
Max air pressure	6 bar
Max delivery head	60 m
Max suction lift dry	3 m
Max suction lift wet	9.8 m
Max solid passing	2 mm
Noise level	62 dB
Max viscosity	5,000 cps
Displacement per stroke	18 сс



PP



PVDF+CF

POMc

# Duotek AF0018



#### Technical data

Fluid connections	3/8" BSP
Air connection	6 mm
Max flow rate	20 l/min
Max air pressure	7 bar
Max delivery head	70 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	2.5 mm
Noise level	65 dB
Max viscosity	10,00 <mark>0 cps</mark>
Displacement per stroke	30 cc









PVDF+CF

POMc

SS316



EX II 3/3 GD c IIB T 135°C

#### Technical data

1/2" BSP
6 mm
35 l/min
7 bar
70 m
5 m
9.8 m
3 mm
65 dB
15,000 cps
65 cc



## Duotek AF0055



EX II 3/3 GD c IIB T 135°C

#### Technical data

Fluid connections	1/2" BSP
Air connection	1/4" BSP
Max flow rate	55 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	3.5 mm
Noise level	70 dB
Max viscosity	20,000 cps
Displacement per stroke	140 cc



**PVDF+CF** 

ALU

SS316



#### Technical data

1/2" BSP
1/4" BSP
65 l/min
8 bar
80 m
5 m
9.8 m
3.5 mm
72 dB
20,000 cps
140 сс



## Duotek AF0090



EX II 3/3 GD c IIB T 135°C

#### Technical data

Fluid connections	3/4" BSP
Air connection	3/8" BSP
Max flow rate	100 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	4 mm
Noise level	72 dB
Max viscosity	15,000 cps
Displacement per stroke	200 сс





**PVDF+CF** 



EX II 3/3 GD c IIB T 135°C

#### Technical data

3/4" BSP
3/8″ BSP
120 l/min
8 bar
80 m
5 m
9.8 m
4 mm
72 dB
25,000 cps
200 сс



## Duotek AF0120



EX II 3/3 GD c IIB T 135°C

#### Technical data

Fluid connections	1" BSP
Air connection	3/8" BSP
Max flow rate	120 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	4 mm
Noise level	72 dB
Max viscosity	25,000 cps
Displacement per stroke	200 сс





PVDF+CF



#### Technical data

Fluid connections	1" BSP
Air connection	1/2" BSP
Max flow rate	170 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	6 m
Max suction lift wet	9.8 m
Max solid passing	7.5 mm
Noise level	75 dB
Max viscosity	35,000 cps
Displacement per stroke	700 сс



## Duotek AF0170



EX II 3/3 GD c IIB T 135°C

#### Technical data

Fluid connections	1" BSP <b>DN 25</b>
Air connection	1/2" BSP
Max flow rate	170 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	7.5 mm
Noise level	75 dB
Max viscosity	35,000 cps
Displacement per stroke	700 cc





**PVDF+CF** 



EX II 3/3 GD c IIB T 135°C

#### Technical data

Fluid connections	1" BSP <b>DN 25</b>
Air connection	1/2" BSP
Max flow rate	170 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	7.5 mm
Noise level	75 dB
Max viscosity	35,000 cps
Displacement per stroke	700 сс





**PVDF+CF** 

## Duotek AF0250



EX II 3/3 GD c IIB T 135°C

#### Technical data

Fluid connections	1" 1/4 BSP
Air connection	1/2" BSP
Max flow rate	250 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	6 m
Max suction lift wet	9.8 m
Max solid passing	7.5 mm
Noise level	75 dB
Max viscosity	35,000 cps
Displacement per stroke	700 cc





#### Technical data

Fluid connections	1″ 1/4 BSP
Air connection	1/2" BSP
Max flow rate	250 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	7.5 mm
Noise level	75 dB
Max viscosity	35,000 cps
Displacement per stroke	700 сс
,	





**PVDF+CF** 

## Duotek AF0400



EX II 3/3 GD c IIB T 135°C

#### Technical data

Fluid connections	1" 1/2 BSP <b>DN 40</b>
Air connection	1/2" BSP
Max flow rate	380 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	8 mm
Noise level	78 dB
Max viscosity	40,000 cps
Displacement per stroke	1,200 cc







**PVDF+CF** 

SS316



EX II 3/3 GD c IIB T 135°C

#### Technical data

Fluid connections	2" BSP <b>DN 50</b>
Air connection	3/4" BSP
Max flow rate	700 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	8.5 mm
Noise level	78 dB
Max viscosity	50,000 cps
Displacement per stroke	3,050 сс



## Duotek AF1000



**EX II 3/3 GD c IIB T 135℃** 

#### Technical data

Fluid connections	3" BSP <b>DN 80</b>
Air connection	3/4" BSP
Max flow rate	1,050 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	12 mm
Noise level	82 dB
Max viscosity	55,000 cps
Displacement per stroke	9,750 cc

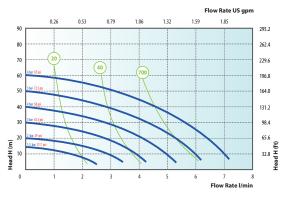


#### Performance curves

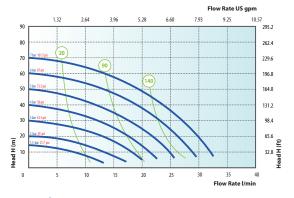
The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according to the construction material.

• Air supply pressure • Air consumption Nlt/min

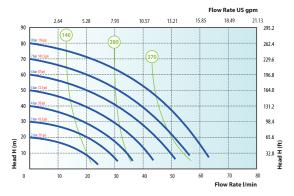
#### **Duotek AF0007**



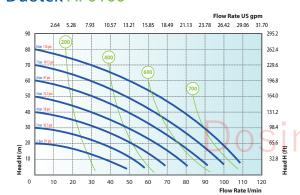
#### **Duotek AF0030**



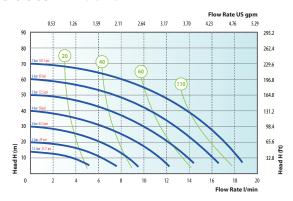
#### **Duotek AF0060**



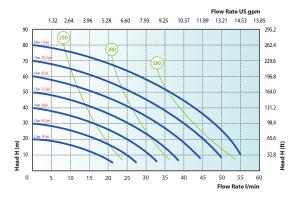
#### **Duotek AF0100**



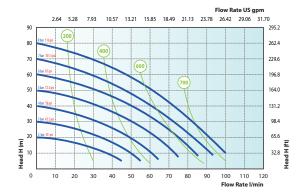
#### **Duotek AF0018**



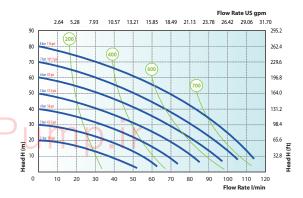
#### **Duotek AF0055**

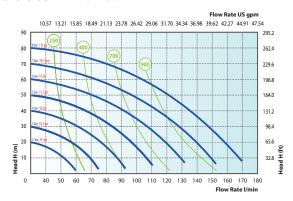


#### **Duotek AF0090**

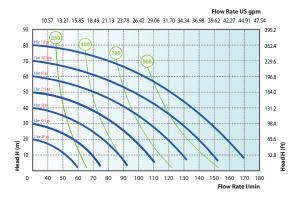


#### Duotek AF0120

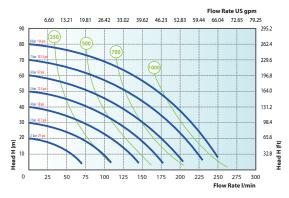




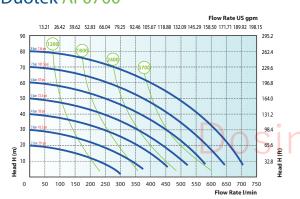
#### **Duotek AF0171**



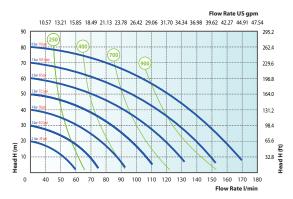
#### Duotek AF0252



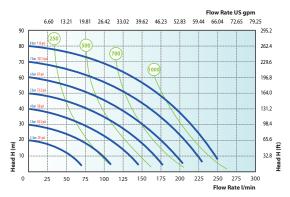
#### **Duotek AF0700**



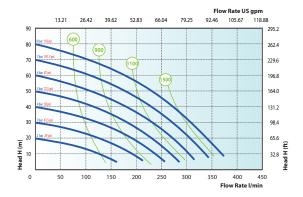
#### Duotek AF0170



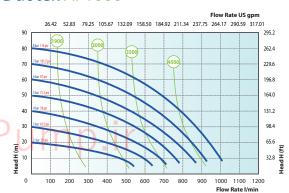
#### Duotek AF0250



#### **Duotek AF0400**



#### **Duotek AF1000**



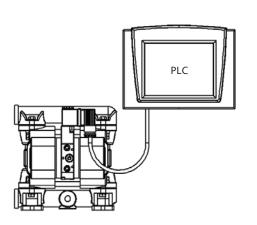
# Special Pumps Accurate Duotek

#### Technical data

Accurate Duotek pumps give you the necessary external pump control for exacting applications such as batching. Featuring a direct electrical interface that utilizes electrical impulses to stroke the pump instead of differential pressure, the Accurate Duotek provides an easily-controlled variable stroke rate.

Note PLC and computer system not included.





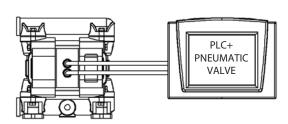
## Main applications

- Chemical industry
- Flexographic industry
- Painting industry
- Wastewater technology
- Printing industry

#### **Pumps**

AF0007; AF0018; AF0030; AF0100; AF0160; AF0250













# Special Pumps Drum Duotek

#### Technical data

Drum Duotek is designed for emptying drums and containers and provides an economical and wear-resistant alternative to other pumping systems. In order to handle a wide range of fluids, DP pumps are available in all materials. The pump can be quickly and easily footmounted on the drum. The drum will be completely emptied with a suction pipe.

#### Main applications

- Chemical industry
- Waste disposal technology
- Automotive industry
- Food industry

#### **Pumps**

AF0018; AF0030; AF0100; AF0160



# Special Pumps Twin Duotek

#### Technical data

Twin Duotek pumps are mainly used in the textile and paper processing industry. These dual-action pumps are able to transfer two different media independently and simultaneously. This is accomplished by using separate connections on the suction and discharge ports, keeping two pumped media isolated from each other and preventing unwanted mixing.

#### Main applications

- Chemical industry
- Flexographic industry
- Painting industry
- Wastewater technology
- Printing industry



#### Pumps

AF0018; AF0030; AF0100; AF0160; AF0250; AF0400

# Damper

### Pneumatic, automatic pulsation dampers

Made in PP, PVDF, ALUMINIUM, SS316, POMc Applicable to all pump sizes







The active pulsation damper is the most efficient way to remove pressure variations on the discharge of the pump. SEKO pulsation dampers work actively with compressed air and a diaphragm, automatically setting the correct pressure to minimize pulsations. Pulsation dampers require minimal maintenance and are, subject to the requirements of the application, available in the same housing and diaphragm materials as the pump.

