

# seko

## Duotek

Air operated double diaphragm pumps



Your Choice,  
Our Commitment

## Air operated double diaphragm pumps

SEKO AODD pumps have long been recognized as the most flexible pumps of the industry for handling difficult liquids at relatively low pressures and flows. The range of applications is virtually limitless. Our AODD pumps come in many sizes and choices of 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.



### Duotek

Air operated double diaphragm pumps made in PP, PVDF, ALUMINIUM, SS AISI 316, POMc with a flow rate from 8 l/min to 1000 l/min and connection from 1/4" to 3".



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### Duotek Food

Air operated double diaphragm pumps made in SS AISI 316 electro-polished and PP food grade (P7) with a flow rate from 8 l/min to 1.000 l/min and Tri-Clamp Connection.



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### Duotek Atex

Air operated double diaphragm pumps, ATEX certified for zone 1. Made in PP+CF, PVDF+CF, ALUMINIUM, SS AISI 316, POMc+CF with flow rate from 8 l/min to 1000 l/min and connection from 1/4" to 3".



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### Duotek Accurate

Double diaphragm pumps with remote control made in PP, PVDF, ALUMINIUM, SS AISI 316, POMc with flow rate from 8 l/min to 700 l/min and connection from 1/4" to 2".



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### Duotek Drum

Air operated double diaphragm pumps with special features to empty drums and tanks. made in PP, PVDF, ALUMINIUM, SS AISI 316, POMc with flow rate from 8 l/min to 160 l/min and connection from 1/4" to 1".



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### Duotek Twin

Air operated double diaphragm pumps with special features with double inlet/outlet. Made in PP, PVDF, ALUMINIUM, SS AISI 316, POMc with flow rate from 8 l/min to 700 l/min and connection from 1/4" to 2".



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### Damper

Pneumatic, automatic pulsation dampers made in PP, PVDF, ALUMINIUM, SS AISI 316, POMc, applicable to all sizes of pump. Available also in ATEX or FOOD version.



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## Technical Features

Un-balanced pilot spool, precisely controls positioning of the main power spool to eliminate stalling and increase efficiency

Long-lasting diaphragm construction ensures a consistent performance and a longer operating life

Special exhaust chamber with double silencer to expand diffusion passages, reduce the icing and assure low noise level

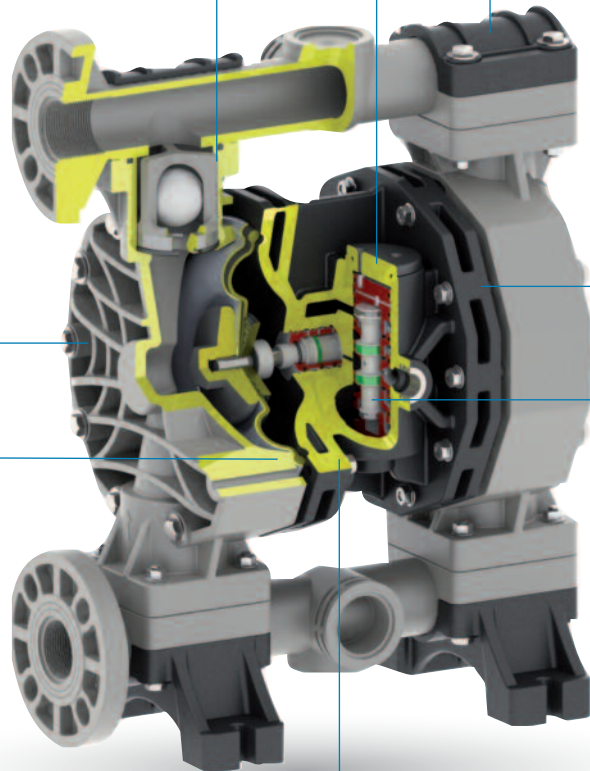
Special pinch clamping, design to minimize wear and increase life of the diaphragm, and provides a uniform seal to avoid leak

All bolted design for an effective sealing to extended leak-proof service

Solid polypropylene air chambers and plastic air valve for maximum chemical resistance in highly corrosive environments


