





Fluimac came into existence in 2012 and was established in the Varese area in Italy. This young, dynamic and innovative company specialises in providing pump solutions using their newly developed designs of pump product ranges.

With their extensive knowledge, experience and expertise, in the Italian and International markets, Fluimac is well equipped to offer not only reliable, high quality products but also a staff infrastructure providing its customers with the benefits of total flexibility, coupled with fast service, speedy deliveries and a superb after sales service.

The Fluimac policy is based on excellent customer service and a network of efficient and knowledgeable distributors who ensure the customer receives the best possible attention at all times. The company is continually researching new solutions and is dedicated to the constant improvement of their product ranges. Highly trained personnel provide our customers with the guarantees of quality, efficiency and a high degree of technical ability and support.

Our experience, serving to you!



Fluimac's subsidiary in Singapore



Our Singapore branch was established to strengthen our presence in the fast growing Asian market. Our office takes care of the sales and aftersales, and strongly supports the extensive network of distributors we have in the region. With ready stock in Asia, we have fast delivery capabilities to the region.





The grouping and organisation of Fluimac's, assembly, pump testing and warehousing facilities, along with the rapid stock check process system in place, allows the company to offer an outstanding, fast delivery service for those customers who find themselves in an emergency situation.

We are proud of our 21st century, high tech, automated test facility which allows us to test each and every pump hydrostatically as well as for suction condition, discharge pressure and flow rate tests.

Our technical research and development department are engaged constantly in finding practical solutions using state of the art technology to ensure continuous improvement to our product ranges. The result is that the Italian genius and excellence of Fluimac keeps the company in the forefront and cutting edge of modern day pump innovation.

Our quality, serving to you!



Fluimac's Certificates















CE CONFORMITY











ATEX

ISO 9001:2008

GOST-R RUSSIA

FDA COMPLIANT

EAC CONFORMITY MARKING





Products

Air operated double diaphragm 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. Fluimac 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.



Phoenix







Air operated double diaphragm pumps Realized in:

PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow-rate from 8 lts/min to 1.000 lts/min Connection from 1/4" to 3".



Phoenix Atex







Air operated double diaphragms pumps, ATEX certified for zone 1. Realized in: PP+CF, PVDF+CF, ALUMINIUM, SS AISI 316, POMc+CF Flow-rate from 8lts/min to 1.000 lts/min Connection from 1/4" to 3".



Phoenix Food









Air operated double diaphragms pumps Realized in:

SS AISI 316 electro-polished Flow-rate from 18lts/min to 1.000 lts/min Tri-Clamp Connection.



Special Pump









Air operated double diaphragms pumps with special features:

TWIN PHOENIX with double inlet/outlet DRUM PHOENIX to empty drums and tanks ACCURATE PHOENIX remote control



Damper







Pneumatic, automatic pulsation dampeners

PP, PVDF, ALUMINIUM, SS AISI 316, POMc Applicable to all size of pumps. Available also in ATEX or FOOD version.





Markets & Applications

Fluimac pumps are some of the most versatile pumps on the market. They can be used in a variety of installations in numerous applications











CHEMICAL



FOOD

BIODIESEL











PULP AND PAPER





MINING



GALVANIC

OIL & GAS



WATER TREATMENT

PRINTING INKS





اتور صنعت **ATOORSANA**

Features & Benefits



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.

Dry-run without damaging the pump or system: seal-less design.

Special Air system: lube-free, nonstall, non-freeze.

Efficient air distribution design: low air consumption.

Handled liquids with solids particles: ideal for abrasive and viscous media.

All plastic air system: strong and corrosionresistant in harsh environments.

Efficient performance: high flow rates through optimal casings designs.

Can customize to specific applications: Multiple porting options available along with interface options.

All Bolted Construction: it provides maximum leak resistance and safety.

Variable flow and head pressures, easy to adjust, without sophisticated controls.

Wide Range of sizes and materials suited to variety of conditions and chemicals fluids.

Fully submersible: can be submerged completely according to the fluid compatibility.

Special air exhaust: Designed to operate at low noise levels.

Serviceability: easily maintained and quickly without any special tools.

Self-priming dry up to 6 meters: works in suction lift applications.

Safely "dead head" function, against closed discharge, without pump damage.







ump Operation



1. Suction Cycle

Compressed air fills left inner chamber, causing the opposing diaphragm to create suction, lifting the lower valve ball, pulling in fluid at inlet. Simultaneously, the left chamber is in "Discharge" cycle.



2. Discharge Cycle

Compressed air fills right inner chamber, causing upper valve ball to open and discharge fluid. Simultaneously, the left chamber is in "Suction" cycle.

Installation



Pump installed below head (positive suction)

(when it is necessary to empty completely the container)



Self priming pump installed above head (negative suction)

(pump initially work with dry column without problem)



Pump installed above drum or tank

(with special featuring pump)



Pump installed on hopper for high viscosity liquid

(hopper's height helps the pump to treat the fluid. Air pressure has to be high, Suction tube has to be bigger than pump size)



Submerged pump

(it is necessary to check the chemical compatibility)



Pump installed on a mobile unit

(with a trolley or cart when pump must be often moved)



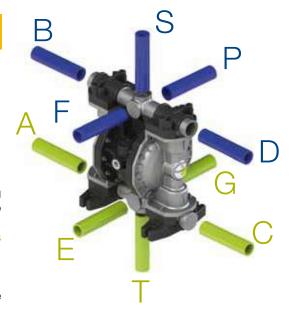


How to read the code



BALLS MATERIAL

CONNECTIONS



ump selection

To select the right **FLUIMAC** pump for your application, the following factors should be considered to achieve economy of operation, long pump life, and minimal maintenance costs:

- The nature of the medium to be pumped, its viscosity, and the solids
- Pumping capacity in relation to the desired output
- Suction and pressure conditions

Considering these parameters, an optimal pump size is selected when the intersection of the intended installation "pressure vs. flow rate" is near the middle section of the curves.

sing Performance Curves

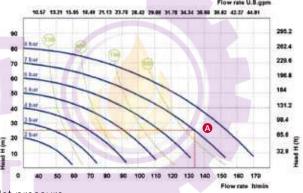
To determine compressed air requirements and proper size for a **FLUIMAC** AODD pump, two elements of information are required:

1 Required Flow Rate

2 Total Delivery Head

As an example, consider a P160 pump performance curve, pumping about 135 l/min at 25mt.

Point A on the performance curve is where the desired Flow Rate and Total Delivery Head points intersect. This point determines compressed air requirements for the particular pump.

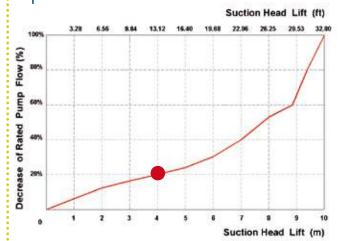


At performance point A, the pump will require approximately 7 Bar air inlet pressure.

To arrive at this figure, follow the solid blue curve to the left to read the air pressure rating in BAR.

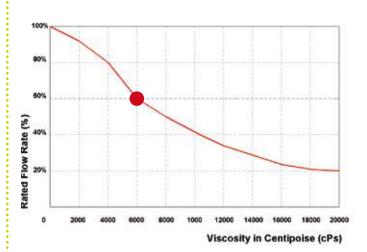
By looking at the nearest green curve, it is determined the pump will require approximately 900 nl/min (Normal Liter per minute) of air consumption.

Specified Suction Lift



With a suction lift of 4 mt, pump rate decreases by approximately 20%. Valid for pumps 3/4" and larger; data varies with pump configuration.

Viscous Liquids Performance Data



During the conveyance of a fluid with a viscosity of 6000cPs, the pump rate decreases to 60% of its rated value (100% = water). Valid for 3/4" pumps & larger.











Air operated double diaphragms pumps Realized in: PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow-rate from 8lts/min to 1.000 lts/min Connection from 1/4" to 3". ATEX certification for zone 2 EX II 3/3 GD c IIB T135°C















Technical data

Fluid connections: 1/4" BSP Air connection: 4 mm Max flow-rate: 8 lt/min Max air pressure: 8 Bar Max delivery head: 80 mt Max Suction Lift Dry: 3 mt Max Suction Lift Wet: 9,8 mt Max Solid passing: 2,5 mm Noise level: 62 dB

Displacement for cycle: 8 cc

Max Viscosity: 6.000 cps

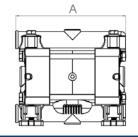
← EX II 3/3 GD c IIB T 135°C

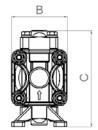
Performance Flow rate U.S.gpm 0.26 0.53 0.79 1.85 2.11 1.32 295.2 8 bar 262.4 7 bar 229.6 6 bar 196.8 50 164 131.2 3 bar 30 98.4 20 Head H (m) 10 Flow rate It/min Air supply pressure Air consumption Ntt/min

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

Dimensions

	PP	PVDF	POMc
A (mm)	129	129	129
B (mm)	68	68	68
C (mm)	112	112	112
Weight kg	0,9	0,7	0,9
MAX Temperature	65°C	95°C	95°C





MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0007	P = PP KC = PVDF+CF O = POMc	NT = NBR+PTFE	T = PTFE S = SS	K = PVDF O = POMc	:	1 = BSP 5 = NPT	- = zone 2	AB = STANDARD









Performance

PVDF+CF



POMc



AISI 316



Technical data

Fluid connections: 3/8" BSP Air connection: 6 mm Max flow-rate: 20 lt/min Max air pressure: 8 Bar

Max delivery head: 80 mt

Max Suction Lift Dry: 6 mt

Max Suction Lift Wet: 9,8 mt Max Solid passing: 3 mm

Noise level: 65 dB

Displacement for cycle: 30 cc

Max viscosity: 12.000 cps

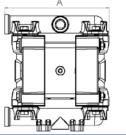
Flow rate U.S.gpm 0.53 1.06 4.76 5.28 4.23 295.2 262.4 229.6 196.8 164 131.2 3 bar 98.4 2 bar Hosen H 10 Flow rate It/min Air supply pressure Air consumption Nlt/min

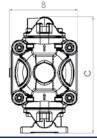
The curves and performance values refer to pumps with submerged suction and a free delivery outletwith water at 20° C, and vary according to the construction material.

