



## PHOENIX

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

www.fluimac.com



ENGLISH 👬



### MAIN FEATURES

Fluimac is an original, young and dynamic company built in 2012 for a new concept of product. It is specialized in providing pump solutions with an innovative and continuously developing design of range. The huge experience, knowledge and efficiency of its team is the starting point of its own business. Fluimac stands out for its reliable and prompt technical support and assistance.

The internal research and development department ensures the proficiency of its team, which constantly grows in order to satisfy all the customers' needs.

The company keeps up with the constant evolution of the national and international market and its quality control guarantees innovative and certificated products, which respect current legal standards.

The organization of the warehouse and the assembly/testing department, allows the company to offer short delivery times, immediate check of availability, speedy shipments and fast service assistance. The policy of Fluimac relies also on excellent customer service and a network of efficient, reliable distributors who ensure willingness, quality and technical support. This makes Fluimac a high quality company, grounded in excellence.

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FAMILICATO DA:	FLUMAC Sz.J
HARDITELTION BARENCTURE IN TIPO/SERIE	CATTICLONE OLDRA AND TTILY POMPA PREJMATICA & DOPTA REPRESAN UNIT
MODELLO	PHOENOX
CODICE	PO18P-NTTPv1-
MATRICOLA	P8916
MARCATURA ATEX	11/2 CO (1111)C
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### FLUIMAC'S CERTIFICATES