#### **Applications**

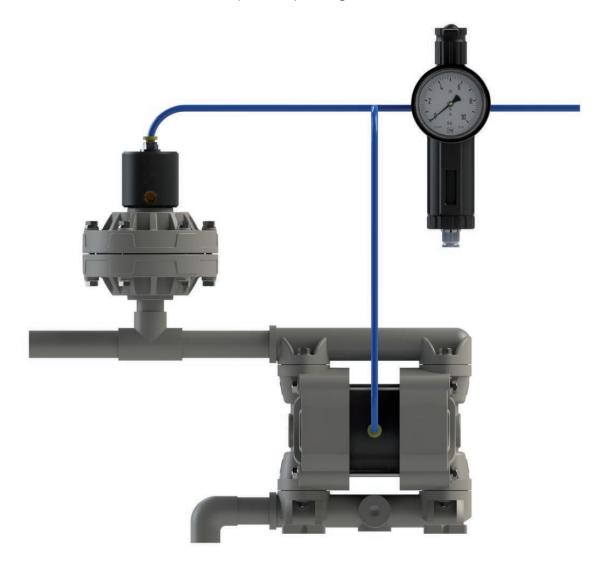
- Metering/injection/dosing (equalizes discharge pressure spikes, increasing accuracy)
- Filter press/in-line filters (increases filter efficiency and life by providing a smooth flow)
- Spraying (smooth, consistent spray pattern)
- Filling (eliminates inconsistent filling and splashing)
- Transfer (eliminates harmful water hammer, preventing pipe and valve damage)

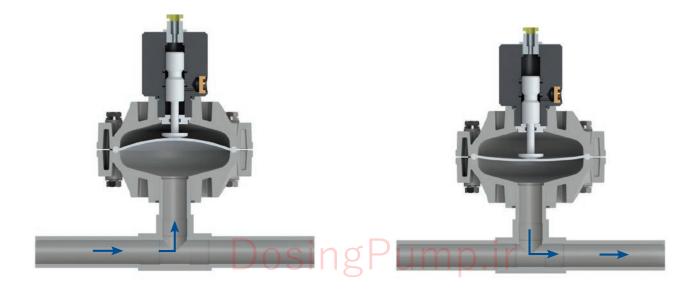


Significant pulsation reduction with an Dosing Paverage 70%-80% pulsation reduction in high back pressure applications.

### How it works

The pulsating flow of the discharge forces the diaphragm upwards where it is cushioned by the air in the chamber. The flexing of the diaphragm absorbs the pulsation, providing a smooth flow.





## Damper DAF20

#### Technical data

Fluid connections	3/4"
Air connection	6 mm
Max air pressure	8 bar
Compatible with	0007
	0018
	0030
	0055









PVDF+CF

**POMc** 

SS

## Damper DAF25

#### Technical data

Fluid connections	1"
Air connection	8 mm
Max air pressure	8 bar
Compatible with	0060
	0090
	0100 - 0120





**PVDF+CF** 

**POMc** 

SS

# Damper DAF40

#### Technical data

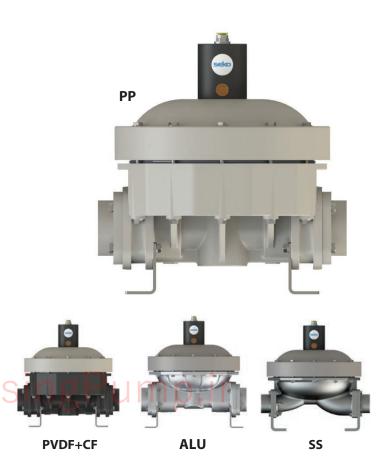
Fluid connections	1″1/2
Air connection	10 mm
Max air pressure	8 bar
Compatible with	0160
	0170 - 0171
	0250 - 0252
	0400



# Damper DAF50

#### Technical data

Fluid connections	2"
Air connection	12 mm
Max air pressure	8 bar
Compatible with	0700
	1000



# Side Channel Blowers Vacuum and blast air systems



## Product Overview

	Single Impeller	Double Impeller	Triple Impeller
Connections	from 1" to 4"	from 1"¼ to 5"	1″1⁄4
Flow Rate	40 – 1,370 m³/h	47 – 2,050 m³/h	170 m³/h
Pressure	70 – 480 mbar	240 – 820 mbar	1050 mbar
Vacuum	-60 – -340 mbar	-200 – -500 mbar	-340 mbar
Motor	Single or 3-Phase	Single or 3-Phase	3-Phase
Noise	46 – 71 dBA	58 – 84 dBA	72 dBA

### **Blowers**

SEKO's range of side channel blowers are an effective solution for air displacement in many applications.

Side channel blowers are the first choice in many automation projects for applications that require large volumes of clean, dry air with low pressures and voids. SEKO 's product offering features ease of installation like our other products, with low operating noise levels and low energy consumption.

## Side channel compressors and vacuum pumps

Side channel blowers work on the principle of lateral channels working both in suction and compression, and are designed to work in continuous service. The impeller is mounted directly on the motor shaft for frictionless compression and, together with specially shaped housing forms the side channel. SEKO's side channel blowers are constructed of die-cast aluminium, guaranteeing maximum robustness and easy handling. Lubrication is not necessary because there is no contact between static and rotating parts.

The pumped medium is sucked in and compressed which makes it is possible to use a side channel blower to generate both a vacuum and blast air.

The rated power of the engine determines the maximum differential pressure of blower. The silencers installed on the sides of the supply and exhaust system ensures quiet operation. Maximum operational reliability, even with high differential is ensured by having the bearings outside the compression chamber.





### Performance advantages

New variable frequency drive allows maximum performance of a common motor driven unit to be improved by 300%. The precision machine tool cutting, ensures the accuracy and quality, of the blower. All products go through a strict mechanical and electrical performance test, using PROE, UG, CAD and other computer aided design software and motion simulations that test all the design features prior to final manufacture.

All SEKO blowers use 2-pole motors. The range includes both single-phase and three-phase motors. Dual frequency (50/60HZ) and wide voltage can meet almost all voltage levels in all regions of the world, while the external design of the bearing tolerates high working temperatures, and improves the reliability and service life of the blower. The machines are suitable for operation with inverters.

In the moulding for die-casting of aluminium alloys, the machining of completed parts in the cutting process guarantees an improvement in terms of precision compared to traditional technologies. The design of the impeller improves the overall performance of the machine, while its IP55 protection class (class F insulation) makes it suitable for applications all over the world.





#### Operating principle

The impellers are mounted directly on the motor shaft for non-contact, frictionless compression. Maximum operational reliability, even at high differential, is ensured by the arrangement of the bearings outside the compression chamber.

The gas is taken in though the inlet. As it enters the side channel, the rotating impeller imparts velocity to the gas in the direction of rotation. Centrifugal force in the impeller blades accelerates the gas outward and pressure increases. Every rotation adds kinetic energy.

This results in the further increase of pressure along the side channel. The side channel narrows at the rotor, sweeping the gas off the impeller blades and discharging it though the outlet silencer where it exits the side channel blower.

# The unique principle of operation and design brings key advantages

- No wearing parts
- No lubrication required
- Minimal maintenance
- Silent operation
- Smooth air flow
- Can be mounted in any direction, with reduced footprint and installation costs



### Product line

### Single Impeller

Connection from 1" to 4"

Flow rate	from 40 to 1,370 m <sup>3</sup> /h
Pressure	from 70 to 480 mbar
Vacuum	from -60 to -340 mbar
Motor	Single or 3-Phase
Noise	from 46 to 71 dB A



### Double Impeller

Connection	from 1"¼ to 5"
Flow rate	from 47 to 2,050 m <sup>3</sup> /h
Pressure	from 240 to 820 mbar
Vacuum	from -200 to -500 mbar
Motor	Single or 3-Phase





### Triple Impeller

Connection	1"1/4
Flow rate	170 m³/h
Pressure	1,050 mbar
Vacuum	-730 mbar
Motor	3-Phase
Noise	72 dB A







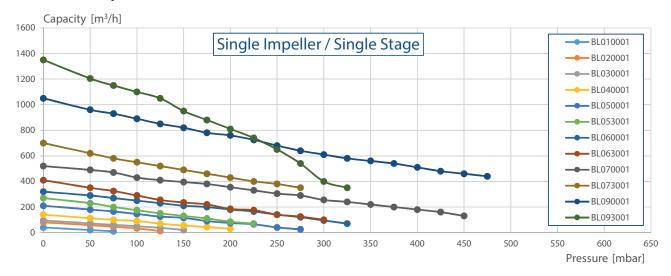
## Compressors performance selection at 50 hz (2900 rpm)

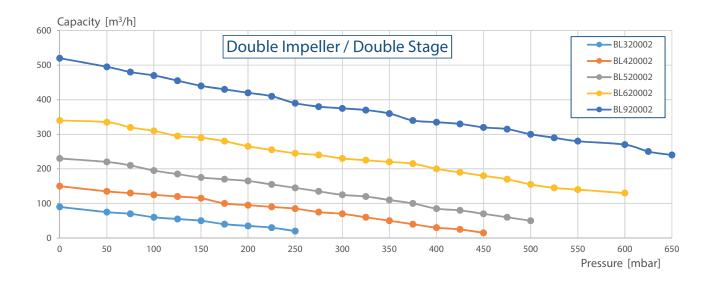
	ngle Impel													Pres	sure (m	ıbar)												Noise
2	Single Stag	e	0	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
1"	BL010001	kW	0.2	0.2	0.2																							51
	DLU IUUU I	m³/h	40	20	10																							31
	BL020001	kW	0.4	0.4	0.4	0.4	0.4																					56
1″¼	DLU20001	m³/h	80	58	45	33	12																					30
1 74	DI 020001	kW	0.55	0.55	0.55	0.55	0.55	0.55																				
	BL030001	m³/h	95	72	60	50	37	20																				60
4/11/	DI 0 40004	kW	0.85	0.85	0.85	0.85	0.85	0.85	1.3	1.3																		
1″½	BL040001	m³/h	140	112	100	90	70	55	43	30																		64
		kW	1.3	1.3	1.3	1.3	1.3	1.3	1.5	2.2	2.2	2.2	2.2															
	BL050001	m³/h	210	180	165	145	125	115	90	75	65	40	25															70
		kW	1.3	1.3	1.3	1.3	1.3	1.3	2.2	2.2	2.2																	
	BL053001	m³/h	270	230	200	175	150	130	110	85	70																	71
2"		kW	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3	3	3	4	4													
	BL060001	m³/h	320	290	270	250	230	210	200	180	165	140	120	95	70													74
		kW	3	3	3	3	3	3	3	3	3	4	4	4														
	BL063001	m³/h	410	350	325	290	255	235	220	185	175	140	125	100														73
		kW	4	4	4	4	4	4	4	4	5.5	5.5	5.5	5.5	7.5	7.5	7.5	7.5	7.5	7.5								
	BL070001	m³/h	520	490	470	430	410	395	380	355	330	305	290	255	240	220	200	180	160	130								74
2″1⁄2		kW	4	4	4	4	4	5.5	5.5	7.5	7.5	7.5	7.5		2.10			100	100	.50								
	BL073001	m³/h	700	620	580	550	520	490	460	430	400	380	350															74
		kW	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	12.5	12.5	12.5	15	15	15	15	18.5	18.5	18.5	18.5							
	BL090001		1.050	960	930	890	850	820	780	760	725	680	640	610	580	560	540	510	480	460	440							79
4"			8.5													300	340	310	400	400	440							
	BL093001	kW		8.5	8.5	8.5	12.5	12.5	12.5	12.5	18.5	18.5	18.5	18.5	18.5													80
		m³/h	1,350	1,205	1,150	1,100	1,050	950	880	810	740	650	540	400	350													