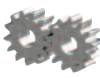


Acetalic shuttle ensures long valve life, auto-lubricated material

Pneumatic exchanger is easily externally accessible for a quick inspection



## Features & Benefits

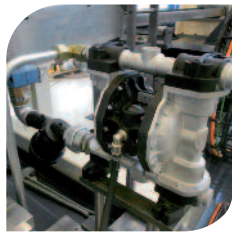
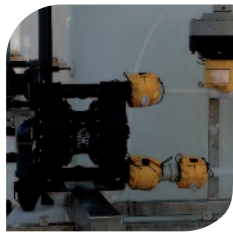
Variable flow and head pressures, easy to adjust, without sophisticated controls	100% wet tested after final assembly: deadheading, priming, and sealing	ATEX certifications in all versions: Conductive plastic pumps available	Portable and compact for multi-location use, optionally with trolley	All plastic air system: strong and corrosion-resistant in harsh environments.
Handles liquids with solids 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.	Dry-run without damaging the pump or system: seal-less design.	Efficient performance: high flow rates through optimal casing designs.
Self-priming dry up to 6 meters: works in suction lift applications.	Special air exhaust: Designed to operate at low noise levels.	Efficient air distribution design: low air consumption.	Fully submersible: can be submerged completely according to fluid compatibility.	Can customize to specific applications: multiple porting options available along with interface options.
All Bolted Construction: provides maximum leak resistance and safety.	Service ability: easily maintained and quickly without any special tools.	Safe "dead head" function, against closed discharge, without pump damage.		

Pump type	 AODD	 CENTRIFUGAL	 LOBE	 GEAR	 SCREW	 PERISTALTIC	 PISTON
Variable Flow & Head Control	✓	✓	✓	✓	!	!	✓
Deadhead Safely	✓	✓	!	!	!	!	!
Dry-Running	✓	X	X	X	X	X	X
Dry Self-Priming	✓	X	X	✓	X	✓	!
No Mechanical Alignment	✓	X	X	X	X	X	X
No Electrical Installation	✓	X	X	X	X	X	X
Portability	✓	✓	!	!	!	✓	!
Submersible	✓	!	X	X	X	X	!
Seal-less	✓	!	!	!	!	!	!
Cavitation Tolerance	✓	X	!	!	✓	!	!
Low Shear & Degradation	✓	X	✓	✓	!	!	!

✓ = Suitable ! = Limitations X = Not Recommended

## Markets & Applications

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



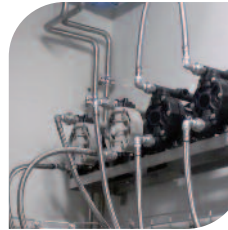
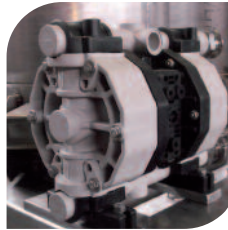
AUTOMOTIVE

AGRICULTURE

MECHANICAL

CAR WASHING

CHEMICAL



FOOD



BIODIESEL

CERAMIC

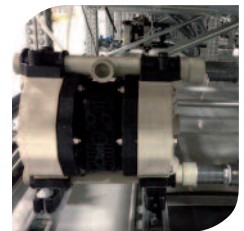
TEXTILE  
AND LEATHER

PAINT  
AND VARNISH

NAVAL AND  
PETROCHEMICAL



PULP AND  
PAPER



MINING

PHARMACEUTICAL  
AND COSMETIC

GALVANIC

OIL & GAS

WATER  
TREATMENT

PRINTING  
INKS



# Duotek

Air operated double diaphragm pumps

made in PP, PVDF, ALUMINIUM, SS AISI 316, POMc

Flow rate from 8 l/min to 1000 l/min

Connection from 1/4" to 3"

ATEX certification for zone 2

EX II 3/3 GD c IIB T135°C

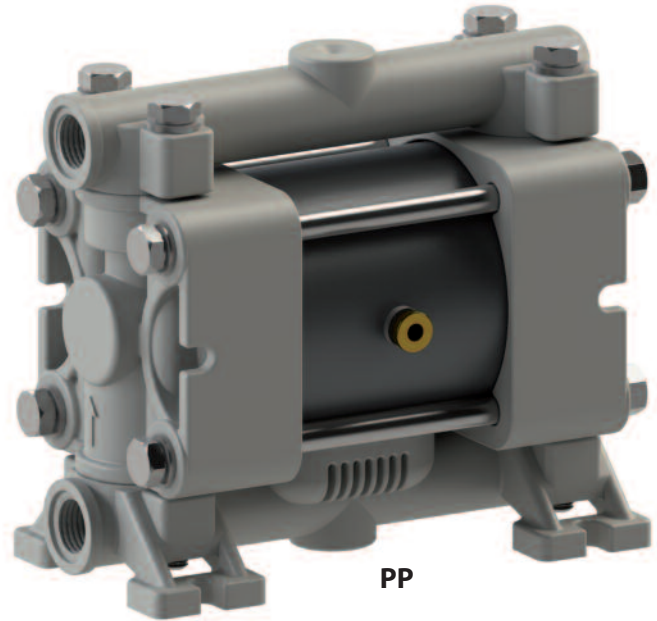


# Duotek AF7

 EX II 3/3 GD c IIBT 135°C

## Technical data

Fluid connections	1/4" BSP
Air connection	4 mm
Max flow rate	8 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	3 m
Max suction lift wet	9.8 m
Max solid passing	2.5 mm
Noise level	62 dB
Max viscosity	6000 cps