FDA COMPLIANT







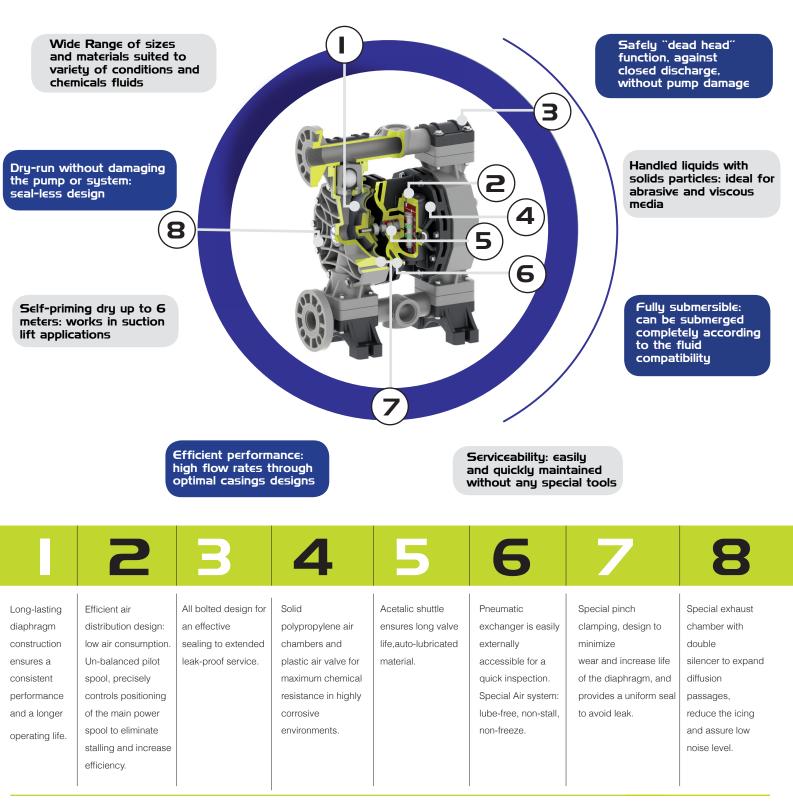
#### PRODUCTS

RANGE

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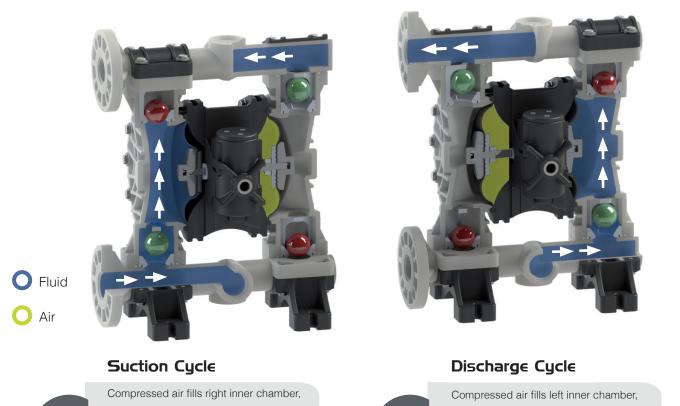
Air operated double diaphragm pumps have long been recognized as the most flexible pumps of the industry for handling difficult liquids at relatively low pressures and flows. The range of applications is virtually limitless. Fluimac AODD pumps come in many sizes and choices of materials of construction. Almost every type of liquid from highly corrosive acids through high viscosity paints and adhesives, to food and drink products can be pumped.	<b>PHOENIX</b> Air operated double diaphragm pumps Realized in: PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow-rate from 7 lt/min to 1.000 lt/min. Connection from ¼" to 3".	<b>С€</b> [∰ €∑
	<b>PHOENIX FOOD</b> Air operated double diaphragms pumps Realized in: SS AISI 316 electro-polished. Flow-rate from 20 lt/min to 1.000 lt/min. Tri-Clamp Connection.	C € [f][ (€x) IFD∕A
	<b>PHOENIX ATEX</b> Air operated double diaphragms pumps, ATEX certified for zone1. Realized in: PP+CF, PVDF+CF, ALUMINIUM, SS AISI 316, POMc+CF Flow-rate from 7 lt/min to 1.000 lt/min. Connection from ¼" to 3".	C € [f][ &&> ₽₽&
	ACCURATE PHOENIX Double diaphragm pumps with remote control Realized in: PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow-rate from 7 lt/min to 250 lt/min. Connection from ¼" to 1"14.	C € [f][ €∑ ₽₽
	DRUM PHOENIX Air operated double diaphragms pumps with special features to empty drums and tanks Realized in: PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow-rate from 20 lt/min to 170 lt/min. Connection from 3/8" to 1".	<b>С€</b> [∰[ €[x]
	TWIN PHOENIX Air operated double diaphragms pumps with special features with double inlet/outlet Realized in: PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow-rate from 7 lt/min to 700 lt/min. Connection from ¼" to 2".	<b>С€</b> [∰ €x>
	<b>SUBMERSIBLE PHOENIX</b> Air operated double diaphragm pumps with special features, design to be submerged. Applicable to all size of pumps.	<b>С€</b> [∰ &⊗
	<b>POWDER PHOENIX</b> Air operated double diaphragms pump with special design to handle powder Realized in: ALU, SS. Size available 1"½ and 2".	C € [f][ ⟨Ex⟩ <b>FD∕</b> 2
	DAMPER Pneumatic, automatic pulsation dampeners. Realized in: PP, PVDF, ALUMINIUM, SS AISI 316, POMc Applicable to all size of pumps. Available also in ATEX and FOOD version.	CC IHI Ex FDA





**QUALITY** 100% wet tested after final assembly: deadheading, priming and sealing **SAFE** ATEX certifications in all versions: Conductive plastic pumps available **FLEXIBILITY** Multiple porting options available along with interface options





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

causing upper valve ball to open and discharge fluid. Simultaneously, the right 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 works with dry column without problem



Pump installed above drum or tank

pump

Pump installed on hopper for high viscosity liquid

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

pump

Submerged Suspended Pump installed оп a mobile unit

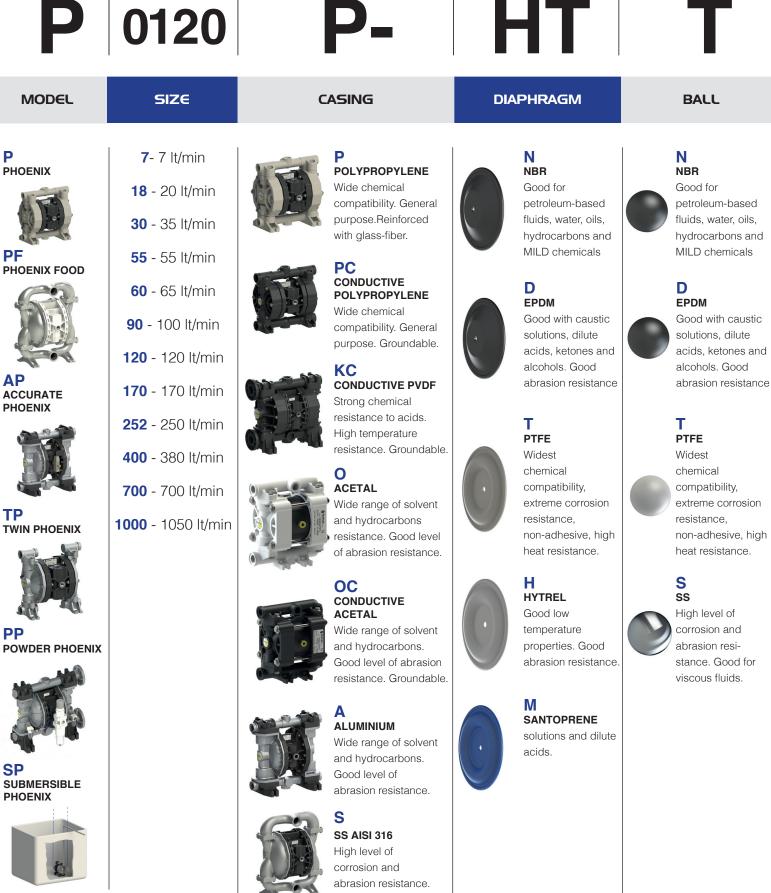
it is necessary to check the chemical compatibility