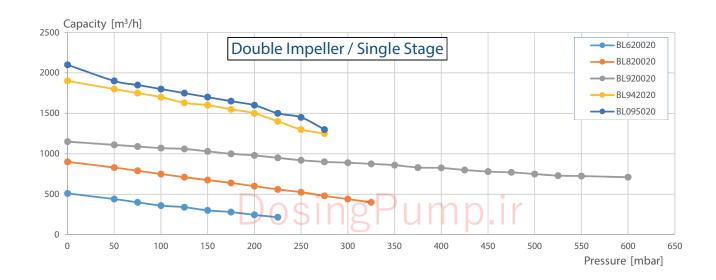
	ouble Impel													Pres	sure (m	nbar)												
D	ouble Stag		0	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
4.017	DI 220002	kW	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7																(1
1"1/4	BL320002	m³/h	90	75	70	60	55	50	40	35	30	20																61
4.017	DI 420002	kW	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.2	2.2	2.2	2.2								
1"1/2	BL420002	m³/h	150	135	130	125	120	115	100	95	90	85	75	70	60	50	40	30	25	15								- 69
	DI 520002	kW	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4						7.
ייני	BL520002	m³/h	230	220	210	195	185	175	170	165	155	145	135	125	120	110	100	85	80	70	60	50						74
2	DI (20002	kW	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5.5	5.5	5.5	5.5	5.5	7.5	7.5			76
	BL620002	m³/h	340	335	320	310	295	290	280	265	255	245	240	230	225	220	215	200	190	180	170	155	145	140	130			- 76
2017	BI 020002	kW	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	11	11	11	11	11	11	11	15	15	70
2"1/2	BL920002	m³/h	520	495	480	470	455	440	430	420	410	390	380	375	370	360	340	335	330	320	315	300	290	280	270	250	240	- 78

	ouble Impe Single Stag		0	50	75	100	125	150	175	200	225	250	275	Pres:	sure (m 325	bar) <b>350</b>	375	400	425	450	475	500	525	550	600	625	650	Noise dB (A)
	99	kW	4	4	4	4	4	4	5.5	5.5	5.5	230	2/3	300	323	300	3/3	400	423	430	4/3	300	323	טכנ	000	023	050	( )
2"	BL620020	m³/h	510	440	400	360	340	300	280	245	215																	- 78
201/	DI 020020	kW	7.5	7.5	7.5	7.5	7.5	7.5	7.5	11	11	11	11	11	11													70
2"1/2	BL820020	m³/h	900	830	790	750	710	675	640	600	560	525	480	440	400													- 78
	DI 020020	kW	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	20	20	20	20	20	25	25	25			70
4"	BL920020	m³/h	1,150	1,110	1,090	1,070	1,060	1,030	1,000	980	950	920	900	890	875	860	830	825	800	780	770	750	730	725	710			- 78
4	BL942020	kW	15	15	15	15	20	20	20	20	25	25	25															- 84
	DL942020	m³/h	1,900	1,800	1,750	1,700	1,630	1,600	1,550	1,500	1,400	1,300	1,250															- 04
E"	PI 005020	kW	15	15	15	15	15	15	15	20	20	25	25															- 84
5"	BL095020	m³/h	2,100	1,900	1,850	1,800	1,750	1,700	1,650	1,600	1,500	1,450	1,300															- 84

## Compressors performance selection at 50 hz (2900 rpm)







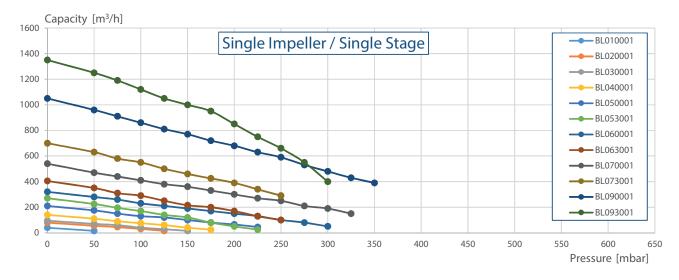
## Exhausters performance selection at 50 hz (2900 rpm)

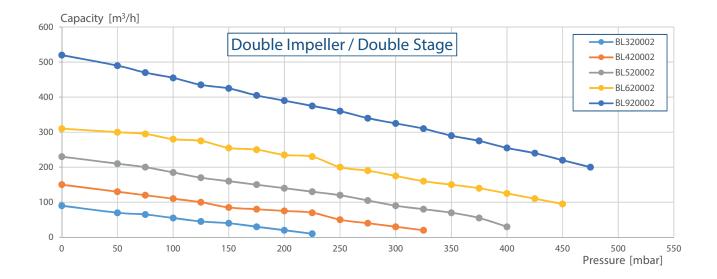
	ngle Impel	ler												Press	sure (m	ıbar)												Noise
S	ingle Stag	e	0	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
1"	BL010001	kW	0.2	0.2																								51
	DEUTOUUT	m³/h	40	15																								
	BL020001	kW	0.4	0.4	0.4	0.4	0.4																					56
1″¼	DEUZUUUT	m³/h	80	55	45	30	15																					
1 /4	BL030001	kW	0.55	0.55	0.55	0.55	0.55	0.55																				60
	DEUSUUUT	m³/h	95	70	60	40	28	15																				
1″½	BL040001	kW	0.85	0.85	0.85	0.85	0.85	0.85	0.85																			64
1 72	DL040001	m³/h	140	110	90	75	60	40	25																			04
	BL050001	kW	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.3	2.2																	70
	DLUJUUUI	m³/h	210	175	150	130	120	100	80	65	45																	70
	BL053001	kW	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2																	71
2"	DE033001	m³/h	270	225	195	170	140	120	80	50	25																	/ 1
2	BL060001	kW	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	3	3	4	4														74
	DE000001	m³/h	320	280	260	230	210	190	170	150	130	100	80	50														/4
	BL063001	kW	3	3	3	3	3	3	3	3	4	4																73
	DLU03001	m³/h	405	350	310	290	250	215	200	170	130	100																/3
	BL070001	kW	4	4	4	4	4	4	4	4	5.5	5.5	5.5	5.5	7.5													74
2//1/	BL0/0001	m³/h	540	470	440	410	380	360	330	300	270	250	210	190	150													74
2″½	BL073001	kW	4	4	4	4	4	4	5.5	5.5	7.5	7.5																74
	BL0/3001	m³/h	700	630	580	550	500	460	425	390	340	290																/4
	BL090001	kW	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	12.5	12.5	12.5	15	15	18.5												70
A!!	BL090001	m³/h	1,050	960	910	860	810	770	720	680	630	590	530	480	430	390												79
4"	DI 002005	kW	8.5	8.5	8.5	8.5	12.5	12.5	12.5	12.5	18.5	18.5	18.5	18.5														00
	BL093001	m³/h	1.350	1,250	1.190	1,120	1,050	1,000	950	850	750	660	550	400														80

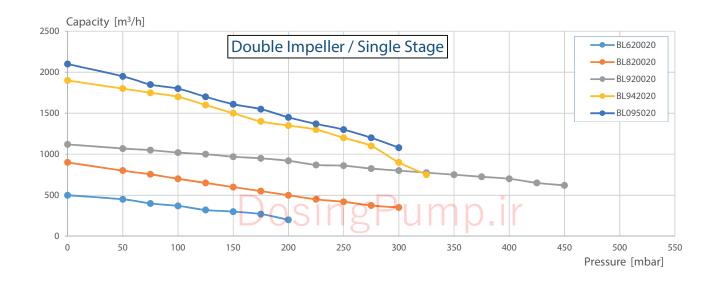
Do	uble Impel	ller												Pres	sure (m	ıbar)												Noise
D	ouble Stag			50		100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
4.017	DI 220002	kW	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7																	<b>C1</b>
1"¼	BL320002	m³/h	90	70	65	55	45	40	30	20	10																	61
1"½	BL420002	kW	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2													- 60
I 1/2	BL420002	m³/h	150	130	120	110	100	85	80	75	70	50	40	30	20													- 69
	BL520002	kW	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4										- 74
2"	DL320002	m³/h	230	210	200	185	170	160	150	140	130	120	105	90	80	70	55	30										74
	DI (20002	kW	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5.5	5.5	5.5	5.5								76
	BL620002	m³/h	310	300	295	280	275	255	250	235	230	200	190	175	160	150	140	125	110	95								76
381/	DI 020002	kW	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	11	15	15							70
2"½	BL920002	m³/h	520	490	470	455	435	425	405	390	375	360	340	325	310	290	275	255	240	220	200							- 78

	ouble Impe														sure (m													Noise
-	Single Stag	e	0	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
211	DI 620020	kW	4	4	4	4	4	4	5.5	5.5																		70
2"	BL620020	m³/h	500	450	400	370	320	300	270	200																		- 78
201/	DI 020020	kW	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	11	11	11	11														70
2"½	BL820020	m³/h	900	800	755	700	650	600	550	500	450	420	375	350														- 78
		kW	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	20	25								
	BL920020	m³/h	1,120	1,070	1,050	1,020	1,000	970	950	920	870	860	825	800	775	750	725	700	650	620								- 78
4"		kW	15	15	15	15	15	20	20	20	20	25	25	25	25													
	BL942020	m³/h	1,900	1,800	1,750	1,700	1,600	1,500	1,400	1,350	1,300	1,200	1,100	900	750													- 84
		kW	15	15	15	15	15	15	20	20	20	25	25	25														
5"	BL095020	m³/h	2,100	1,950	1,850	1,800	1,700	1,610	1,550	1,450	1,370	1,300	1,200	1,080														- 84

## Exhausters performance selection at 50 hz (2900 rpm)







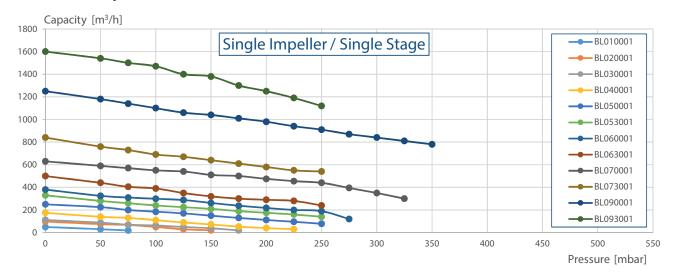
## Compressors performance selection at 60 Hz (3500 rpm)

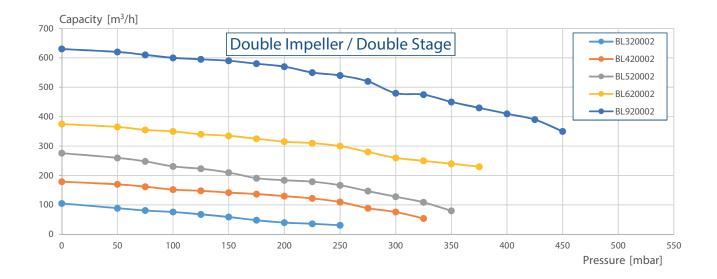
Si	ngle Impel	ler												Pres	sure (n	nbar)												Noise
-	Single Stag	e	0	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
1"	BL010001	kW	0.23	0.23	0.23																							- 51
	DLU IUUU I	m³/h	50	30	19																							31
	BL020001	kW	0.5	0.5	0.5	0.5	0.5	0.5																				56
1″1⁄4	DLUZUUUT	m³/h	98	75	68	50	30	20																				30
1 74	BL030001	kW	0.62	0.62	0.62	0.62	0.62	0.62	0.62																			60
	BE030001	m³/h	112	88	70	63	50	38	20																			
1″1⁄2	BL040001	kW	0.95	0.95	0.95	0.95	0.95	0.95	1.5	1.5	1.5																	64
1 /2	DLUTUUUI	m³/h	175	140	130	110	90	72	53	40	30																	
	BL050001	kW	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.75	2.55	2.55																70
	BE030001	m³/h	250	225	200	185	170	150	130	112	96	78																70
	BL053001	kW	2.05	2.05	2.05	2.05	2.05	2.05	2.55	2.55	2.55	2.55																71
2"	DEUJJUUI	m³/h	330	280	260	240	225	210	190	175	160	140																/1
2	BL060001	kW	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	3.45	3.45	4.5															74
	DEUUUUUI	m³/h	380	325	310	299	288	262	238	218	200	190	120															/4
	BI 063001	kW	3.45	3.45	3.45	3.45	3.45	3.45	3.45	4.6	4.6	4.6																73
	DE003001	m³/h	500	440	405	390	350	320	300	290	280	240																/3
	BL070001	kW	4.6	4.6	4.6	4.6	4.6	4.6	4.6	6.3	6.3	6.3	8.6	8.6	8.6													74
2″1⁄2	DLU/0001	m³/h	630	590	570	550	540	510	500	475	455	440	395	350	300													/4
Z 72	BL073001	kW	4.6	4.6	4.6	6.3	6.3	6.3	6.3	8.6	8.6	8.6																74
	DLU/3001	m³/h	840	760	730	690	670	640	610	580	550	540																/4
	BL090001	kW	9.8	9.8	9.8	9.8	9.8	9.8	9.8	14.5	14.5	14.5	17.5	17.5	17.5	21.3												79
4"	PEOSOOOI	m³/h	1,250	1,180	1,140	1,100	1,060	1,040	1,010	980	940	910	870	840	810	780												/9
4	BL093001	kW	9.8	9.8	14.5	14.5	14.5	14.5	21.3	21.3	21.3	21.3																90
	DLU93UU1	m³/h	1,600	1,540	1,500	1,470	1,400	1,380	1,300	1,250	1,190	1,120																- 80