PP



PVDF+CF



POMc

# Duotek AF18

 EX II 3/3 GD c IIBT 135°C

## Technical data

Fluid connections	3/8" BSP
Air connection	6 mm
Max flow rate	20 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	3 mm
Noise level	65 dB
Max viscosity	12000 cps



PP



PVDF+CF



POMc



SS316

# Duotek AF30

 EX II 3/3 GD c IIBT 135°C

## Technical data

Fluid connections	1/2" BSP
Air connection	6 mm
Max flow rate	35 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	65 dB
Max viscosity	15000 cps



PP



PVDF+CF



POMc



SS316

# Duotek AF50

 EX II 3/3 GD c IIBT 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	6 m
Max suction lift wet	9.8 m
Max solid passing	3.5 mm
Noise level	68 dB
Max viscosity	20000 cps



PP



PVDF+CF



ALU



SS316



# Duotek AF65

 EX II 3/3 GD c IIBT 135°C

## Technical data

Fluid connections	1/2" BSP
Air connection	3/8" BSP
Max flow rate	70 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	3.5 mm
Noise level	72 dB
Max viscosity	25000 cps



# Duotek AF100

 EX II 3/3 GD c IIBT 135°C

## Technical data

Fluid connections	3/4" BSP
Air connection	3/8" BSP
Max flow rate	110 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	3.5 mm
Noise level	72 dB
Max viscosity	25000 cps



# Duotek AF160

 EX II 3/3 GD c IIB T 135°C

## 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	35000 cps



PP



PVDF+CF



ALU



SS316

# Duotek AF250

 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	35000 cps



PP



PVDF+CF



ALU



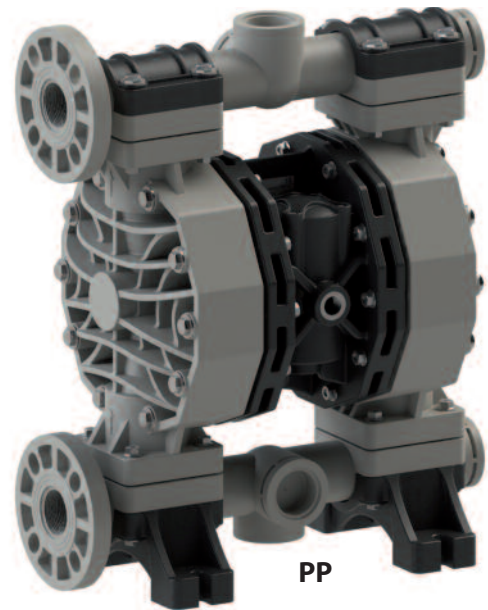
SS316

# Duotek AF400

 EX II 3/3 GD c IIB T 135°C

## Technical data

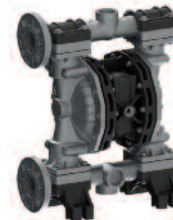
Fluid connections	1" 1/2 BSP <b>DN 40</b>
Air connection	3/4" BSP
Max flow rate	380 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	8 mm
Noise level	78 dB
Max viscosity	40000 cps



PP



PVDF+CF



ALU



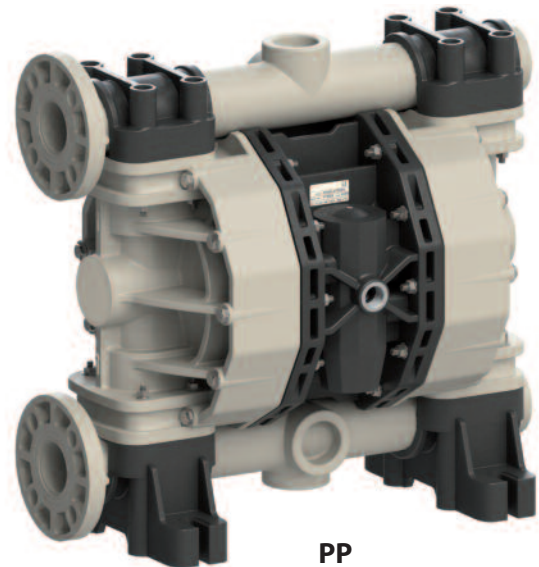
SS316

# Duotek AF500

 EX II 3/3 GD c IIB T 135°C

## Technical data

Fluid connections	1" 1/2 BSP <b>DN 40</b>
Air connection	3/4" BSP
Max flow rate	550 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	50000 cps