🨓 EX II 3/3 GD c IIB T 135°C

Dimensions

	PP	PVDF	POMc	AISI 316
A (mm)	146	146	146	148
B (mm)	96	96	96	92
C (mm)	164	164	164	153
Weight kg	1,1	1,4	1,1	2,1
MAX Temperature	65°C	95°C	95°C	95°C





MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0018	P = PP KC = PVDF+CF O = POMc S = SS	: NT = NBR+PTFF	T = PTFE S = SS	K = PVDF O = POMc	:	1 = BSP 5 = NPT	- = zone 2	AB = STANDARD









PVDF+CF



POMc



AISI 316



Technical data

Fluid connections: 1/2" BSP Air connection: 6 mm 35 lt/min Max flow-rate: Max air pressure: 8 Bar Max delivery head: 80 mt Max Suction Lift Dry: 5 mt Max Suction Lift Wet: 9,8 mt Max Solid passing: 3,5 mm

Noise level: 65 dB Displacement for cycle: 50 cc

Max Viscosity: 15.000 cps

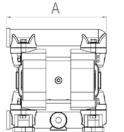
🨓 EX II 3/3 GD c IIB T 135°C

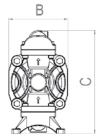
Performance Flow rate U.S.gpm 1.32 7.93 9.25 295.2 262.4 7 bar 229.6 6 bar 196.8 5 bar 164 131.2 3 bar 98.4 2 bar Head H (m) 10 32.8 10 Flow rate It/min Air consumption Nlt/min Air supply pressure

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

Dimensions

	PP	PVDF	POMc	AISI	
A (mm)	177	177	177	182	
B (mm)	105	105	105	104	
C (mm)	183	183	183	190	
Weight kg	1,4	1,7	1,4	2,4	
MAX Temperature	65°C	95°C	95°C	95°C	





MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0030	KC = PVDF+CF 0 = POMc	:	T = PTFE S - SS	KC = PVDF+CF O = POMC S - SS	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	- = zone 2	AB = STANDARD













ALU



AISI 316



Technical data

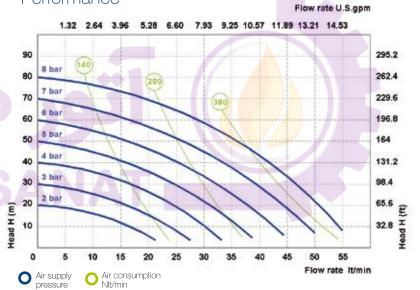
Fluid connections: 1/2" BSP 1/4" BSP Air connection: Max flow-rate: 55 lt/min Max air pressure: 8 Bar Max delivery head: 80 mt Max Suction Lift Dry: 6 mt Max Suction Lift Wet: 9,8 mt Max Solid passing: 3,5 mm Noise level: 68 dB

Displacement for cycle: 85 cc

Max Viscosity: 20.000 cps

🨓 EX II 3/3 GD c IIB T 135°C

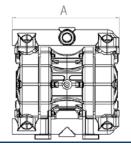
Performance

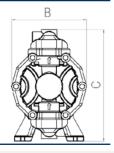


The curves and performance values refer to pumps with submerged suction and a free delivery outletwith water at 20°C, and vary according to the construction material.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	222	222	225	225
B (mm)	156	156	156	156
C (mm)	233	233	230	230
Weight kg	4	4,5	5	6
MAX Temperature	65°C	95°C	95°C	95°C





MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0050	KC = PVDF+CF A = ALU	:	T = PTFE S = SS	P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	- = zone 2	AB = STANDARD









ALU



AISI 316

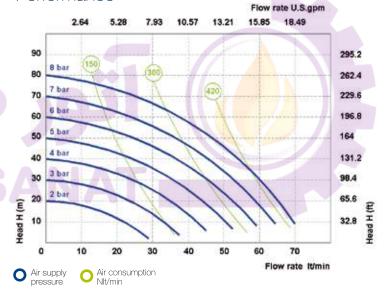


Technical data

Fluid connections: 1/2" BSP 3/8" BSP Air connection: Max flow-rate: 70 lt/min Max air pressure: 8 Bar Max delivery head: 80 mt Max Suction Lift Dry: 6 mt Max Suction Lift Wet: 9,8 mt Max Solid passing: 3,5 mm Noise level: 72 dB Displacement for cycle: 100 cc

Max Viscosity: 25.000 cps

Performance

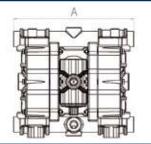


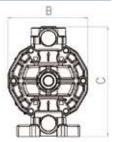
The curves and performance values refer to pumps with submerged suction and a free delivery outletwith water at 20°C, and vary according to the construction material.

🨓 EX II 3/3 GD c IIB T 135°C

Dimensions

	PP	PVDF	ALU	AISI	
A (mm)	265	265	265	250	
B (mm)	175	175	175	175	
C (mm)	245	245	245	250	
Weight kg	6,5	7	7	9	
MAX Temperature	65°C	95°C	95°C	95°C	





MODEL	. CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0065	P = PP KC = PVDF+CF A = ALU S = SS	: M = SANTOPRENE	S = SS D = EPDM N = NBB	P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE		1 = BSP 2 = FLANGED 5 = NPT	- = zone 2	AB = STANDARD











ALU



AISI 316



Technical data

Fluid connections: 3/4" BSP 3/8" BSP Air connection: Max flow-rate: 110 lt/min Max air pressure: 8 Bar Max delivery head: 80 mt Max Suction Lift Dry: 6 mt Max Suction Lift Wet: 9,8 mt Max Solid passing: 3,5 mm Noise level: 72 dB

Displacement for cycle: 100 cc

Max Viscosity: 25.000 cps

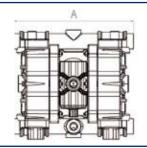
🨓 EX II 3/3 GD c IIB T 135°C

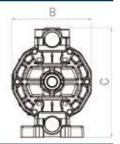
Performance Flow rate U.S.gpm 2.64 6.28 7.93 10.67 13.21 15.85 18.49 21.13 23.78 26.42 29.06 295.2 8 bar 262.4 7 bar 229.6 6 bar 196.8 164 5 bar 131.2 40 98.4 65.6 Head H (m) 110 100 Air supply Air consumption Flow rate It/min Nlt/min