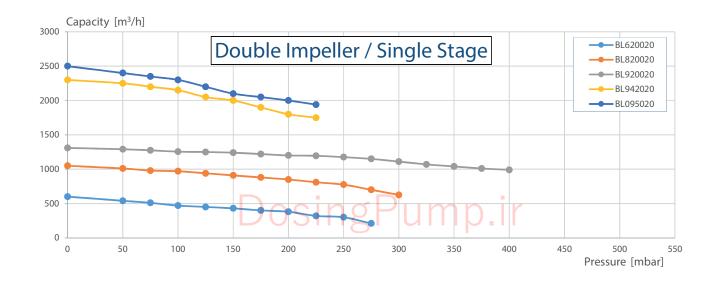
	ouble Impe													Pres	sure (m	ıbar)												Noise
С	ouble Stag		0	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
1817	DI 220002	kW	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83																<b>C1</b>
1 74	BL320002	m³/h	105	89	81	76	68	59	48	40	36	31																- 61
41117	DI 420002	kW	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.55	2.55													
1"1/2	BL420002	m³/h	179	170	162	152	148	142	137	130	122	110	89	76	54													- 69
	DI 520002	kW	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	4.6	4.6												7.
2"	BL520002	m³/h	276	260	248	231	223	210	191	184	179	167	147	128	109	80												- 74
2	DI 400000	kW	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	6.3	6.3	6.3	6.3											
	BL620002	m³/h	375	365	355	350	340	335	325	315	310	300	280	260	250	240	230											- 76
0.004		kW	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	12.6	12.6	12.6	12.6	12.6	17.3								
2"1/2	BL920002	m³/h	630	620	610	600	595	590	580	570	550	540	520	480	475	450	430	410	390	350								- 78

Do	uble Impe	ller												Pres	sure (m	ıbar)												
	ingle Stag			50		100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
2"	BL620020	kW	4.6	4.6	4.6	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3															- 78
2	BL020020	m³/h	600	540	510	470	450	430	400	380	320	300	210															/8
201/	DI 020020	kW	8.6	8.6	8.6	8.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6														- 78
2"½	BL820020	m³/h	1,050	1,010	980	970	940	910	880	850	810	775	700	625														/8
	DI 020020	kW	19	19	19	19	19	19	19	19	19	19	19	23	23	29	29	29										70
411	BL920020	m³/h	1,310	1,290	1,275	1,255	1,250	1,240	1,220	1,200	1,195	1,175	1,150	1,110	1,070	1,040	1,010	990										- 78
4"	DI 042020	kW	17.5	17.5	23	23	23	29	29	29	29																	0.4
	BL942020	m³/h	2,300	2,250	2,200	2,150	2,050	2,000	1,900	1,800	1,750																	- 84
c"	DI 005030	kW	17.5	17.5	17.5	17.5	17.5	23	23	29	29																	
5"	BL095020	m³/h	2,500	2,400	2,350	2,300	2,200	2,100	2,050	2,000	1,940																	- 84

## Compressors performance selection at 60 Hz (3500 rpm)







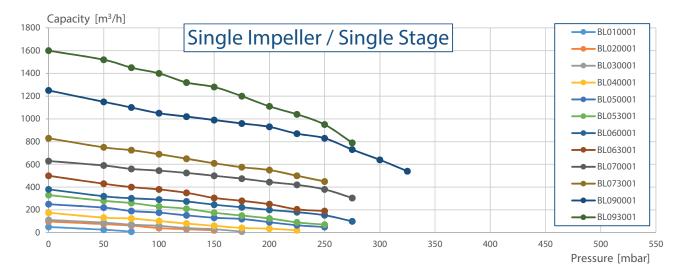
## Exhausters performance selection at 60 Hz (3500 rpm)

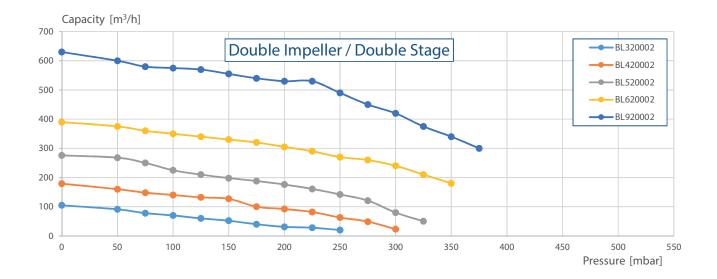
	ngle Impel													Pres	sure (m	nbar)												Noise
S	ingle Stag	e	0	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
1"	BL010001	kW	0.23	0.23	0.23																							51
	DLU IUUU I	m³/h	50	26	9																							31
	BL020001	kW	0.5	0.5	0.5	0.5	0.5	0.5																				56
1″1⁄4	DLUZUUUT	m³/h	98	75	62	40	30	20																				30
1 74	BL030001	kW	0.62	0.62	0.62	0.62	0.62	0.62	0.62																			60
	DE030001	m³/h	112	88	70	60	40	30	9																			
1″1⁄2	BL040001	kW	0.95	0.95	0.95	0.95	0.95	0.95	1.5	1.5	1.5																	64
1 72	DL040001	m³/h	175	132	124	102	80	60	41	35	20																	04
	BL050001	kW	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.75	2.55	2.55																70
	DLUJUUUI	m³/h	250	220	190	176	152	131	120	92	65	49																70
	BL053001	kW	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.55	2.55	2.55																71
2"	DLU33001	m³/h	330	280	260	230	210	175	150	125	90	70																/1
2	BL060001	kW	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	3.45	3.45	4.6															74
	DEUUUUUI	m³/h	380	320	302	291	274	246	223	200	180	153	100															/4
	BL063001	kW	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	4.6	4.6																73
	DL003001	m³/h	500	430	400	380	350	305	280	250	205	190																/3
	BL070001	kW	4.6	4.6	4.6	4.6	4.6	4.6	6.3	6.3	6.3	6.3	8.6															74
2″1⁄2	DLU/UUU1	m³/h	630	590	560	545	525	500	475	445	420	380	305															/4
Z 72	BL073001	kW	4.6	4.6	4.6	6.3	6.3	6.3	6.3	8.6	8.6	8.6																74
	DLU/3001	m³/h	830	750	725	690	650	610	575	550	500	450																/4
	BL090001	kW	9.8	9.8	9.8	9.8	9.8	9.8	9.8	14.5	14.5	14.5	17.5	17.5	21.3													79
4"	DE030001	m³/h	1,250	1,150	1,100	1,050	1,020	990	960	930	870	830	730	640	540													19
4	BL093001	kW	9.8	9.8	9.8	14.5	14.5	14.5	14.5	21.3	21.3	21.3	21.3															80
	DE033001	m³/h	1,600	1,520	1,450	1,400	1,320	1,280	1,200	1,110	1,040	950	790															00

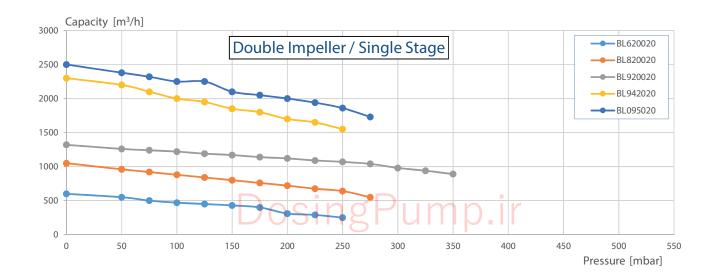
	ouble Impe														sure (m													Noise
L	ouble Stag	je	0	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
1"1/4	DI 220002	kW	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83																<b>C1</b>
1 74	BL320002	m³/h	105	91	78	70	60	52	40	31	28	20																- 61
4.017	DI 420002	kW	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.55														
1"1/2	BL420002	m³/h	179	160	148	140	132	127	100	92	82	63	49	23														- 69
	DI 520002	kW	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	4.6													74
2"	BL520002	m³/h	276	268	250	225	210	198	188	176	161	142	121	80	50													- 74
2	DI (20002	kW	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	6.3	6.3												76
	BL620002	m³/h	390	375	360	350	340	330	320	305	290	270	260	240	210	180												- 76
201/	BI 020002	kW	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	12.6	12.6	17.3											70
2"1/2	BL920002	m³/h	630	600	580	575	570	555	540	530	530	490	450	420	375	340	300											- 78

Do	ouble Impel	ller												Pres	sure (m													
	Single Stage			50		100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	600	625	650	dB (A)
2"	BL620020	kW	4.6	4.6	4.6	4.6	4.6	4.6	6.3	6.3	6.3	6.3																- 78
2	DL020020	m³/h	600	550	500	470	450	430	400	310	290	250																70
2"½	BL820020	kW	8.6	8.6	8.6	8.6	8.6	8.6	12.6	12.6	12.6	12.6	12.6															- 78
Z 72	DLOZUUZU	m³/h	1,050	960	920	880	840	800	760	720	675	640	550															- /0
	DI 020020	kW	19	19	19	19	19	19	19	19	19	19	19	23	23	29												70
4"	BL920020	m³/h	1,320	1,260	1,240	1,220	1,190	1,170	1,140	1,120	1,090	1,070	1,040	980	940	890												78
4	DI 042020	kW	17.5	17.5	17.5	17.5	17.5	23	23	23	23	29																0.4
	BL942020	m³/h	2,300	2,200	2,100	2,000	1,950	1,850	1,800	1,700	1,650	1,550																- 84
5"	DI 005030	kW	17.5	17.5	17.5	17.5	17.5	23	23	23	29	29	29															0.4
5	BL095020	m³/h	2,500	2,380	2,320	2,250	2,250	2,100	2,050	2,000	1,940	1,860	1,730															- 84

## Exhausters performance selection at 60 Hz (3500 rpm)







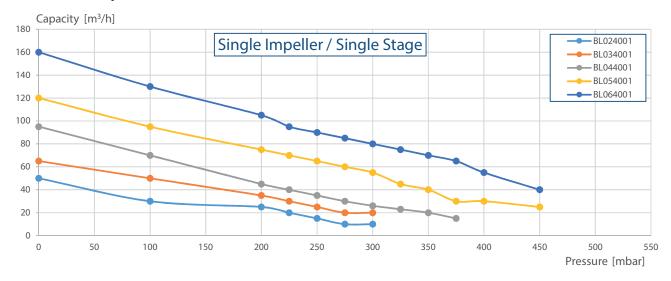
## Compressors HP performance selection at 50 Hz (2900 rpm)

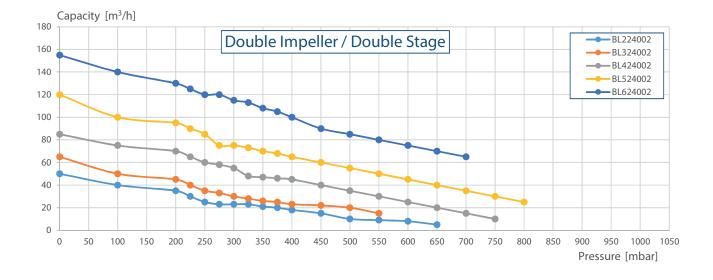
Sir	ngle Impel	ler												Pres	sure (n	nbar)												Noise
S	ingle Stag	e	0	100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
	BL024001	kW	0.55	0.55	0.55	0.55	0.55	0.55	0.55																			57
	DLU24001	m³/h	50	30	25	20	15	10	10																			3/
	BL034001	kW	0.55	0.55	0.55	0.55	0.55	0.81	0.81																			57
	BL034001	m³/h	65	50	35	30	25	20	20																			5/
1//1/	DI 02 4001	kW	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1																58
1″¼	BL034001	m³/h	95	70	45	40	35	30	26	23	20	15																58
	BL054001	kW	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	2.2														
	BLU54001	m³/h	120	95	75	70	65	60	55	45	40	30	30	25														64
	DI OC 4004	kW	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.3	3.3	3.3														
	BL064001	m³/h	160	130	105	95	90	85	80	75	70	65	55	40														64