PP



PVDF+CF



ALU



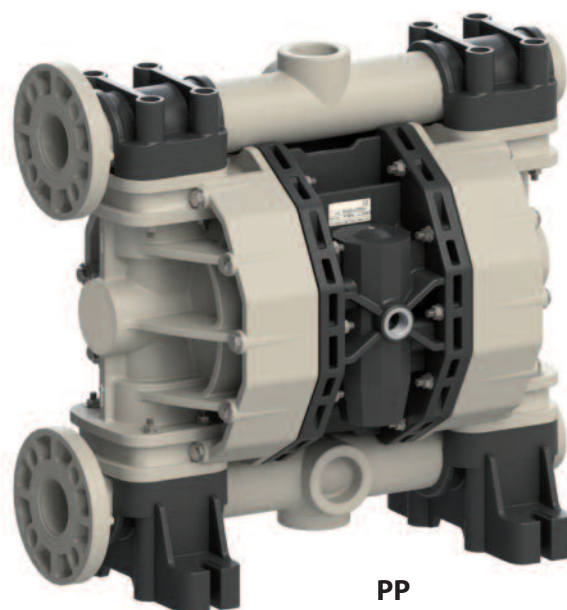
SS316

# Duotek AF700

 EX II 3/3 GD c IIB T 135°C

## Technical data

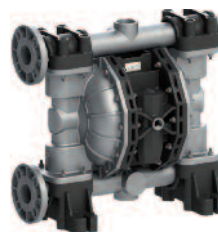
Fluid connections	2" BSP <b>DN 50</b>
Air connection	3/4" BSP
Max flow rate	700 l/min
Max air pressure	8 bar
Max delivery head	80 m
Max suction lift dry	5 m
Max suction lift wet	9.8 m
Max solid passing	8.5 mm
Noise level	78 dB
Max viscosity	50000 cps



**PP**



**PVDF+CF**



**ALU**



**SS316**

# Duotek AF1000

 EX II 3/3 GD c IIB T 135°C

## Technical data

Fluid connections	3" BSP <b>DN 80</b>
Air connection	3/4" BSP
Max flow rate	1050 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	10 mm
Noise level	78 dB
Max viscosity	55000 cps



**PP**



**PVDF+CF**



**ALU**



**SS316**

# Duotek Food



## Air operated double diaphragm pumps

made in SS316 electro-polished and PP food grade (P7)

Flow rate from 8 l/min to 1000 l/min

Tri-Clamp Connection

ATEX certification

**Atex zone 2 - EX II 3/3 GD c IIB T 135°C**

**Atex zone 1 - EX II 2/2 GD c IIB T 135°C**

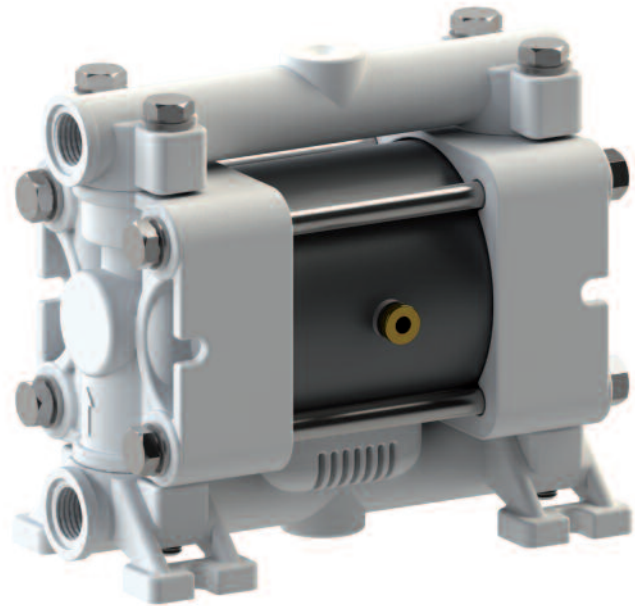


## Duotek Food AF7

**FDA**  
compliant

### Technical data

Fluid connections	1/4" BSP
Air connection	4 mm
Max flow rate	8 l/min
Max air pressure	8 bar
Max viscosity	6000 cps



**PP FOOD GRADE**

## Duotek Food AF18

**FDA**  
compliant 

### Technical data

Fluid connections	Tri-Clamp 1/2"
Air connection	6 mm
Max flow rate	20 l/min
Max air pressure	8 bar
Max viscosity	12000 cps