special version with fixing feet also in the upper must be often part, for ceiling fixing

with a trolley or cart when pump moved

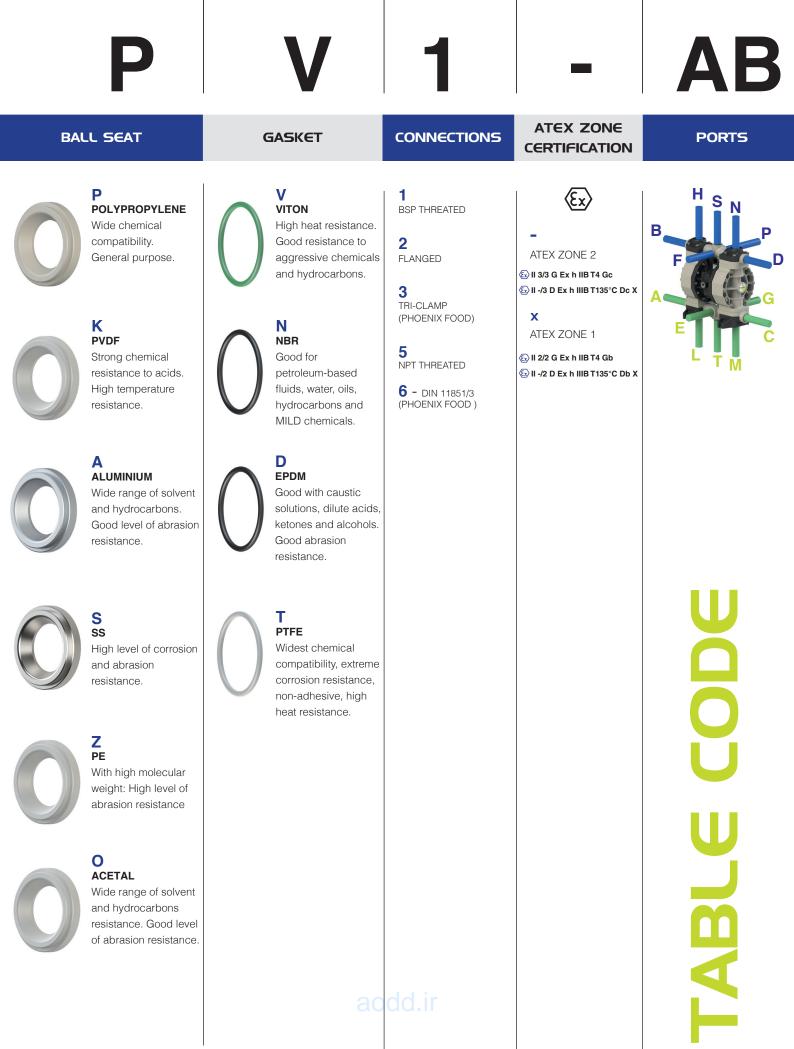
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SS - AISI 316 Electropolished High level of corrosion and abrasion resistance. Phoenix Food.



## **PUMP 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 content
- Pumping capacity in relation to the desired output
- Suction and pressure conditions

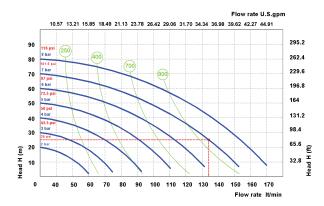
Considering these parameters, an optimal pump size is selected when the intersection of the intended installation "pressure vs. flow rate" is near the middle section of the curves.

#### USING PERFORMANCE CURVES

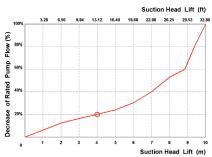
To determine compressed air requirements and proper size for a FLUIMAC AODD pump, two elements of information are required:

- 1 Required Flow Rate
- 2 Total Delivery Head

As an example, consider a P170 pump performance curve, pumping about 135 lt/min at 25m.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 m, 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.

PUMP TYPE	AODD	CENTRIFUGAL	LOBE	GEAR	SCREW	PERISTALIC	PISTON
	$\bigcirc$	5	44		Webbler.		H.
Variable Flow & Head Control	$\checkmark$	$\checkmark$	$\checkmark$		!	$\checkmark$	
Deadhead Safely	$\checkmark$	!	!	!	!	!	!
Dry-Running	$\checkmark$	x	x	x	X	$\checkmark$	x
Dry Self-Priming		x	x	$\checkmark$	x	$\checkmark$	1
No Mechanical Alignment	$\checkmark$	x	x	x	X	x	x
No Electrical Installation	$\checkmark$	x	x	x	X	x	x
Portability		$\checkmark$	!	!	!	$\checkmark$	!
Submersible		!	x	x	X	x	!
Sealless		! a	odd ir	· !	!	!	!
Cavitation Tolerance		x	!	!	$\checkmark$	$\checkmark$	!
Low Shear & Degradation	<b>V</b>	x			!		!