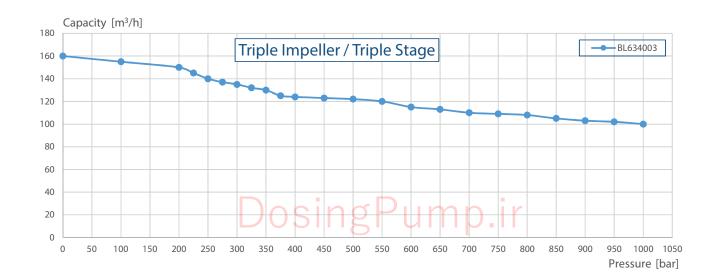
Doubl	le Impel													Pres	sure (m	bar)												
Doul	ıble Stagı		0	100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
DI.	L224002 -	kW	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.6	1.6	1.6	1.6	1.6										
DL	LZZ400Z	m³/h	50	40	35	30	25	23	23	23	21	20	18	15	10	9	8	5										58
DI.	224002	kW	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6	1.6												
BL.	L324002 -	m³/h	65	50	45	40	35	33	30	28	26	25	23	22	20	15												59
1/ DI	424002	kW	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.3	3.3	3.3	3.3	3.3	3.3								- (1
1/4 BL	L424002 -	m³/h	85	75	70	65	60	58	55	48	47	46	45	40	35	30	25	20	15	10								61
DI	F24002	kW	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3							
BL:	L524002 -	m³/h	120	100	95	90	85	75	75	73	70	68	65	60	55	50	45	40	35	30	25							64
- DI	624002	kW	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	5.5	5.5	5.5									-
RL	L624002 -	m³/h	155	140	130	125	120	120	115	113	108	105	100	90	85	80	75	70	65									67

	e Impelle													Pres	sure (n	nbar)												Noise
Trip	ole Stage			100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
1"1/4 RI	1 (2 4002	kW	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5			72
1 1/4 BL	L634003	m³/h	160	155	150	145	140	137	135	132	130	125	124	123	122	120	115	113	110	109	108	105	103	102	100			12

## Compressors HP performance selection at 50 Hz (2900 rpm)







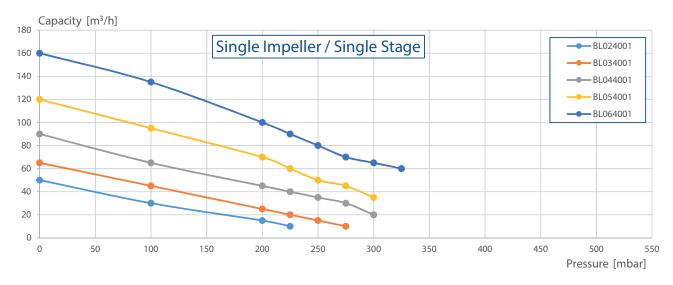
## Exhausters HP performance selection at 50 Hz (2900 rpm)

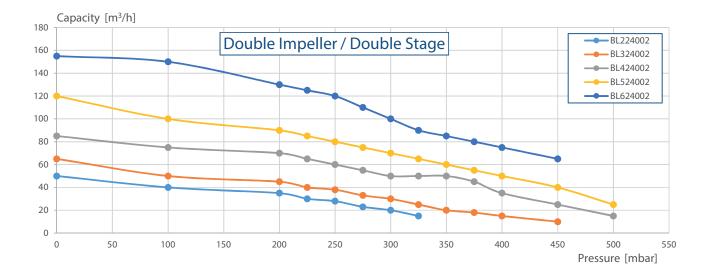
Sii	ngle Impel	ler												Pres	sure (n	nbar)												Noise
2	ingle Stag	e		100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
	BL024001	kW	0.55	0.55	0.55	0.55																						51
	DLU24001	m³/h	50	30	15	10																						31
	BL034001	kW	0.55	0.55	0.55	0.55	0.81	0.81																				56
	BL034001	m³/h	65	45	25	20	15	10																				56
1//1/	DI 044001	kW	1.1	1.1	1.1	1.1	1.1	1.1	1.1																			
1″¼	BL044001	m³/h	90	65	45	40	35	30	20																			60
	DI 05 4001	kW	1.6	1.6	1.6	1.6	1.6	1.6	1.6																			
	BL054001	m³/h	120	95	70	60	50	45	35																			64
	DI OC 4004	kW	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2																		
	BL064001	m³/h	160	135	100	90	80	70	65	60																		67

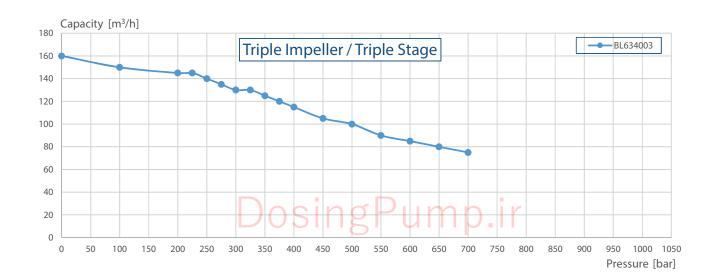
Do	uble Impel	ller												Pres	sure (n	nbar)												Noise
D	ouble Stag		0	100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	11,00	dB (A)
	BL224002	kW	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81																		(1
	BL224002	m³/h	50	40	35	30	28	23	20	15																		61
	BL324002	kW	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6														69
	BL324002	m³/h	65	50	45	40	38	33	30	25	20	18	15	10														69
1//1/	DI 424002	kW	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.3													74
1″¼	BL424002	m³/h	85	75	70	65	60	55	50	50	50	45	35	25	15													/4
	DI 534003	kW	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	4.3													76
	BL524002	m³/h	120	100	90	85	80	75	70	65	60	55	50	40	25													76
	DI 62 4002	kW	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3														70
	BL624002	m³/h	155	150	130	125	120	110	100	90	85	80	75	65														78

Triple Imp														Pres	sure (n	nbar)												Noise
Triple Sta	age			100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
1"1/4 RI 63/100		W	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5									72
1"¼ BL63400		³/h	160	150	145	145	140	135	130	130	125	120	115	105	100	90	85	80	75									12

# Exhausters HP performance selection at 50 Hz (2900 rpm)







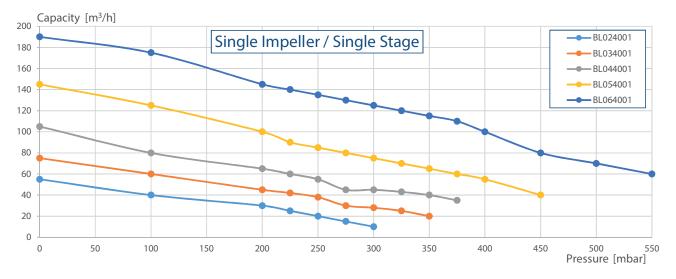
# $Compressors\ HP\ {}_{performance\ selection\ at\ 60\ Hz\ (3500\ rpm)}$

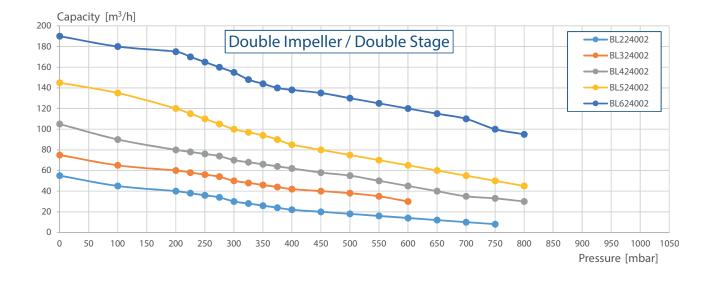
Sir	ngle Impel	ler												Pres	sure (m	bar)												Noise
S	ingle Stag	e	0	100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
	BL024001	kW	0.63	0.63	0.63	0.63	0.63	0.63	0.63																			(1)
	DLU24001	m³/h	55	40	30	25	20	15	10																			62
	BL034001	kW	0.63	0.63	0.63	0.63	0.63	0.94	0.94	0.94	0.94																	62
	BL034001	m³/h	75	60	45	42	38	30	28	25	20																	02
1″¼	BL044001	kW	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3																- (2
1 74	BL044001	m³/h	105	80	65	60	55	45	45	43	40	35																62
	BL054001	kW	1.75	1.75	1.75	1.75	1.75	1.75	1.75	2.05	2.05	2.05	2.05	2.05														68
	BLU54001	m³/h	145	125	100	90	85	80	75	70	65	60	55	40														08
	DI OC 4004	kW	2.55	2.55	2.55	2.55	2.55	2.55	2.55	3.8	3.8	3.8	3.8	3.8	3.8	3.8												74
	BL064001	m³/h	190	175	145	140	135	130	125	120	115	110	100	80	70	60												71

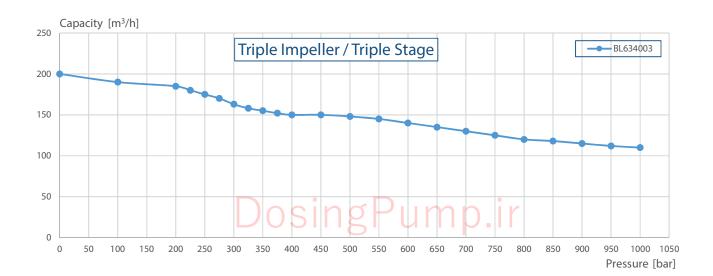
Dou	ıble Impel	ler												Pres	sure (m													
Do	ouble Stag	e	0	100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
	BL224002	kW	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	2.05	2.05	2.05	2.05	2.05	2.05								- (2
	BL224002	m³/h	55	45	40	38	36	34	30	28	26	24	22	20	18	16	14	12	10	8								62
	DI 224002	kW	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.05	2.05	2.05											
	BL324002	m³/h	75	65	60	58	56	54	50	48	46	44	42	40	38	35	30											63
//1/	DI 424002	kW	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8							
″1/4	BL424002	m³/h	105	90	80	78	76	74	70	68	66	64	62	58	55	50	45	40	35	33	30							66
	DI 534003	kW	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8							71
	BL524002 -	m³/h	145	135	120	115	110	105	100	97	94	90	85	80	75	70	65	60	55	50	45							71
	DI 62 4002	kW	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3							72
	BL624002	m³/h	190	180	175	170	165	160	155	148	144	140	138	135	130	125	120	115	110	100	95							72

	iple Impell													Pres	sure (n	nbar)												Noise
1	Triple Stage			100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
1"1/4	DI 624002		8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6			72
1 74	BL634003	m³/h	200	190	185	180	175	170	163	158	155	152	150	150	148	145	140	135	130	125	120	118	115	112	110			12

# Compressors HP performance selection at 60 Hz (3500 rpm)







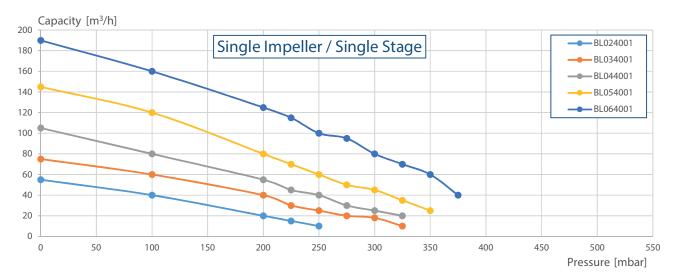
# Exhausters HP performance selection at 60 Hz (3500 rpm)