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

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	265	265	265	250
B (mm)	175	175	175	175
C (mm)	245	245	245	250
Weight kg	6,5	7	7	9
MAX Temperature	65°C	95°C	95°C	95°C





MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0100	P = PP KC = PVDF+CF A = ALU S = SS	: M = SANTOPRENE	S = SS D = EPDM N = NBR	P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE		1 = BSP 2 = FLANGED 5 = NPT	- = zone 2	AB = STANDARD





PP



PVDF+CF



ALU



AISI 316



Technical data

Fluid connections: 1" BSP 1/2" BSP Air connection:

170 lt/min Max flow-rate:

Max air pressure: 8 Bar

Max delivery head: 80 mt

Max Suction Lift Dry: 6 mt

Max Suction Lift Wet: 9,8 mt

Max Solid passing: 7,5 mm

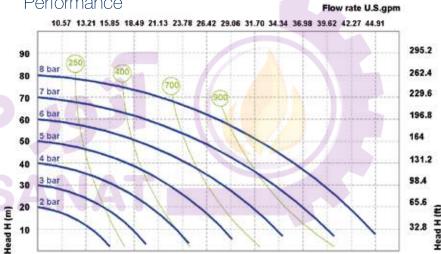
Noise level: 75 dB

Displacement for cycle: 330 cc

Max Viscosity: 35.000 cps



Performance



Air supply

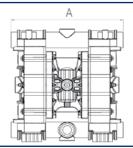
Air consumption Nlt/min

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

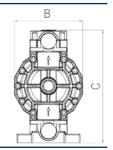
160 Flow rate It/min

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	370	370	370	360
B (mm)	222	222	222	222
C (mm)	370	370	364	346
Weight kg	15	16	16	20
MAX Temperature	65°C	95°C	95°C	95°C



110 120 130 140



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0160	KC = PVDF+CF	M = SANTOPRENE	T = PTFE S = SS D = FPDM	P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	- = zone 2	AB = STANDARD



PP





PVDF+CF



ALU



AISI 316



Technical data

Fluid connections: 1" 1/4 BSP

1/2" BSP Air connection:

Max flow-rate: 250 lt/min

Max air pressure: 8 Bar

Max delivery head: 80 mt

Max Suction Lift Dry: 6 mt

Max Suction Lift Wet: 9,8 mt

Max Solid passing: 7,5 mm

Noise level: 75 dB

Displacement for cycle: 330 cc

Max Viscosity: 35.000 cps

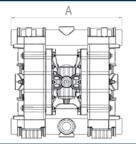


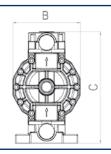


The curves and performance values refer to pumps with submerged suction and a free delivery outletwith water at 20°C, and vary according to the construction material.

Dimensions

	PP	PVDF	ALU	AISI	
A (mm)	370	370	370	360	
B (mm)	222	222	222	222	
C (mm)	370	370	364	346	
Weight kg	15	16	16	20	
MAX Temperature	65°C	95°C	95°C	95°C	





MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0250	P = PP KC = PVDF+CF	: M = SANTOPRENE	S = SS	P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	- = zone 2	AB = STANDARD









ALU



AISI 316



Technical data

Fluid connections: 1" 1/2 BSP

Air connection: 3/4" BSP

Max flow-rate: 550 lt/min

Max air pressure: 8 Bar

Max delivery head: 80 mt

Max Suction Lift Dry: 5 mt

Max Suction Lift Wet: 9,8 mt

Max Solid passing: 8,5 mm

Noise level: 78 dB

Displacement for cycle: 1250 cc

Max Viscosity: 50.000 cps

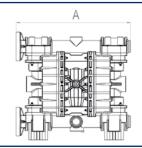
─ EX II 3/3 GD c IIB T 135°C

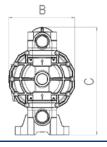
Performance Flow rate U.S.gpm 295.2 262.4 1100 7 bar 229.6 6 bar 196.8 5 bar 164 131.2 3 bar 98.4 30 20 Head H (m) 10 150 400 500 550 Flow rate It/min Air supply pressure Air consumption Nlt/min

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

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	595	595	595	582
B (mm)	345	345	345	345
C (mm)	565	565	560	570
Weight kg	31	36	36	60
MAX Temperature	65°C	95°C	95°C	95°C





MODE	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0500	KC = PVDF+CF	M = SANTOPRENE	S = SS D = FPDM	P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE		1 = BSP 2 = FLANGED 5 = NPT	- = zone 2	AB = STANDARD









ALU



AISI 316



Technical data

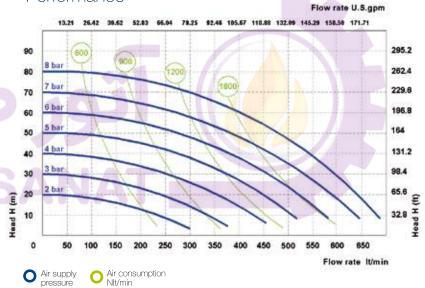
Fluid connections: 2" BSP 3/4" BSP Air connection: Max flow-rate: 700 lt/min Max air pressure: 8 Bar Max delivery head: 80 mt Max Suction Lift Dry: 5 mt Max Suction Lift Wet: 9,8 mt Max Solid passing: 8,5 mm