**SS316 ELECTRO-POLISHED**

## Duotek Food AF30



### Technical data

Fluid connections	Tri-Clamp 1"
Air connection	6 mm
Max flow rate	35 l/min
Max air pressure	8 bar
Max viscosity	15000 cps



**SS316 ELECTRO-POLISHED**

## Duotek Food AF50



### Technical data

Fluid connections	Tri-Clamp 1"
Air connection	1/4" BSP
Max flow rate	55 l/min
Max air pressure	8 bar
Max viscosity	20000 cps



**SS316 ELECTRO-POLISHED**

## Duotek Food AF100



### Technical data

Fluid connections	Tri-Clamp 1"
Air connection	3/8" BSP
Max flow rate	110 l/min
Max air pressure	8 bar
Max viscosity	25000 cps



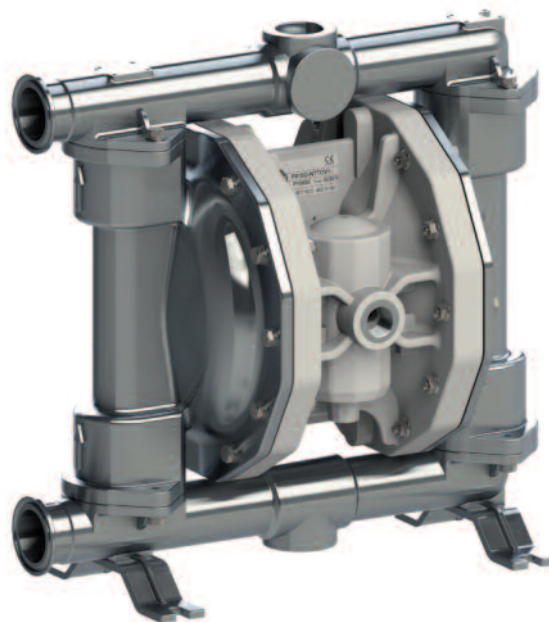
**SS316 ELECTRO-POLISHED**

## Duotek Food AF160



### Technical data

Fluid connections	Tri-Clamp 1 1/2"
Air connection	1/2" BSP
Max flow rate	170 l/min
Max air pressure	8 bar
Max viscosity	35000 cps



**SS316 ELECTRO-POLISHED**



## Duotek Food AF400



### Technical data

Fluid connections	Tri-Clamp 2"
Air connection	3/4" BSP
Max flow rate	380 l/min
Max air pressure	8 bar
Max viscosity	40000 cps



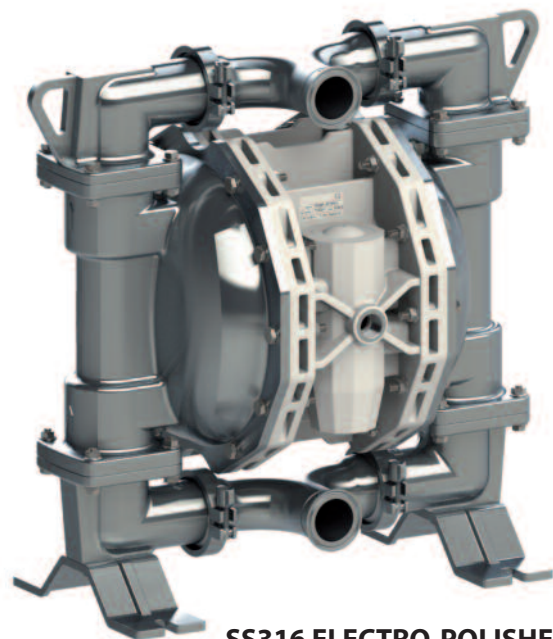
**SS316  
ELECTRO-POLISHED**

## Duotek Food AF500



### Technical data

Fluid connections	Tri-Clamp 2"
Air connection	3/4" BSP
Max flow rate	550 l/min
Max air pressure	8 bar
Max viscosity	50000 cps



**SS316 ELECTRO-POLISHED**

# Duotek Food AF700



## Technical data

Fluid connections	Tri-Clamp 2"1/2
Air connection	3/4" BSP
Max flow rate	700 l/min
Max air pressure	8 bar
Max viscosity	50000 cps



**SS316  
ELECTRO-POLISHED**

# Duotek Food AF1000



## Technical data

Fluid connections	3" BSP
Air connection	3/4" BSP
Max flow rate	1050 l/min
Max air pressure	8 bar
Max viscosity	55000 cps



**SS316  
ELECTRO-  
POLISHED**

# Special pumps

Air operated double diaphragm pumps

with special features

DUOTEK ATEX certification zone1 ATEX

ACCURATE DUOTEK remote control

DRUM DUOTEK to empty drums and tanks

TWIN DUOTEK with double inlet/outlet




# Special Pumps Duotek Atex

## Technical data

Appropriate submissions have been made to Bureau Veritas to confirm that SEKO AODD pumps and pulsation dampers conform to the ATEX Directive 94/9/CE and are constructed with materials for zone 1 certification.