✓ = Suitable ! = Limitations X = Not Recommended



# PHOENIX

Realized in: PP, PVDF, ALUMINIUM, SS AISI 316, POMc Flow-rate from 7 lt/min to I.OOO lt/min Connection from I/4" to 3". ATEX certification for zone 2 (ix) II 3/3 G Ex h IIB T4 Gc (ix) II -/3 D Ex h IIIB T135°C Dc X





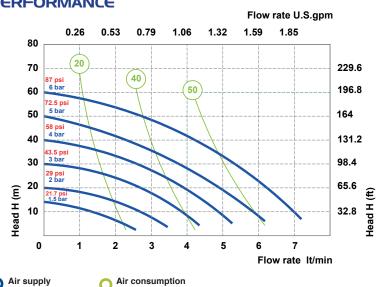






TECHNICAL DATA		PERFORMA	NCE
Fluid connections	1/4" BSP	0.26	6 0.53 0.79 <sup>,</sup>
Air connection	4 mm	80	
Max. Flow rate	7 It/min	70 20	(40)
Max air pressure	6 bar	60 6 bar 72.5 psi	
Max delivery head	60 m	50 5 bar	
Max Suction Lift Dry	3 m	40 4 bar 43.5 psi	
Max Suction Lift Wet	9,8 m	30 <sup>3 bar</sup> 29 psi	
Max Solid passing	2 mm	<b>Ξ</b> 20 2 bar 21.7 psi 1.5 bar	
Noise level:	62 dB	(E) 20 21.7 psi 1.5 bar H 10 H 21.7 psi 1.5 bar	
Max Viscosity:	5.000 cps	ੁੱਧੀ ਸਿੰਘ ਦੀ ਸ਼ਿੰਦ ਸ਼ ਸ਼ਿੰਦ ਸ਼ਿੰਦ	2 3
Displacement per Stroke: (i) II 3/3 G Ex h IIB T4 Gc (i) II -/3 D Ex h IIB T135°C Dc X	18 CC ~	Air supply pressure	O Air consumpti NIt/min
Displacement per stroke may vary based on sucti discharge head, air pressure and fluid type.	ion condition,		ance values refer to pump ta may vary according to

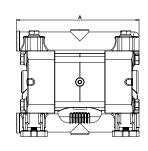
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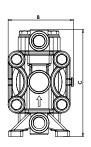


mps with submerged suction and free delivery outlet, with to the construction materials and hydraulic conditions.

#### DIMENSIONS

	Α	В	С	Net Weight	Temp	erature
PP	129 mm	68 mm	112 mm	0,84 Kg	- 4°C	+ 65°C
PVDF	129 mm	68 mm	112 mm	0,96 Kg	- 20°C	+ 95°C
POMc	129 mm	68 mm	112 mm	0,84 Kg	- 5°C	+ 80°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	P = PP K = PVDF O = POMc	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD









POMc

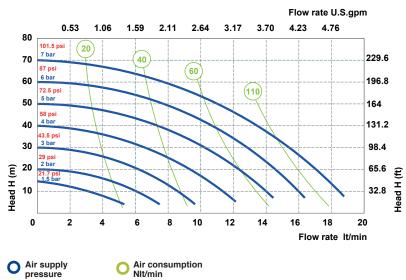


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#### **TECHNICAL DATA**

Fluid connections	3/8" BSP
Air connection	6 mm
Max. Flow rate	20 It/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:	10.000 cps
Displacement per Stroke:	30 CC ~
ᡚ II 3/3 G Ex h IIB T4 Gc ᡚ II -/3 D Ex h IIIB T135℃ Dc X	
Displacement per stroke may vary based on suction co	ndition,

#### PERFORMANCE

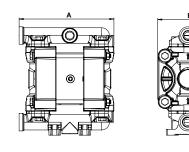


The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

#### DIMENSIONS

discharge head, air pressure and fluid type.