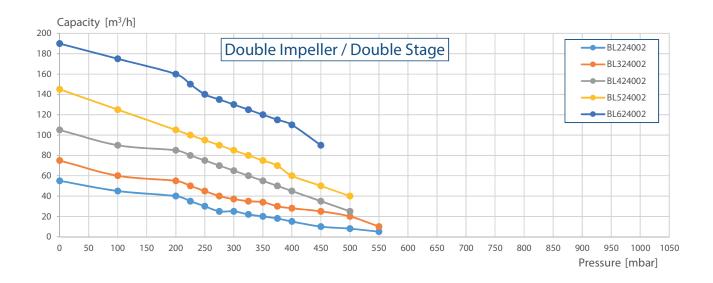
Sir	ngle Impel	ler												Pres	sure (n	nbar)												Noise
S	ingle Stag	e	0	100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
	BL024001	kW	0.63	0.63	0.63	0.63	0.63																					51
	DLU24001	m³/h	55	40	20	15	10																					31
	BL034001	kW	0.63	0.63	0.63	0.63	0.63	0.94	0.94	0.94																		56
	BL034001	m³/h	75	60	40	30	25	20	18	10																		20
1//1/	DI 044001	kW	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3																		
1″¼	BL044001	m³/h	105	80	55	45	40	30	25	20																		60
	DI 05 4001	kW	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	2.05																	
	BL054001	m³/h	145	120	80	70	60	50	45	35	25																	64
	DI OC 4004	kW	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	3.8																70
	BL064001	m³/h	190	160	125	115	100	95	80	70	60	40																70

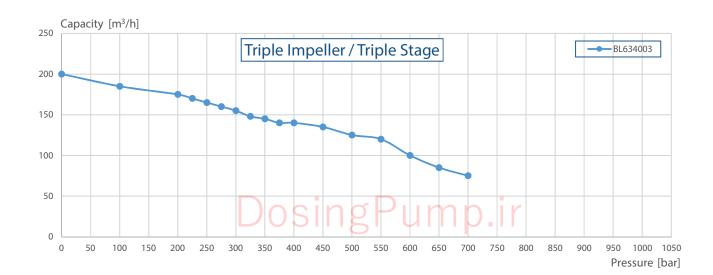
	uble Impel													Pres	sure (m	ıbar)												Noise
D	ouble Stag	e	0	100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
	BL224002	kW	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	2.05	2.05	2.05												(1
	BL224002	m³/h	55	45	40	35	30	25	25	22	20	18	15	10	8	5												61
	DI 224002	kW	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.05	2.05	2.05	2.05	2.05												
	BL324002	m³/h	75	60	55	50	45	40	37	35	34	30	28	25	20	10												69
1//1/	DI 424002	kW	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	3.8	3.8													74
1″¼	BL424002	m³/h	105	90	85	80	75	70	65	60	55	50	45	35	25													74
	DI 534003	kW	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	4.8													76
	BL524002	m³/h	145	125	105	100	95	90	85	80	75	70	60	50	40													76
	DI 62 4002	kW	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3														70
	BL624002	m³/h	190	175	160	150	140	135	130	125	120	115	110	90														78

	Impelle													Pres	sure (n	nbar)												Noise
Triple	e Stage			100	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	dB (A)
1"¼ BI 63	24002	kW	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6									72
1 % BL03	34003	m³/h	200	185	175	170	165	160	155	148	145	140	140	135	125	120	100	85	75									12

# Exhausters HP performance selection at 60 Hz (3500 rpm)







# Accessories



### Common Accessories

Threaded Water Meter

Series	Size	Pulse/I
		0.1
TH1	from 1/2" to 2"	1
TC0		4



Series	Size	Pulse/I
	from 2" to 6"	100
FC	110111 2 10 0	1,000



Diameter

	Height	
Туре	[mm]	for Tank
SML-100	610	SER-100
SML-250	820	SER-250
SML-300	960	SER-300
SML-500	1,105	SER-500
SML-1000	1,255	SER-1000

Silait	Material
600	
800	SS316
900	PVC
1,100	
Propeller	rpm
90	1400

Shaft	Material
600	
800	SS316
900	PVC
1,100	
Propeller	rpm
150	70
220	200







Туре	<b>Height</b> [mm]	<b>Diameter</b> [Ø mm]
T-150	610	550
T-300	820	765
T-400	960	780
T-800	1,105	846
T-1500	1,255	1,235



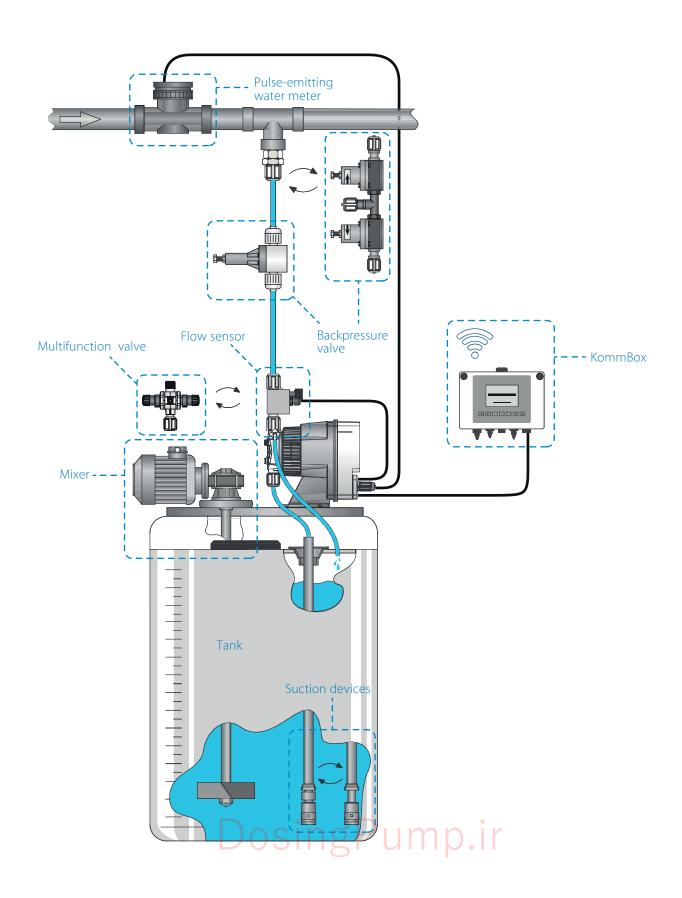
Height

Type





# Solenoid-Driven Pump Accessories



### Solenoid-Driven Pump Accessories

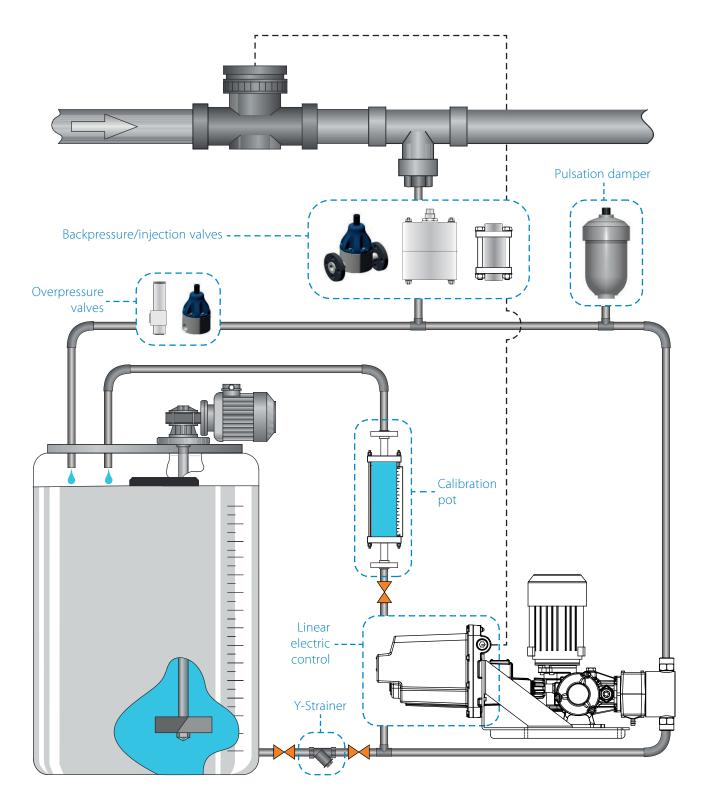
Suction devices					
Туре	Length [mm]	Diameter [Ø mm]	Seals	Level	for Tank
	450	22			SER-50
_	650	(for 4x6 tube)	FKM-B EPDM		SER-100
PVC suction lance	900	_ (,		YES NO	SER-250
_	1,050	- 34 (fan 0 : 12 to las)	LI DIVI	NO	SER-300
	1,250	(for 8x12 tube)			SER-500/1000

lves					
Туре	Pressure [bar]	Flow rate [I/h]	Material	Seals	Tube
Backpressure	1.5 0.5 - 5	-	PVDF	FKM-B EPDM	4x6
Backpressure	1.5 0.5 - 10	-	PVC	FPM EPDM	4x6 8x12
Backpressure HYC	max 10	50	PVC	FPM EPDM	4x6 8x12
Safety HYS	max 10	50	PVC	FPM EPDM	4x6 8x12
Multiple HYM	max 10	50	PVC	FPM EPDM	4x6 8x12
Multifunction	0 - 18 (safety) 0 - 5 (backpressure)	-	PVDF (diaphragm PTFE)	FKM-B EPDM	4x6 8x12

Communication device								
Type	Power supply	CAN	RS485	Ethernet	Max units connected			
Kontrol KommBox	100 - 240Vac 50/60Hz	Communication port	Serial Port for Data Communication	Standard RJ45 Ethernet port	10			

Other					
Туре	Pressure [bar]	Flow rate [I/h]	Material	Seals	Tube
Flow sensor	1.5 0.5 - 5	-	PVC PVDF PMMA	FKM-B EPDM	4x6 8x12

# Motor-Driven Pump Accessories



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### Motor-Driven Pump Accessories

Backpressu	ure valve			
Model	Max Flow Rate [I/h]	Setting Pressure [bar]	Code	Contact parts
\(C) 4 C	300		VSM1S03005_A	
<b>VSM-S</b> (SS316L)	800	0 - 5	VSM2S08005_A	SS316L/PTFE
(333 TOL)	1,500		VSM3S15005_A	

Backpres	Backpressure / relief valve										
Code		ater		XX VDF EPDM	<b>Material</b> – XX Flanged / Threaded	Flow Rate [I/h]	Pressure [bar]	Fittings			
BV XX 103010 Y					F/T	300		DN10			
BV XX 208010 Y					F/T	800		DN20			
BV XX 408010 Y	21	24	41	44	F	800	0 - 10	ANSI ¾"			
BV XX 315010 Y					F/T	1,500		DN25			
BV XX 515010 Y					F	1,500		ANSI 1"			

Overpressure valve										
Model	Max Flow Rate [I/h]	Setting Pressure [bar]		ssure	Code	Contact parts				
		Min	Max	Std						
		0	19	10	VS1S250019_A					
VS1-S	250	20	45	20	VS1S250045_A	SS316L/PTFE				
		46	150	50	VS1S250150 A	-				

Injection	Injection valve										
Code	<b>Material</b> Body / Diaphragm	Max Pressure [bar]	Nitrogen Volume [1]	Max Precharge [bar]	Fittings						
HSTX005_A		210	0.05	150	3/8" BSP						
HSTX01_A			0.12	_	1/2" BSP						
HSTX035_A	662161 /		0.35	- - 105 / 150							
HSTX07_A	SS316L/ NBR	150 / 210	0.7		3/4" BSP						
HSTX08_A	NON	130 / 210	0.8		3/4 031						
HSTX15_A			1.5		1" BSP						
HSTX23_A			2.3		ו טטר						