## European ATEX Directive 94/9/CE

 II 2/2 GD c IIB T 135°C

 Safety symbols DIN 40012 Annex A

**II** Equipment Group surface

**2/2** Equipment category 2  
Level of protection - High level - Zone 1

**GD** Type of explosive atmospheres (group II)  
G = Gas vapours  
D = Dust

**c** Equipment protection constructional safety (EN 13463-5).

**IIB** Group of gas IIB Ethylene. Exclusion of the following products Hydrogen, acetylene, carbon disulphide.

**T 135° (T4)**

Temperature class (group II):  
Maximum surface temperature [°C] 135

## Pumps

AF7; AF18; AF30; AF50; AF65;  
AF100; AF160; AF250; AF400;  
AF500; AF700; AF1000

## Main applications

- Petrol-Chemical Industry
- Painting industry
- Flexographic industry
- Automotive industry
- Food industry



PP + CF 



POMc + CF 



PVDF + CF 



ALU 



SS 

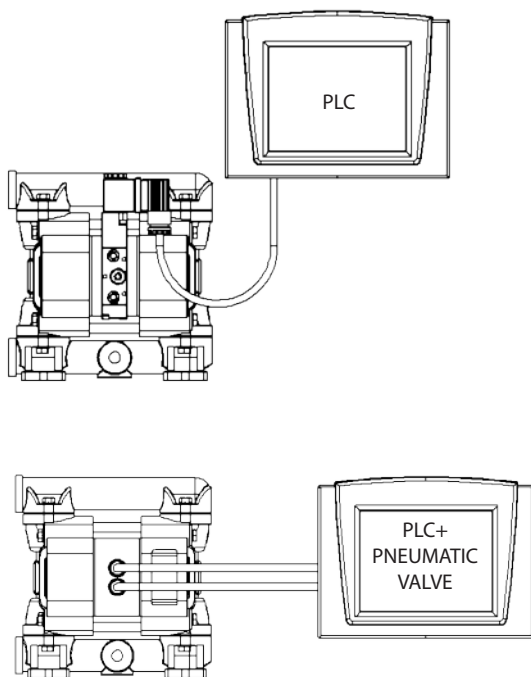
## Special Pumps

## 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.

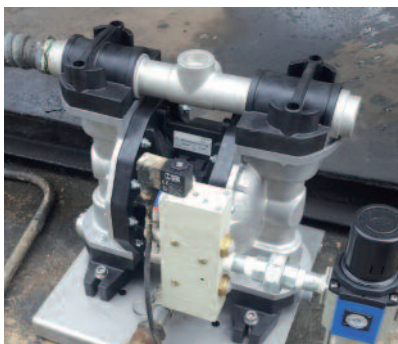
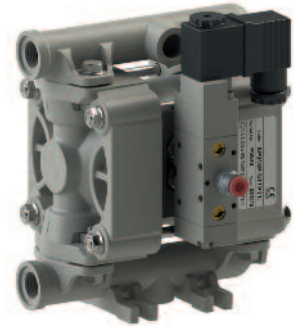


## Pumps

AF7; AF18; AF30; AF50;  
AF65; AF100; AF160;  
AF250

## Main applications

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



## Special Pumps

# Drum Duotek

### Technical data

DRUM DUOTEK are designed for emptying drums and containers, and provide 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 mounted on the drum with its feet. The drum will be completely emptied with a suction pipe.

### Main applications

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

### Pumps

AF18; AF30; AF50;  
AF65; AF100; AF160



## Special Pumps

# Twin Duotek

### Technical data

TWIN DUOTEK 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, preventing unwanted mixing.