	Α	В	С	Net Weight	Tempe	erature
PP	146 mm	96 mm	167 mm	1,3 Kg	- 4°C	+ 65°C
PVDF	146 mm	96 mm	167 mm	1,6 Kg	- 20°C	+ 95°C
POMc	146 mm	96 mm	167 mm	1,5 Kg	- 5°C	+ 80°C + 95°C
SS	148 mm	92 mm	152 mm	2,3 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0018	P = PP KC = PVDF+CF O = POMc SS = SS	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE	T = PTFE S = SS	<b>P</b> = PP <b>K</b> = PVDF <b>O</b> = POMc <b>S</b> = SS	<b>D</b> = EPDM <b>V</b> = VITON <b>N</b> = NBR <b>T</b> = PTFE	1 = BSP 5 = NPT	- <b>=</b> zone 2	<b>AB =</b> STANDARD







PVDF+CF



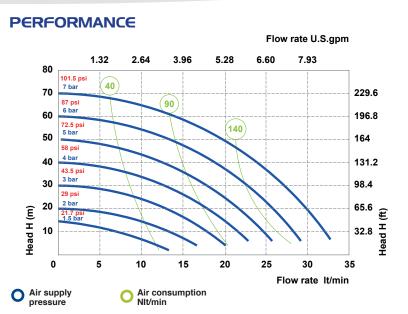
ALU



SS

#### **TECHNICAL DATA**

Fluid connections	1/2" BSP
Air connection	6 mm
Max. Flow rate	35 lt/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	3 mm
Noise level:	65 dB
Max Viscosity:	15.000 cps
Displacement per Stroke:	65 CC ~
<ul> <li>Iii 3/3 G Ex h IIB T4 Gc</li> <li>Iii -/3 D Ex h IIIB T135℃ Dc X</li> <li>Displacement per stroke may vary based on suction co</li> </ul>	ndition,

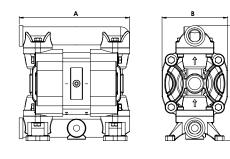


The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

#### DIMENSIONS

discharge head, air pressure and fluid type.

	Α	В	С	Net Weight	Tempe	erature
PP	177 mm	105 mm	185 mm	1,8 Kg	- 4°C	+ 65°C
PVDF	177 mm	105 mm	185 mm	2,3 Kg	- 20°C	+ 95°C
ALU	183 mm	110 mm	189 mm	2,8 Kg		+ 95°C
SS	181 mm	106 mm	192 mm	3,8 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0030	P = PP KC = PVDF+CF S = SS A = ALU	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE	T = PTFE S = SS D = EPDM N = NBR	P = PP K = PVDF S = SS Z = PE-UHMWE	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = Flanged 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD







**PVDF+CF** 



ALU



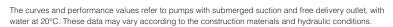
#### **TECHNICAL DATA**

Fluid connections	1/2" BSP
Air connection	1/4" BSP
Max. Flow rate	55 lt/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:	15.000 cps
Displacement per Stroke: II 3/3 G Ex h IIB T4 Gc II -/3 D Ex h IIIB T135°C Dc X	140 CC ~

#### PERFORMANCE Flow rate U.S.gpm 1.32 2.64 3.96 5.28 6.60 7.93 9.25 10.57 11.89 13.21 14.53 295.2 90 116 psi (140) 8 bar 262.4 80 (280) 01.5 7 ba 70 229.6 (380) 6 ba 196.8 60 72 5 5 bi 50 164 i8 ps 4 ba 40 131.2 43.5 p 3 bar 30 98.4 20 2 ba 65.6 65.6 32.8 (tt) Head H Head H (m) 10 0 5 10 15 20 25 30 35 40 45 50 55 Flow rate It/min O Air supply pressure Air consumption NIt/min 0

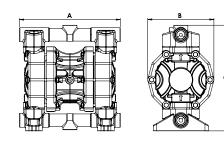
Displacement per stroke may vary based on suction condition,

discharge head, air pressure and fluid type.



#### DIMENSIONS

	Α	В	С	Net Weight	Tempe	erature
PP	238 mm	156 mm	249 mm	3,8 Kg	- 4°C	+ 65°C
PVDF	238 mm	156 mm	249 mm	4,8 Kg	- 20°C	+ 95°C
ALU	234 mm	156 mm	245 mm	3,8 Kg		+ 95°C
SS	234 mm	156 mm	268 mm	6,8 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0055	P = PP KC = PVDF+CF S = SS A = ALU	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR	T = PTFE S = SS D = EPDM N = NBR	K = PVDF S = SS Z = PE-UHMWE A = ALU	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD

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**PVDF+CF** 



ALU



<b>TECHNICAL DATA</b>		PERFORMANCE
Fluid connections	1/2" BSP	Flow rate U.S.gpm 2.64 5.28 7.93 10.57 13.21 15.85 18.49
Air connection	1/4" BSP	90
Max. Flow rate	65 It/min	80 116psi (140) 8bar (280)
Max air pressure	8 bar	70 7bar 70 7bar 8 col
Max delivery head	80 m	60 6 bar 725 pil
Max Suction Lift Dry	5 m	50 5 bar
Max Suction Lift Wet	9,8 m	
Max Solid passing	3,5 mm	20 20 20 20 20 20 20 20 20 20 20 20 20 2
Noise level:	72 dB	(LL) H Prop
Max Viscosity:	20.000 cps	0 10 20 30 40 50 60 70
Displacement per Stroke:	140 CC ~	Flow rate It/min Air supply pressure Air consumption NIt/min

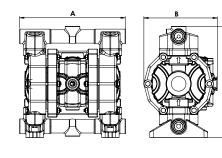
II -/3 D Ex h IIIB T135℃ Dc X

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.