Calibration pot									
<b>Code</b> SS316L	<b>Code</b> PVDF	Volume [l]	<b>Suggested flow rate</b> [I/h] for minimum 30" calibration						
CP0004B36AA1B	CP0004B96AA1B	0.04	0 - 4.6						
CP0050B36CA1B	CP0050B96CA1B	0.5	4.6 - 57						
CP0100B36CA0B	CP0100B96CA0B	1	57 - 114						
CP0150B36CA0B	CP0150B96CA0B	1.5	114 - 171						
CP0300B36EA0B	CP0300B96EA0B	3	228 - 342						
CP0500B36EA0B	CP0500B96EA0B	5	342 - 570						
CP1000B36FA0B	CP1000B96FA0B	10	570 - 1,140						
CP2000B36FA0B	CP2000B96FA0B	20	1,710 - 2,280						
CP2500B36FA0B	CP2500B96FA0B	25	2,280 - 2,850						
			Dosin						

Model	Max Flow Rate	Setting Pressure	Code	Contact parts
	[l/h]	[bar]		
\( (C) \( () \( C) \( () \( C) \( () \( C) \( () \( C) \( C) \( () \( C)	300		VSM1P03005_A	
VSM-P (PVC)	800	0 - 5	VSM2P08005_A	PVC/PTFE
(1 VC)	1,500		VSM3P15005_A	

Injection valve										
Model	Max Flow Rate [I/h]	Setting Pressure [bar]	Code	Contact parts						
	80	_	VZX1S00502_A							
	100	_	VZX3S01002_A							
VZX-S	200	- 2	VZX4S02002_A	SS316I						
(SS316L)	420		VZX5S04202_A	33310L						
	800		VZX6S08002_A							
	1,650		VZX7S16502_A							

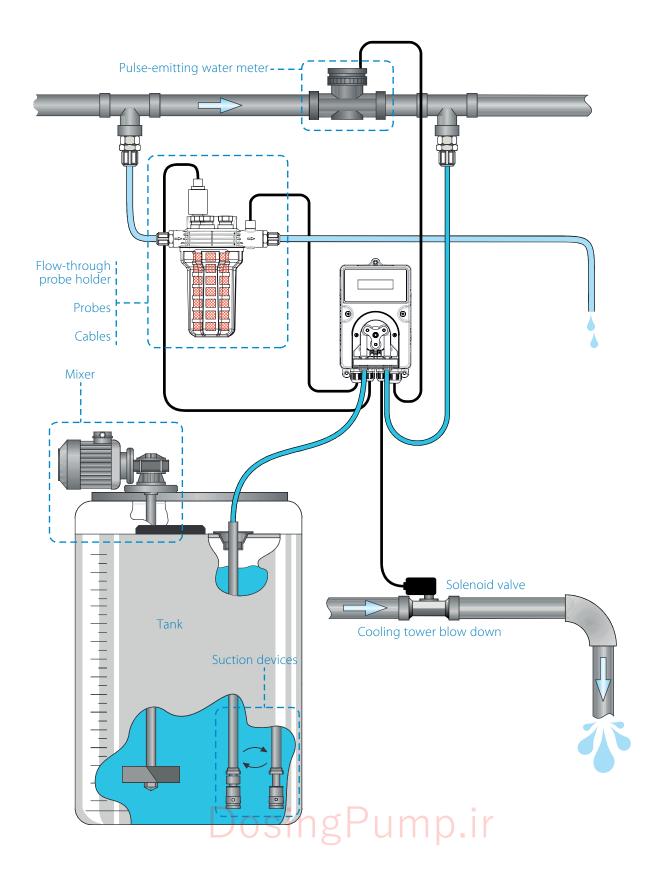
Model	Max Flow Rate [I/h]	Setti	<b>ng Pre</b> : [bar]	ssure	Code	Contact parts
		Min	Max	Std		
		0	13	10	VS2S2650013_A	
VS2-S	650	14	30	20	VS2S2650030_A	SS316L/PTFE
		31	150	50	VS2S650100_A	

Code	<b>Material</b> Body / Diaphragm	Max Pressure [bar]	Nitrogen Volume [1]	Max Precharge [bar]	Fittings
HSTPVC005_A			0.05		3/8" BSP
HSTPVC01_A			0.12		
HSTPVC035_A	PVC / FPM	10	0.35	. 7	1/2" BSP
HSTPVC07_A	FVC/TFIVI	10	0.7		
HSTPVC15_A			1.5		3/4" BSP
HSTPVC15_A			2.3		3/4 D3P

Aktua series - linear electric control					
Code	Description	For Spring pumps series			
SAL025M00000	Electric Actuator Aktua Series	All			
SA99106004		MS1A064/094			
SA99106005		MS1B108			
SA99106001	<ul> <li>Installation Actuator</li> <li>Interface</li> </ul>	MS1C138 / 165			
SA99106002		PS1			
SA99106003		PS2			

Y-Strainer		
<b>Code</b> SS316L	<b>Code</b> PVDF	Connection
FYP3240200_A	FYS3240008_A	3/8" BSP
FYP3230040_A	FYS3240100_A	1/2" BSP
FYP3230060_A	FYS3240110_A	3/4" BSP
FYP3230080_A	FYS3240120_A	1"BSP

# Peristaltic Pump Accessories

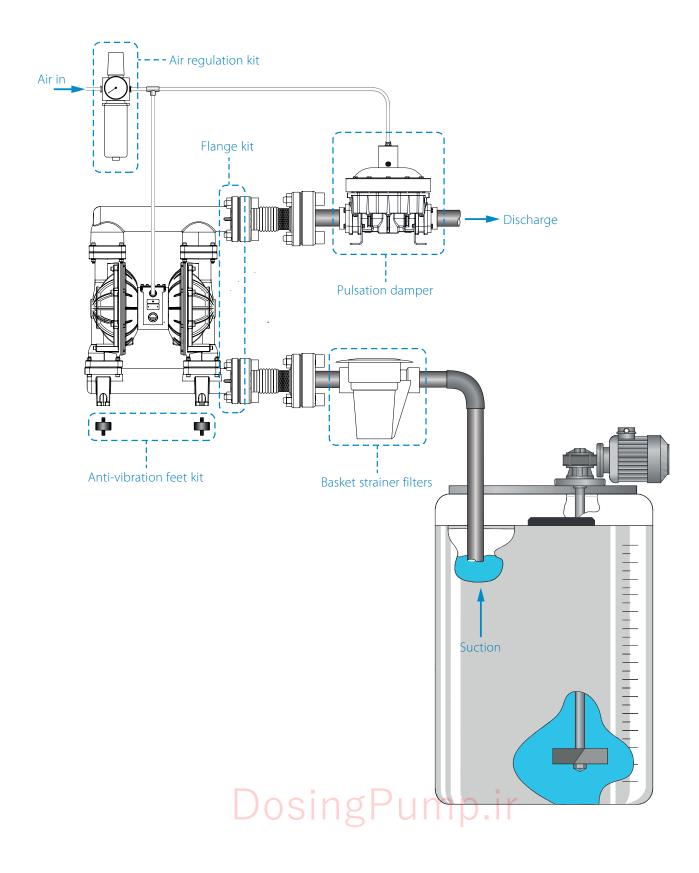


Model	Temp [°€]	Pressure [bar]	Body	Flow sensor	Probes	Code
PSS7		6	Blue PP + transparent PMMA	Not included - Ø12		990010302
PSS8-A		2	PP + transparent PMMA			990010308
PSS8-A1	40		PP + black PP	- - Included - Ø12	Not included	990010308
PSS8-A HP		5	PP + transparent PMMA	- Included - Ø12		990010309
PSS8-A1 HP			PP + black PP	-		990010309

Probes									
Model	Measurement range	Temp range $[^{\circ}\!\mathbb{C}]$	Pressure [bar]	Body	Membrane	Junction	Cable length [m]	Connection	Code
SPH1-WP-S1-1.5	2 - 12 pH	0 - 60	6	PC	Glass	Single	1.5	BNC	9900105001
SPH1-WP-S1-6	2 - 12 pH	0 - 60	6	PC	Glass	Single	6	BNC	9900105096
SPH1-WP-S1-DJ	2 - 12 pH	0 - 60	6	PC	Glass	Double	1.5	BNC	9900105105
SPH2-WP	2 - 12 pH	0 - 60	6	Ероху	Glass	Single	-	PG 13.5 mm - S8	9900105003
SPH3-WW	0 - 14 pH	0 - 80	6	Glass	Glass	Double	-	PG 13.5 mm - S8	9900105005
SPH4-HP	0 - 14 pH	0 - 60	6	Glass	Glass	Double	-	PG 13.5 mm - S8	9900105006
SPH4-HT	0 - 14 pH	0 - 130	16 @ 25°C	Glass	Glass	Double	-	PG 13.5 mm - S8	9900105007
SPH4-LC	0 - 14 pH	10 - 40	0.5	Glass	Glass	Double	-	PG 13.5 mm - S7	9900105008
SPH4-CR	0 - 14 pH	0 - 60	2	Glass	Glass	Double	-	PG 13.5 mm - S8	9900105016
SPH4-HF	0 - 14 pH	10 - 100	16 @ 100°C	Glass	Glass	Double	1.5	PG 13.5 mm - S8	9900105017
SRH1-WP-SJ-1.5	±1,000 mV	0 - 60	6	PC	-	Single	1.5	BNC	9900105031
SRH1-WP-SJ-6	±1,000 mV	0 - 60	6	PC	-	Single	6	BNC	9900105097
SRH1-WP-DJ	±1,000 mV	0 - 60	6	PC	-	Double	6	BNC	9900105104
SRH1-WP-AU	±2,000 mV	0 - 60	6	PC	-	Single	6	BNC	9900105103
SRH2-WP	±1,000 mV	0 - 60	6	Ероху	-	Single	6	BNC	9900105083
SRH3-WW	±1,000 mV	0 - 80	6	Glass	-	Double	-	PG 13.5 mm - S8	9900105033
SRH4-HT	±2,000 mV	0 - 130	16 @ 130°C	Glass	-	Double	-	PG 13.5 mm - S8	9900105034
PT100 3 wire 12mm	0±100°C	-	0±7	-	-	-	5 (3-wire)	12 mm	9900105061
Pt100 3 wire PG 13.5	0±100°C	-	0±7	-	-	-	5 (3-wire)	PG 13.5 mm	9900105062

pH/ORP probes cal	ble				
Model	Connection	Connected	Cable [Ø 5mm]	Cable length [m]	Code
CE-1		No	COAX RG58	1	9900108001
CE-5		No	COAX RG58	5	9900108003
CE-10	-	No	COAX RG58	10	9900108004
CE-20	-	No	COAX RG58	20	9900108006
CE-10-HT	-	No	Low Noise COAX	10	9900110001
CE-20-HT	- C7 I DNC	No	Low Noise COAX	20	9900110002
CE-1-B	- S7 and BNC	Yes	COAX RG58	1	9900109001
CE-5-B	_	Yes	COAX RG58	5	9900109003
CE-10-B	-	Yes	COAX RG58	10	9900109004
CE-20-B	L	Yes	COAX RG58	20	9900109006
CE-10-HT-B	_	Yes	Low Noise COAX	10	9900110101
CE-20_HT-B	_	Yes	Low Noise COAX	20	9900110102

# Duotek AODD Accessories



Air regulation	kit		
Model	Connection	For use with pumps	Code
	1/4″	from 0007 to 0030	AFAK0030
	1/4	0055 - 0060	AFAK0060
AFAK	3/8"	from 0090 to 0120	AFAK0120
	1/2"	from 0170 to 0400	AFAK0400
	1"	from 0700 to 1000	AFAK1000

Ball valve			
Model	Connection	For use with pumps	Code
	1/8"	from 0007 to 0030	AFBV0030
	1/4"	0055 - 0060	AFBV0060
AFBV	3/8"	from 0090 to 0120	AFBV0120
	1/2"	from 0170 to 0400	AFBV0400
	3/4"	from 0700 to 1000	AFBV1000

Flanges kit			
Model	Size	For use with pumps	Code
	1/2" - DN16	from 0030 to 0060	AFFK0060
	3/4" - DN20	0090 - 0100	AFFK0100
	1" - DN25	0120 - 0170	AFFK0170
AFFK	1"¼ - DN32	0252	AFFK0252
	1"½ - DN40	0400	AFFK0400
	2" - DN50	0700	AFFK0700
	3" - DN80	1000	AFFK1000