### Main applications

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

### Pumps

AF18; AF30;  
AF50; AF65;  
AF100; AF160;  
AF250; AF400



# Damper

Pneumatic, automatic  
pulsation dampers

made in PP, PVDF, ALUMINIUM, SS AISI 316, POMc

Applicable to all size of pumps

Available also in ATEX or FOOD version

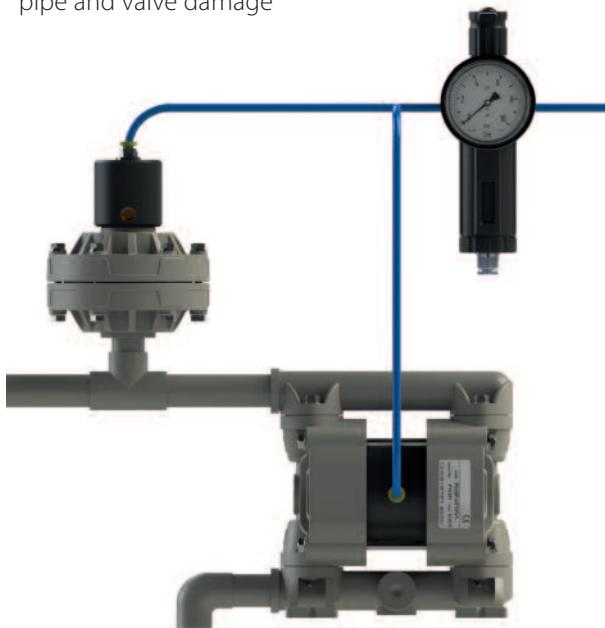


# Damper

The active pulsation damper is the most efficient way to remove pressure variations on the discharge of the pump. SEKO pulsation damper work actively with compressed air and a diaphragm, automatically setting the correct pressure to minimize the pulsations. Pulsation dampers require minimum 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

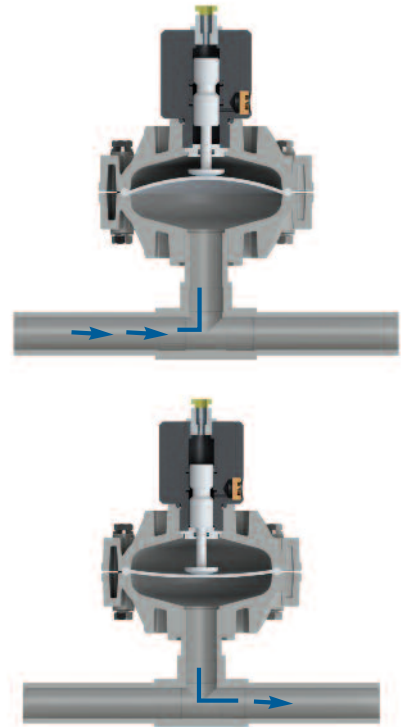


## How it works

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 giving a smooth flow.



Significant Pulsation Reduction with an average 70% - 80% pulsation reduction in high back pressure applications.