The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

#### DIMENSIONS

	Α	В	С	Net Weight	Temperature	
PP	238 mm	165 mm	249 mm	4,3 Kg	- 4°C	+ 65°C
PVDF	238 mm	165 mm	249 mm	5,3 Kg	- 20°C	+ 95°C
ALU	234 mm	165 mm	245 mm	4,3 Kg		+ 95°C
SS	234 mm	165 mm	268 mm	7,3 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0060	P = PP KC = PVDF+CF S = SS A = ALU	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR	T = PTFE S = SS D = EPDM N = NBR	K = PVDF S = SS Z = PE-UHMWE A = ALU	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD





PVDF+CF

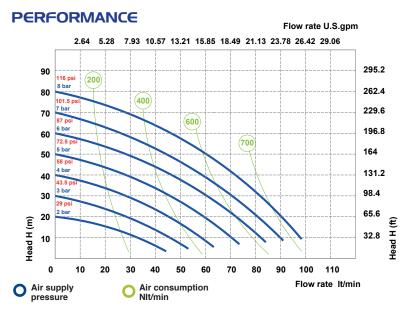


ALU (P 100)



#### TECHNICAL DATA

Fluid connections	3/4" BSP
Air connection	3/8" BSP
Max. Flow rate	100 lt/mm
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 CC ~
<ul> <li>II 3/3 G Ex h IIB T4 Gc</li> <li>II -/3 D Ex h IIIB T135°C Dc X</li> <li>Displacement per stroke may vary based on suction c</li> </ul>	condition,

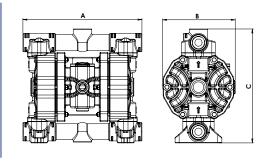


The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

#### DIMENSIONS

discharge head, air pressure and fluid type.

	Α	В	С	Net Weight	Tempe	erature
PP	293 mm	176 mm	280 mm	5,1 Kg	- 4°C	+ 65°C
PVDF	293 mm	176 mm	280 mm	6,6 Kg	- 20°C	+ 95°C
ALU	265 mm	178 mm	245 mm	5,6 Kg		+ 95°C
SS	247 mm	178 mm	251 mm	7,6 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0090 P0100	P = PP KC = PVDF+CF S = SS A = ALU	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR	T = PTFE S = SS D = EPDM N = NBR	K = PVDF S = SS Z = PE-UHMWE A = ALU	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD





#### **PVDF+CF**



#### **TECHNICAL DATA**

Fluid connections	1" BSP
Air connection	3/8" BSP
Max. Flow rate	120 lt/mm
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: II 3/3 G Ex h IIB T4 Gc II -/3 D Ex h IIIB T135°C Dc X	200 CC ~

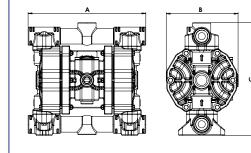
#### PERFORMANCE Flow rate U.S.gpm 2.64 5.28 7.93 10.57 13.21 15.85 18.49 21.13 23.78 26.42 29.06 90 295.2 16 psi (200 262.4 80 01.5 p (400 229.6 70 600 196.8 60 (700 164 5 ba 50 58 ps 4 har 131.2 40 43.5 p 3 bar 98.4 30 ) psi 65.6 20 Head H (m) £ 32.8 Head H 10 0 20 30 40 60 70 80 90 100 110 120 10 50 Air supply Air consumption NIt/min Flow rate It/min 0 pressure

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.

The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

#### DIMENSIONS

	Α	В	С	Net Weight	Tempe	erature
PP	293 mm	178 mm	280 mm	5,6 Kg	- 4°C	+ 65°C
PVDF	293 mm	178 mm	280 mm	7,6 Kg		+ 95°C
SS	258 mm	177 mm	295 mm	9,6 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0120	<b>P =</b> PP <b>KC =</b> PVDF+CF <b>S =</b> SS	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR	T = PTFE S = SS D = EPDM N = NBR	P = PP K = PVDF S = SS Z = PE-UHMWE	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD





**PVDF+CF** 



ALU (P 160)

PERFORMANCE

0 40 50 60 70 80 90

O Air supply

pressure



295.2

262.4

229.6

196.8

164

131.2

98.4

65.6

32.8

Flow rate lt/min

Head H (ft)