Noise level: 78 dB Displacement for cycle: 1250 cc

Max Viscosity: 50.000 cps

🨓 EX II 3/3 GD c IIB T 135°C

Performance

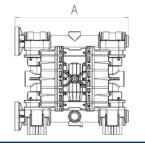


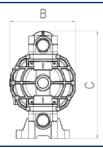
Air supply pressure

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

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	595	595	595	582
B (mm)	345	345	345	345
C (mm)	565	565	560	570
Weight kg	31	36	36	60
MAX Temperature	65°C	95°C	95°C	95°C





MODE	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0700	P = PP KC = PVDF+CF	M = SANTOPRENE	S = SS D = EPDM	P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE		1 = BSP 2 = FLANGED 5 = NPT	- = zone 2	AB = STANDARD







PVDF



ALU



AISI 316



Technical data

Fluid connections: 3" BSP 3/4" BSP Air connection: 1050 lt/min Max flow-rate:

Max air pressure: 8 Bar Max delivery head: 80 mt

Max Suction Lift Dry: 5 mt Max Suction Lift Wet: 9,8 mt

Max Solid passing: 10 mm

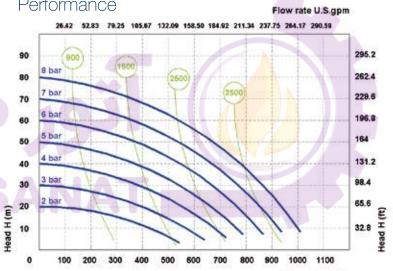
Noise level: 78 dB

Displacement for cycle: 2825 cc

Max Viscosity: 55.000 cps



Performance



Air supply

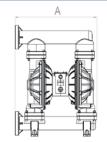
Air consumption Nlt/min

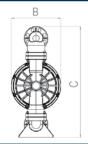
Flow rate It/min

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

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	685	685	570	570
B (mm)	417	417	420	420
C (mm)	933	933	838	838
Weight kg	50	55	55	120
MAX Temperature	65°C	95°C	95°C	95°C





MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P1000	: A = ALU	MT = SANTOPRENE+PTFE H = HYTREL	D = EPDM		D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED	- = zone 2	AB = STANDARD









Air operated double diaphragms pumps, ATEX certified for zone 1. Realized in: PP+CF, PVDF+CF, ALUMINIUM, SS AISI 316, POMc+CF Flow-rate from 8lts/min to 1.000 lts/min Connection from 1/4" to 3". ATEX certification for zone 1

EX II 2/2 GD c IIB T135°C







PHOENIX, PHOENIX FOOD and DAMPER

Zone 2 certified, EX II 3/3 GD c IIB T135°C standard version, assembled with central part in PP, fluid body in PP, PVDF, ALUMINIUM and SS AISI 316

PHOENIX ATEX, PHOENIX FOOD ATEX DAMPER ATEX

Zone 1 certified, EX II 2/2 GD c IIB T135°C ATEX version, assemble with central part in PP+CF (conductive), fluid body in PP+CF (conductive), PVDF+CF(conductive), ALUMINIUM and SS AISI 316



ATEX SAFETY SYMBOLS

II 2/2 GD: Surface equipment for use in zones in which gases, vapours or mists and clouds of combustible dust in air occur occasionally in normal operation (EN 1127-1 subclause 6.3) in both the external and internal zone.

II 3/3 GD: Surface equipment for use in zones in which gases, vapours or mists and clouds of combustible dust in air are not likely to occur in normal operation or may occur rarely for a short period in both the external and internal zone.

c: Equipment protected by constructional safety (EN 13463-5).

IIB: Exclusion of the following products: Hydrogen, acetylene, carbon disulphide.

T 135°: Allowed temperature class. The user shall process fluids in accordance with the corresponding temperature classification, bearing in mind the manual instructions and the provisions of current legislation.

The user shall also consider the ignition temperatures of gases, vapours or mists and clouds of combustible dust in air in the area of use.



€ EX II 2/2 GD c IIB T 135°C

Technical data

Air supply

Fluid connections: 1/4" BSP
Air connection: 4 mm
Max flow-rate: 8 lt/min
Max air pressure: 8 Bar
Max viscosity: 6.000 cps

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

Air consumption Nlt/min

MODEL C	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0007 K	PC = PP+CF (C = PVDF+CF)C = POMc+CF	NT = NBR+PTFE	T = PTFE S = SS		D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 5 = NPT	X = zone 1	AB = STANDARD







PP+CF





POMc+CF



30

AISI 316

EX II 2/2 GD c IIB T 135°C

Technical data

3/8" BSP Fluid connections: 6 mm Air connection: 20 lt/min Max flow-rate: 8 Bar Max air pressure: Max viscosity: 12.000 cps

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295.2 262.4 229.6

196.8 164 131.2

98.4 65.6 E 32.8

Performance 4.76 5.28

Air co... Nlt/min Air supply pressure Air consumption

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.

Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0018	PC = PP+CF KC = PVDF+CF OC = POMc+CF S = SS	NT = NBR+PTFE	T = PTFE S = SS	· M DV/DE	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 5 = NPT	X = zone 1	AB = STANDARD









POMc+CF



AISI 316

EX II 2/2 GD c IIB T 135°C

Technical data

Fluid connections: 1/2" BSP Air connection: 6 mm Max flow-rate: 35 lt/min Max air pressure: 8 Bar Max viscosity: 15.000 cps

Performance Flow rate U.S.gpm 1.32 70 7 bor 60 6 bar 50 5 hur 4 that 131.2 30 3 bur 20 2 60 65.6 10 Air consumption NIt/min Air supply pressure

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.

MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PC = PP+CF KC = PVDF+CF OC = POMc+CF S = SS	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE	: D = EPDM	: S = SS	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARD











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AISI 316

EX II 2/2 GD c IIB T 135°C

Technical data

1/2" BSP Fluid connections: Air connection: 1/4" BSP 35 lt/min Max flow-rate: Max air pressure: 8 Bar Max viscosity: 20.000 cps

Performance Flow rate U.S.gp 1.32 2.64 3.96 5.29 6.60 262.4 225,6 196.8 164 131.2

Air cond Nlt/min 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 consumption

Composition

MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PC = PP+CF KC = PVDF+CF OC = POMc+CF S = SS	MT = SANTOPRENE+PTFE	S = SS	0 = POMc S = SS		1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARD







PVDF+CF ALU

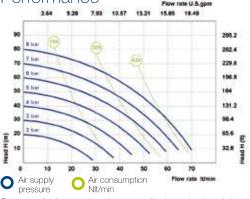
EX II 2/2 GD c IIB T 135°C

Technical data

Air supply

Fluid connections: 1/2" BSP Air connection: 3/8" BSP Max flow-rate: 70 lt/min Max air pressure: 8 Bar Max viscosity: 25.000 cps

Performance



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.

OOMPOSITION							
MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PC = PP+CF KC = PVDF+CF A = ALU S = SS		T = PTFE S = SS	A = ALU	: V - VITOIN	1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARE











EX II 2/2 GD c IIB T 135°C

Technical data



3/4" BSP Fluid connections: 3/8" BSP Air connection: Max flow-rate: 110 lt/min Max air pressure: 8 Bar Max viscosity: 25.000 cps

Performance Flow rate U.S.gp 2.64 5.29 7.93 10.57 13.21 15.85 18.49 21.13 23.78 26.42 29.06 295.2 262.4 80 229.6 70 & ba 116.8 60 5-bar 50 164 4 box 131.2 40 98.4 2 but 65.6 32.8 Air consumption NIt/min Air supply pressure

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. **ALU AISI 316**

Composition

P0100

PC = PP+CF

KC = PVDF+CF

 $\mathbf{A} = ALU$ S = SS

HT = HYTREL+PTFE

MT = SANTOPRENE+PTFE

H = HYTREL

M = SANTOPRENE **D** = EPDM

N = NBR

D = EPDM $\mathbf{N} = \mathsf{NBR}$

T = PTFE

 $\mathbf{S} = SS$

KC = PVDF+CF $\mathbf{A} = ALU$

S = SS

P = PP

: **Z** = PE-UHMWE

 $\mathbf{D} = \mathsf{EPDM}$ $\mathbf{V} = VITON$

 $\mathbf{N} = \mathsf{NBR}$ T = PTFE **1** = BSP

2 = FLANGED **5** = NPT

X = zone 1 : **AB** = STANDARD















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AISI 316

EX II 2/2 GD c IIB T 135°C

Technical data

Fluid connections: 1" BSP Air connection: 1/2" BSP Max flow-rate: 170 lt/min Max air pressure: 8 Bar Max viscosity: 35.000 cps

Performance



pressure Nlt/min

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.

00111003111011							
MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PC = PP+CF KC = PVDF+CF A = ALU S = SS	M = SANTOPRENE	S = SS D = EPDM N = NBR	A = ALU		1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARD











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AISI 316

EX II 2/2 GD c IIB T 135°C

Technical data

1" 1/4 BSP Fluid connections: 1/2" BSP Air connection: 250 lt/min Max flow-rate: 8 Bar Max air pressure: Max viscosity: 35.000 cps

Performance 295.2 262.4 229.6 70 60 164 50 131.2 40 30 20 O Air cond Nlt/min Air supply Air consumption

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.

Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0250	PC = PP+CF KC = PVDF+CF A = ALU	: M = SANTOPRENE	T = PTFE S = SS D = EPDM N = NBR	: KC = PVDF+CF : A = ALU		1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARD





PP+CF



PVDF+CF



ALU



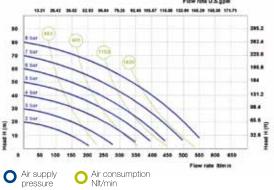
AISI 316

EX II 2/2 GD c IIB T 135°C

Technical data

Fluid connections: 1" 1/2 BSP Air connection: 3/4" BSP Max flow-rate: 550 lt/min Max air pressure: 8 Bar Max viscosity: 50.000 cps

Performance



pressure

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.

COMPOSITION							
MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PC = PP+CF KC = PVDF+CF A = ALU S = SS	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR	_	P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARD









ALU AISI 316

EX II 2/2 GD c IIB T 135°C

Technical data

2" BSP Fluid connections: Air connection: 3/4" BSP 700 lt/min Max flow-rate: Max air pressure: 8 Bar Max viscosity: 50.000 cps

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ATOORSANA

Performance



pressure 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.

Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0250	PC = PP+CF KC = PVDF+CF	: M = SANTOPRENE	T = PTFE S = SS D = EPDM N = NBR	- 7.20	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARD





ALU



AISI 316

EX II 2/2 GD c IIB T 135°C

Technical data

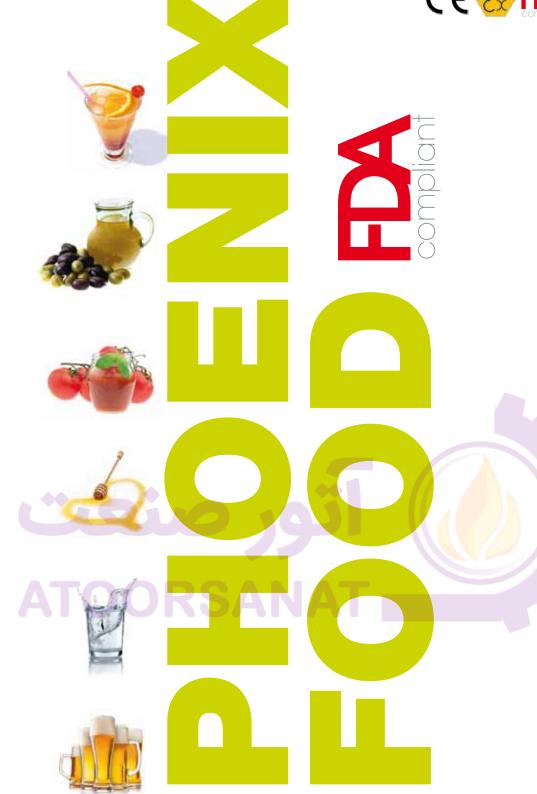
Fluid connections: 3" BSP Air connection: 3/4" BSP Max flow-rate: 1050 lt/min Max air pressure: 8 Bar Max viscosity: 55.000 cps

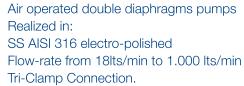
Performance Flow rate U.S.gpm 80 262.4 70 196.8 50 40 Air consumption NIt/min Air supply pressure

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.

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P1000	S = SS	MT = SANTOPRENE+PTFE H = HYTREL	T = PTFE S = SS D = EPDM N = NBR	A = ALU S = SS	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED	X = zone 1	AB = STANDARD







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

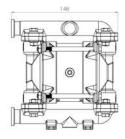


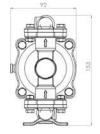






AISI 316 ELECTRO-POLISHED



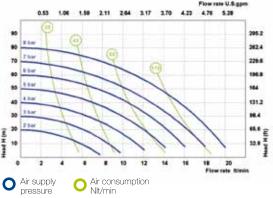


Technical data

Fluid connections: Tri-Clamp 1/2"

Air connection: 6 mm 20 lt/min Max flow-rate: Max air pressure: 8 Bar Max viscosity: 12.000 cps

Performance



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.

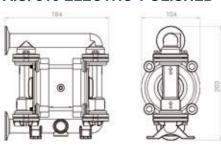
Composition

MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0018 S = SS POLISHED	NT = NBR+PTFE	T = PTFE S = SS	S = SS	T = PTFE	3 = TRI-CLAMP 1 = BSP	- = zone 2 X = zone 1	AB = STANDARD





AISI 316 ELECTRO-POLISHED



Technical data

Fluid connections: Tri-Clamp 1" Air connection: 6 mm 35 lt/min Max flow-rate: 8 Bar Max air pressure: Max viscosity: 15.000 cps

Performance 60 6 bar 50 5 lear 40 4 har 131.2 30 2 hu Air consumption NIt/min Air supply pressure

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.

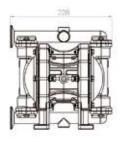
MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0030 S = SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	S = SS	T = PTFE	3 = TRI-CLAMP 1 = BSP	- = zone 2 X = zone 1	AB = STANDARD

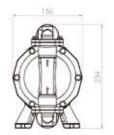






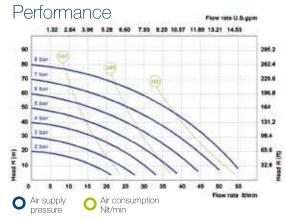
AISI 316 ELECTRO-POLISHED





Technical data

Tri-Clamp 1" Fluid connections: Air connection: 1/4" BSP 55 lt/min Max flow-rate: Max air pressure: 8 Bar Max viscosity: 20.000 cps



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.

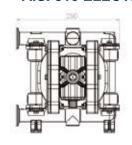
Composition

MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0050 S = SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	S = SS	T = PTFE	3 = TRI-CLAMP 1 = BSP	- = zone 2 X = zone 1	AB = STANDARD





AISI 316 ELECTRO-POLISHED





Technical data

Tri-Clamp 1" Fluid connections: Air connection: 3/8" BSP Max flow-rate: 110 lt/min Max air pressure: 8 Bar Max viscosity: 25.000 cps

Performance 295.2 262,4 229.6 70 131.2 40 98.4 65,6 32.8 Air supply pressure O Air consumption Ntt/min

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.

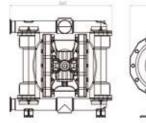
MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0100 S = SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	S = SS	T = PTFE	3 = TRI-CLAMP 1 = BSP	- = zone 2 X = zone 1	AB = STANDARD







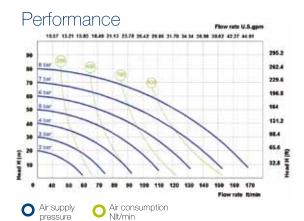
AISI 316 ELECTRO-POLISHED





Technical data

Fluid connections: Tri-Clamp 1"1/2 Air connection: 1/2" BSP 170 lt/min Max flow-rate: Max air pressure: 8 Bar Max viscosity: 35.000 cps



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.