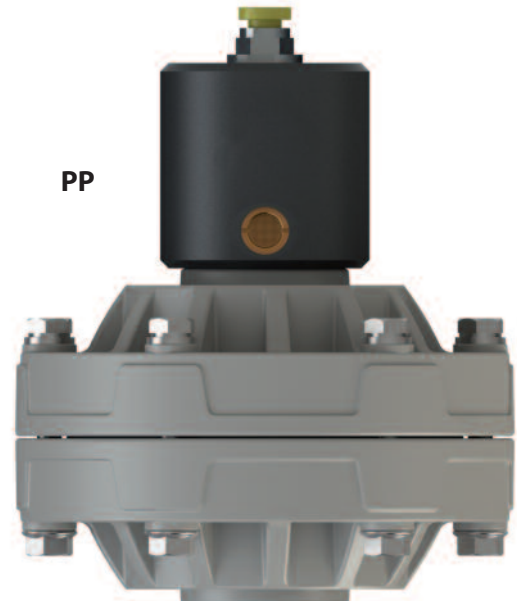


# Damper DAF20

## Technical data

Fluid connections	3/4"
Air connection	6 mm
Max air pressure	8 bar

APPLY TO  
**7 - 18 - 30**



**PVDF+CF**



**POMc**



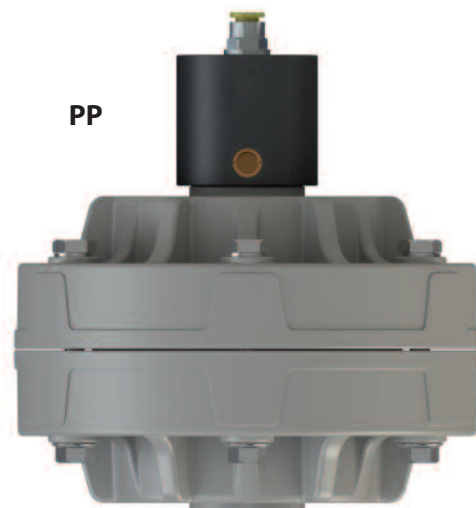
**SS**

# Damper DAF25

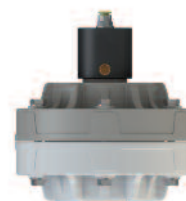
## Technical data

Fluid connections	1"
Air connection	8 mm
Max air pressure	8 bar

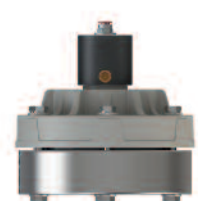
APPLY TO  
**50 - 65 - 100**



**PVDF+CF**



**POMc**



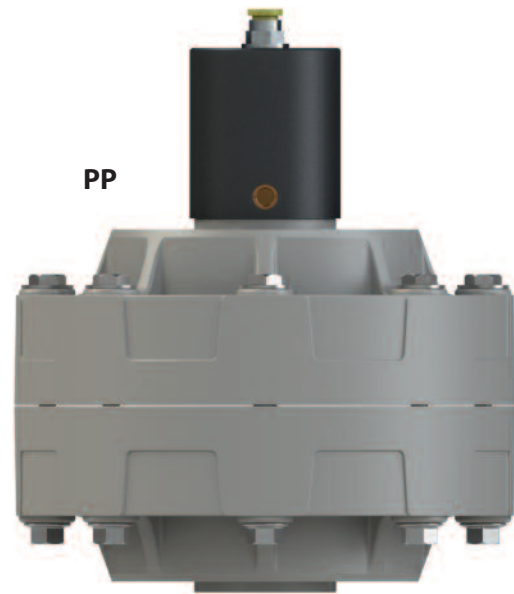
**SS**

# Damper DAF40

## Technical data

Fluid connections	1"1/2
Air connection	10 mm
Max air pressure	8 bar

APPLY TO  
160 - 250 - 400



PVDF+CF



POMc



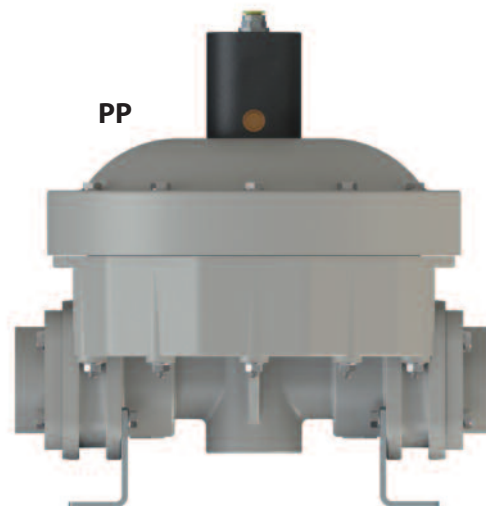
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# Damper DAF50

## Technical data

Fluid connections	2"
Air connection	12 mm
Max air pressure	8 bar

APPLY TO  
500 - 700 - 1000



PVDF+CF



ALU



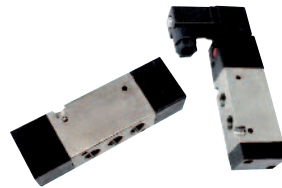
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# Accessories



## AIR REGULATION KIT

Adjust and set air pressure and air flow rate with a filter regulator, pressure gauge and air valve unit.



## SWITCH VALVES

Remotely start and stop with a solenoid or pneumatic valve for the air pump.



## STROKE COUNTER

Counts the number of strokes, connected to a control. It allows various types of monitoring.



## DIAPHRAGM FAILURE DETECTION FLUI-GUARD

The Electronic Leak Detector provides a signal via warning lights, an audible alarm, and the pump can be shut down.



## PNEUMATIC OR ELECTRONIC BATCH CONTROL

Pneumatic and electronic batcher can control any SEKO AODD pump allowing you to set the length of a cycle.



## BASKET STRAINER FILTERS IN PP

Installed in the suction of the pumps, protects them from suspended solids and impurity.



## INOX TROLLEY

Allows pumps to be transportable



## ANTI VIBRATION FEET KIT

Reduces physical vibration from AODD pump operation.



## FLANGE CONNECTION KIT

Adapt a pump from BSP type connection to flanges with this kit.

# Your Choice, Our Commitment

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

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



For more information about our portfolio, worldwide locations, approvals, certifications, and local representatives, please visit [www.seko.com](http://www.seko.com)

As part of a process of on-going product development, SEKO reserves the right to amend and change specifications without prior notice. Published data may be subject to change.

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The SEKO logo, consisting of the word "seko" in a bold, lowercase, blue sans-serif font. The letter 's' is particularly thick and stylized. The logo is positioned in the bottom right corner of the page.

# seko