#### **TECHNICAL DATA**

Fluid connections	1" BSP - DN25
Air connection	1/2" BSP
Max. Flow rate	170 lt/mm
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 ~
ᡚ Ⅱ 3/3 G Ex h ⅡB T4 Gc ᡚ Ⅱ -/3 D Ex h ⅢB T135℃ Dc X	
Displacement per stroke may vary based on suctio	n condition,

#### Flow rate U.S.gpm 10.57 13.21 15.85 18.49 21.13 23.78 26.42 29.06 31.70 34.34 36.98 39.62 42.27 44.91 90 116 psi (250) 8 bar 400 80 01.5 p (700 bar 70 900 7 p: 60 50 40 3 bai 30 2 bai 20 Head H (m) 10

The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

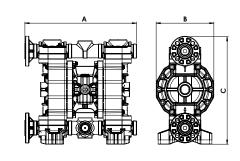
Air consumption NIt/min

0

#### DIMENSIONS

discharge head, air pressure and fluid type.

	A B		С	Net Weight	Tempe	erature
PP	430 mm	222 mm	416 mm	14,2 Kg	- 4°C	+ 65°C
PVDF	430 mm	222 mm	416 mm	16,2 Kg	- 20°C	+ 95°C
ALU	370 mm	222 mm	364 mm	13,2 Kg		+ 95°C
SS	357 mm	222 mm	371 mm	17,2 Kg	- 20°C	+ 95°C



100 110 120 130 140 150 160 170

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0170 P0160	P = PP KC = PVDF+CF S = SS A = ALU	HT =HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR	T = PTFE S = SS D = EPDM N = NBR	K = PVDF S = SS Z = PE-UHMWE A = ALU	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD



PP



**PVDF+CF** 



ALU (P 250)



SS

#### **TECHNICAL DATA**

Fluid connections	1"1/4" BSP
Air connection	1/2" BSP
Max. Flow rate	250 It/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 ~
ⓑ II 3/3 G Ex h IIB T4 Gc ⓑ II -/3 D Ex h IIIB T135℃ Dc X	
Displacement per stroke may vary based on suction cor	ndition,

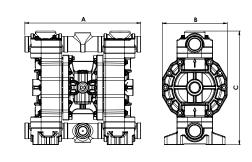
#### PERFORMANCE Flow rate U.S.gpm 6.60 13.21 19.81 26.42 33.02 39.62 46.23 52.83 59.44 66.04 72.65 295.2 90 <sup>116 psi</sup> (250) 8 bar (500 262.4 80 101.5 p 7 bar (700) 229.6 70 87 ps (1000 6 bai 196.8 60 72.5 164 50 58 n 131.2 40 43.5 0 98.4 3 ba 30 65.6 20 Head H (m) £ ) 32.8 Head H 10 125 150 175 0 25 50 75 100 200 225 250 275 Flow rate It/min O Air supply pressure O Air consumption NIt/min

The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

#### DIMENSIONS

discharge head, air pressure and fluid type.

	Α	В	С	Net Weight	Temperature	
PP	396 mm	222 mm	388 mm	14,2 Kg	- 4°C	+ 65°C
PVDF	396 mm	222 mm	388 mm	16,2 Kg	- 20°C	+ 95°C
ALU	370 mm	222 mm	364 mm	13,2 Kg	- 20°C	+ 95°C + 95°C
SS	357 mm	222 mm	374 mm	17,2 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0252 P0250	P = PP KC = PVDF+CF S = SS A = ALU	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR	T = PTFE S = SS D = EPDM N = NBR	K = PVDF S = SS Z = PE-UHMWE A = ALU	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD



PP





ALU



#### **TECHNICAL DATA**

Fluid connections	1"1/2 BSP - DN 40
Air connection	1/2" BSP
Max. Flow rate	380 lt/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:	1200 CC ~

#### PERFORMANCE Flow rate U.S.gpm 13.21 39.62 79.25 92.46 105.67 118.88 26.42 52.83 66.04 90 295.2 600 80 262.4 900 229.6 70 1100 196.8 60 164 50 131.2 40 98.4 30 65.6 20 Head H (ft) Head (m) 32.8 10 100 150 200 250 300 350 400 450 0 50 Flow rate lt/min O Air supply pressure O Air consumption NIt/min

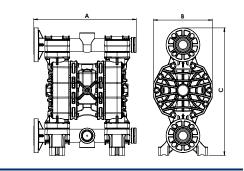
II -/3 D Ex h IIIB T135°C Dc X

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.