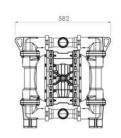
Composition

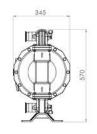
MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0160 S = SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	S = SS	T = PTFE	3 = TRI-CLAMP 1 = BSP	- = zone 2 X = zone 1	AB = STANDARD





AISI 316 ELECTRO-POLISHED

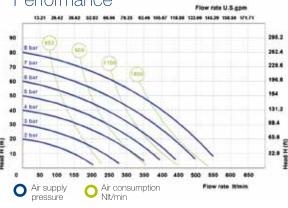




Technical data

Fluid connections: Tri-Clamp 2" Air connection: 3/4" BSP Max flow-rate: 550 lt/min Max air pressure: 8 Bar Max viscosity: 50.000 cps

Performance



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.

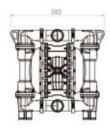
MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0500 S = SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	S = SS	T = PTFE	3 = TRI-CLAMP 1 = BSP	- = zone 2 X = zone 1	AB = STANDARD

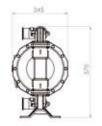






AISI 316 ELECTRO-POLISHED





Technical data

Fluid connections: Tri-Clamp 2"1/2 Air connection: 3/4" BSP 700 lt/min Max flow-rate: Max air pressure: 8 Bar Max viscosity: 50.000 cps

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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.

Composition

MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0700 S = SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	S = SS	T = PTFE	3 = TRI-CLAMP 1 = BSP	- = zone 2 X = zone 1	AB = STANDARD





AISI 316 ELECTRO-POLISHED

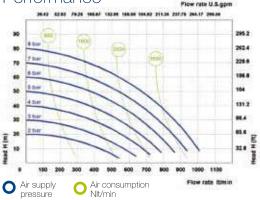




Technical data

Fluid connections: 3" BSP Air connection: 3/4" BSP Max flow-rate: 1050 lt/min Max air pressure: 8 Bar Max viscosity: 55.000 cps

Performance



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.

MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF1000 S = SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	S = SS	T = PTFE	3 = TRI-CLAMP 1 = BSP	- = zone 2 X = zone 1	AB = STANDARD



Air operated double diaphragms pumps with special features: TWIN PHOENIX with double inlet/outlet DRUM PHOENIX to empty drums and tanks ACCURATE PHOENIX remote control

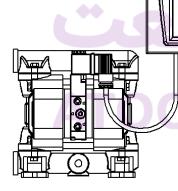




Special Pumps Accurate Phoenix

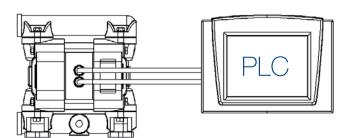






PUMPS

AP7 - AP18 - AP30 AP50 - AP65 - AP100 AP160 - AP250



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

Technical data

ACCURATE PHOENIX are Pumps gives you the external pump control necessary 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 PHOENIX provides a variable stroke rate that you can easily control as needed.

Note: PLC and computer system not included.



Special Pumps **Drum Phoenix**



PUMPS

DP18 - DP30 - DP50 DP65 - DP100 DP160

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



DRUM PHOENIX 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.





PUMPS

TP18 - TP30 - TP50 TP65 - TP100 - TP160 TP250 - TP500 **TP700**

- Painting industry
- Wastewater technology
- Printing industry
- Paper processing
- Flexographic industry



Technical data

TWIN PHOENIX 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.







Pneumatic, automatic pulsation dampeners Realized 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 dampener is the most efficient way to remove pressure variations on the discharge of the pump. Fluimac pulsation dampener works actively with compressed air and a diaphragm, automatically setting the correct pressure to minimize the pulsations. Pulsation dampeners require minimum maintenance and are, subject to the requirements of the application, available in the same housing and diaphragm materials as the pump.

Application

- Metering/Injection/Dosing
- Equalizes discharge pressure spikes, increasing accuracy
- Filter Press/Inline Filters
- Increases filter efficiency and life by providing a smooth flow
- Spraying
- Smooth, consistent spray pattern.
- Eliminates inconsistent filling and splashing.
- Transfer
- Eliminates harmful water hammer, preventing pipe and valve damage.





Significant Pulsation Reduction with an average 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.

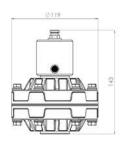
The flexing of the diaphragm absorbs the pulsation giving a smooth flow.







Damper





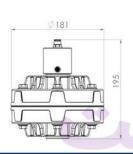
PVDF POMc AISI ALE BALL

Technical data

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

APPLY TO: **7 - 18 - 30**

Damper





PVDF



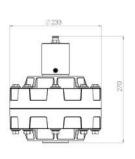


Technical data

1" Fluid connections: Air connection: 8 mm Max air pressure: 8 Bar

APPLY TO: 50 - 65 -100

Damper







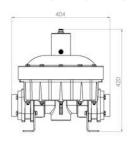


Technical data

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

160 - 250

Damper











Technical data

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

500 - 700 1000





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 pump's air.



STROKE COUNTER

Count the number of strokes, connected to a control. It allows various type of monitoring.



DIAPHRAGM FAILURE DETECTION FLUI-GUARD

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



PNEUMATIC BATCH **CONTROL "START & STOP"**

Pneumatic batcher can control any FLUIMAC AODD pump allowing you to set the cycles amount.



BASKET STRAINER FILTERS IN PP

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



INOX TROLLEY

It makes transportable pumps



ANTI VIBRATION FEET KIT

Reduces physical vibration from AOD pump operation.



PP, PVDF, ALU, SS **NOOZLE**

Dispenser to delivery control and batching.







REINFORCED PVC HOSE

With metal reinforcement for suction/discharge, also food-grade.



FLANGE CONNECTION KIT

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







in the world



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