Anti-vibration feet kit				
Model	Thread	For use with pumps	Code	
AFVK	M4	0007	AFVK0007	
	M5	0018	AFVK0018	
	IVIO	0030	AFVK0030	
	M6	from 0050 to 0060	AFVK0060	
		from 0090 to 0120	AFVK0120	
		0170 - 0252	AFVK0252	
	M10	0400	AFVK0400	
	M12	0700	AFVK0700	
		1000	AFVK1000	

Pneumatic b	add AFPV		
Model	Note	For use with pumps	Code
AFSS	See above	from 0700 to 1000	AFSS1000

Diaphragm leakage detector		Central Block n	nodification included
Model	Note	For use with pumps	Code
AFFG	See above	from 0700 to 1000	AFFG1000

Electronic batch counter		add AFSC1000 + AFSV1000	
Model	Note	For use with pumps Code	
AFFC	See above	from 0700 to 1000	AFFC1000

Diaphragm lea	akage detector	Central Block modification included	
Model	Note	for use with pumps	Code
AFSG	See ahove	from 0700 to 1000	AFSG1000

Stroke counte	er		add AFSV
Model	Note	For use with pumps	Code
AFSC	See above	from 0700 to 1000	AFSC1000

Accurate syst	em		add AFSA
Model	Note	For use with pumps	Code
AFGC	See above	from 0700 to 1000	AFGC1000

Air regulation kit						
Model	Model Connection Code (threaded)					
	1"	AFBS0160	AFBS0160F			
AFDC	1″1⁄2	AFBS0400	AFBS0400F			
AFBS	2"	AFBS0700	AFBS0700F			
	2"	A EDC 1000	A EDC 1 000E			

Prieumatic va	valve - Sirigle way 3/2				
Model	Connection	For use with pumps Code			
AFPV	1/8"	from 0007 to 0030	AFPV0030		
	1/4"	from 0050 to 0120	AFPV0120		
AFPV	3/8"	0170 - 0252	AFPV0252		
	1/2″	0400 - 0700	AFPV0700		

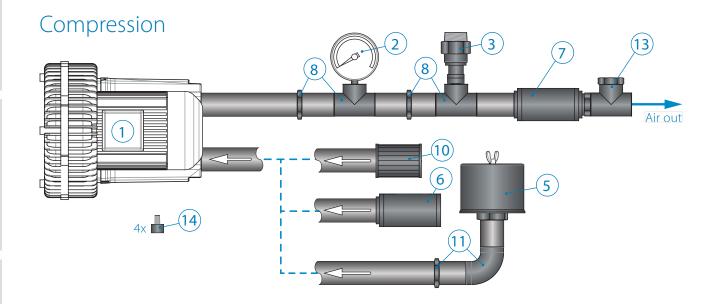
Solenoid valve - single way 3/2				
Model	Connection	Code		
	1/8"	from 0007 to 0030	AFSV0030	
AFSV	1/4"	from 0050 to 0120	AFSV0120	
AFSV	3/8"	0170 - 0252	AFSV0252	
	1/2"	0400 - 0700	AFSV0700	

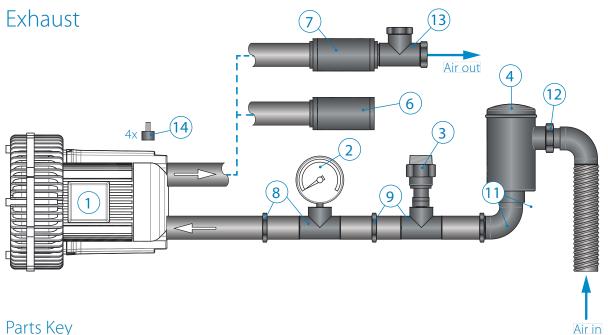
Solenoid valve - for accurate - 3/2					
Model	Connection	Code			
AFCA	1/8"	from 0007 to 0030	AFSA0030		
	1/4"	0060	AFSA0050		
AFSA	3/8"	from 0090 - 0120	AFSA0100		
	1/2"	0170 - 0252	AFSA0250		

Reinforced h	ose		
Model	Size [mm]	For use with pumps	Code
	20	from 0030 to 0060	AFRH0060
	25	0100 - 0120	AFRH0120
AFSV	30	0170	AFRH0170
AFSV	35	0252	AFRH0252
	40	0400	AFRH0400
	50	0700	AFRH0700

Trolley			
Model	Dimension	For use with pumps	Code
A FTT	330x240 mm	from 0007 to 0252	AFTT0252
AFTT	600x280 mm	0700	AFTT0700

## Side Channel Blower Accessories





#### Parts Key

- Side channel blower/exhauster
- Vacuum/pressure gauge 2
- Safety valve
- 4 In-line filter
- 5 Cartridge filter
- 6 Silencer
- In-line silencer
- Vacuum/pressure gauge kit
- 9 Connection valve kit
- 10 Metallic filter
- 11 Kit for cartridge filter
- 12 Kit sleeve + hose (1 mt)
- 13 Check valve
- 14 Anti-vibration pins

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Safety valve	9			
Model	Size	Setting Pressure [bar]	Material	Code
	1⁄4" M	0 - 300		BLSV032AL03
BLSV _	74 IVI	300 - 600		BLSV032AL36
	2" F	100 - 300		BLSV050AL13
		300 - 600	Aluminum	BLSV050AL36
		100 - 200		BLSV100AL12
	4" F	200 - 400		BLSV100AL24
		400 - 600		BLSV100AL36

Safety val	ve installation	kit		
Model	Blower Size	Model	Material	Code
	1″1⁄4			BLKS032032C
DLIKE	1″1⁄2	1"¼ M		BLKS032040C
	2"			BLKS032050C
	2 -	21. 5		BLKS05F050C
BLKS	2" — 2" F Carbon Steel	BLKS05F065C		
	3"	3"F	<del></del>	BLKS08F080C
	4"	411 5		BLKS10F100C
	5″	4" F		BLKS10F125C

In-line filte	r			
Blower size	Size	Code	Material	Code
1″1⁄4		BLIL032PA007		BLIL032PO025
1″1⁄2		BLIL040PA007		BLIL040PO025
2"		BLIL050PA007		BLIL050PO025
2"1/2	Paper 5-7µm	BLIL065PA007	Polyester 25µm	BLIL065PO025
3″	3 / μπ	BLIL080PA007	25μπ	BLIL080PO025
4" short		BLIL10SPA007		BLIL10SPO025
4"		BLIL100PA007		BLIL100PO025

Safety valve	Safety valve					
Blower size	Size	Code	Material	Code		
1″1⁄4		BLIL032SS030		BLIL032SS060		
1″½		BLIL040SS030		BLIL040SS060		
2"	Stainless _ Steel _ 30µm _	BLIL050SS030	Stainless Steel	BLIL050SS060		
2"1/2		BLIL065SS030		BLIL065SS060		
3″	30µm	BLIL080SS030	60µm	BLIL080SS060		
4" short		BLIL10SSS030		BLIL10SSS060		
4"		BLIL100SS030		BLIL100SS060		

In-line	In-line filter		Cartri	Cartridge filter installation kit		
Blower size	Material	Code	Model (PVC)	Code	Model (PVC)	Code
1″1⁄4		BLCF032PA007		BLKC032PN		BLKC032PS
1″1⁄2		BLCF040PA007	Nipple	BLKC040PN		BLKC040PS
2"	Paper	BLCF050PA007		BLKC050PN	Socket	BLKC050PS
2"1/2	5-7μm	BLCF065PA007	90 mm	BLKC065PN	150 mm	BLKC065PS
3″		BLCF080PA007		-		-
4"		BLCF100PA007		BLKC100PN		BLKC100PS

Silencer				
Blower size	Model (Zinc Plated)	Code	Model (Zinc Plated)	Code
1″1⁄4		BLFS032ZPR		BLIS032
1″1⁄2	Final	BLFS040ZPR		BLIS040
2"	Silencer	BLFS050ZPR	In-Line	BLIS050
2"1/2	(internal	BLFS065ZPR	Silencer	BLIS065
3"	mesh)	BLFS080ZPR		BLIS080
4"		BLFS100ZPR		BLIS100

Diffuser				
Туре	Size	Model	Material	Code
	9"	DISC 9 -	EPDM	BLDD09EN
DISC	9	DISC 9	Silicon	BLDD09SN
diffuser	12.5″	DICC 13	EPDM	BLDD12EN
	12.5	DISC 12 -	Silicon	BLDD12SN
Easy fitting	34" BSP	Easy fitting	EPDM	BLAR
	200/250	TUDOLAD 200	EPDM	BLTD03EN
	300/350	TUBOLAR 300 -	Silicon	BLTD03SN
	500/550	TUBOLAR 500 -	EPDM	BLTD05EN
TUBOLAR	300/330	TUBULAR 300	Silicon	BLTD05SN
diffuser	900/950	TUBOLAR 800 -	EPDM	BLTD08EN
	800/850	TUBULAR 800 -	Silicon	BLTD08SN
	1000/1050	TUDOLAD 1000	EPDM	BLTD10EN
	1000/1050	TUBOLAR 1000 -	Silicon	BLTD10SN
NAPOW diff.	9″	NAPOW 9	EPDM	BLND09EN

	Check valve (brass)	Kit sleeve + hose (1 m)
Blower size	Code	Code
1"1⁄4	BLCV032BR	BLSH032
1"1/2	BLCV040BR	BLSH040
2"	BLCV050BR	BLSH050
2"1/2	BLCV065BR	BLSH065
4"	BLCV100BR	BLSH100

Filter valve		Long acces	ssories hold	er kit
Size	Code	Size	Model	Code
2" F	BLFV05F	2"	2"M - 2"F	BLAL05005F
3" F	BLFV08F	2"1/2	2"½ M - 2" F	BLAL06505F
4" F	BLFV10F	4"	4"M - 4"F	BLAL10010F

Anti-vibration pins		Indoor filte	er	
Size	Code	Blower size	Material	Code
6 mm	BLAV06	1"1/4	- Zinc Plated 100 μm	BLIF032ZP100
8 mm	BLAV08	1″1⁄2		BLIF040ZP100
10 mm	BLAV10	2"		BLIF050ZP100
12 mm	BLAV12	2"1/2		BLIF065ZP100

Pressure/vacuum gauge			Reverse flow valve	
Size	Model	Code	Model	Code
Ø 63 mm	Pressure	BLMN06306	5w - 2p	BLRV52
	Vacuum	BLVG06306	5w - 3p	BLRV53

# Your Choice, Our Commitment

People choose to do business with SEKO for one or more reasons, but ultimately it is their choice, and therefore they merit our commitment. "Our commitment" is total and not only to our customers, but also to each other and the Company's to its employees.

#### Vision

TO BE YOUR PARTNER OF CHOICE FOR DOSING SOLUTIONS, GLOBALLY

SEKO, is a passionate, dedicated Global Family of Professionals. We listen to each of our Partners and are committed to deliver the right solution in the Hygiene, Water Treatment and Industrial Process markets.

### Values

## MUTUAL RESPECT, QUALITY AND SPIRIT OF COLLABORATION

#### MUTUAL RESPECT

Mutual Respect because doing business is about being able to generate trust between Customer and Supplier. We'll deliver against our commitments, on time and in a transparent fashion, so you know can plan for your own business needs.

**QUALITY** 

Quality for SEKO is a 360° reality. It covers not only the design, development, production and delivery of our products and solutions but it runs through the core professionalism of our teams.

SPIRIT OF COLLABORATION

Spirit of Collaboration is fundamental to our success and SEKO prides itself on how we work as a worldwide team, blending multiple country teams and functions to bring solutions to a Customer request or market need from an idea to the real world in very short time, across our global presence and beyond.



# 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 renowned 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



SEKO reserves the right to amend and change specifications without prior notice. All pictures shown are for illustration purpose only. Actual product may vary due to product enhancement. Published data may be subject to change.

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