The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

#### DIMENSIONS

	Α	В	С	Net Weight	Temperature	
PP	454 mm	260 mm	564 mm	18,2 Kg	- 4°C	+ 65°C
PVDF	454 mm	260 mm	564 mm	22,2 Kg	- 20°C	+ 95°C
ALU	445 mm	260 mm	563 mm	22,2 Kg		+ 95°C
SS	361 mm	260 mm	502 mm	25,3 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0400	P = PP KC = PVDF+CF S = SS A = ALU	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR	T = PTFE S = SS D = EPDM N = NBR	K = PVDF S = SS Z = PE-UHMWE A = ALU	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD <b>EF =</b> STANDARD SS



PP



**PVDF+CF** 



ALU



SS

#### **TECHNICAL DATA**

Fluid connections	2" BSP - DN 50
Air connection	3/4" BSP
Max. Flow rate	700 lt/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:	3050 CC ~

#### PERFORMANCE Flow rate U.S.gpm 13.21 26.42 39.62 52.83 66.04 79.25 92.46 105.67 118.88 132.09 145.29 158.50 171.71 184.92 295.2 90 16 psi 1800 bar 80 400 262.4 1.5 ps 7 bar 229.6 70 7 ps bar 60 196.8 2.5 psi bar 50 164 8 psi bar 40 131.2 3.5 ps bar 30 98.4 20 65.6 Head H (ft) Head H (m) 10 32.8 0 150 200 250 300 350 400 450 500 550 600 650 700 50 100 Flow rate lt/min **O** Air supply O Air consumption NIt/min pressure

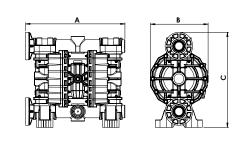
II -/3 D Ex h IIIB T135°C Dc X Displacement per stroke may vary base

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.

The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

#### DIMENSIONS

	Α	В	С	Net Weight	Tempe	erature
PP	595 mm	345 mm	570 mm	30,6 Kg	- 4°C	+ 65°C
PVDF	595 mm	345 mm	570 mm	41,6 Kg	- 20°C	+ 95°C
ALU	595 mm	345 mm	567 mm	37,6 Kg	- 20°C	+ 95°C
SS	487 mm	345 mm	599 mm	51 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0700	P = PP KC = PVDF+CF S = SS A = ALU	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR	T = PTFE S = SS D = EPDM N = NBR	<b>P</b> = PP <b>C</b> . If <b>K</b> = PVDF <b>S</b> = SS <b>Z</b> = PE-UHMWE <b>A</b> = ALU	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	<b>- =</b> zone 2	<b>AB =</b> STANDARD <b>EF =</b> STANDARD SS

# 





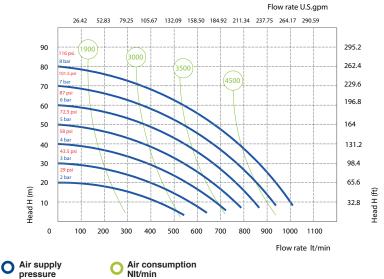




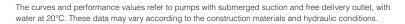
#### **TECHNICAL DATA**

Fluid connections	3" BSP - DN 80
Air connection	3/4" BSP
Max. Flow rate	1050 lt/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: II 3/3 G Ex h IIB T4 Gc II -/3 D Ex h IIIB T135°C Dc X	9750 CC ~

#### PERFORMANCE

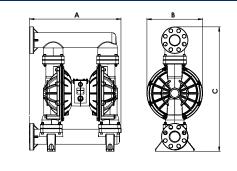


Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.



#### DIMENSIONS

	Α	В	С	Net Weight	Tempe	erature
PP	685 mm	417 mm	933 mm	48,5 Kg	- 4°C	+ 65°C
PVDF	685 mm	417 mm	933 mm	53,5 Kg	- 20°C	+ 95°C
ALU	570 mm	420 mm	838 mm	53,5 Kg		+ 95°C
SS	570 mm	420 mm	838 mm	111,5 Kg	- 20°C	+ 95°C



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P1000	P = PP K = PVDF S = SS A = ALU	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE	T = PTFE S = SS D = EPDM N = NBR	P = PP K = PVDF S = SS A = ALU	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED	<b>- =</b> zone 2	<b>AB =</b> STANDARD



# PHOENIX FOOD

Air operated double diaphragms pumps Realized in: SS AISI 316 electro-polished Flow-rate from 20lt/min to I.000 lt/min Tri-Clamp Connection. **ATEX** certification Atex zone 2 🐼 II 3/3 G Ex h IIB T4 Gc 🐼 II -/3 D Ex h IIIB TI35°C Dc X

Atex zone I 💿 II 2/2 G Ex h IIB T4 Gb II -/2 D €x h IIIB TI35°C Db X



#### PHOENIX FOOD I8

#### **TECHNICAL DATA**

#### PERFORMANCE



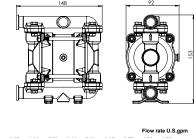


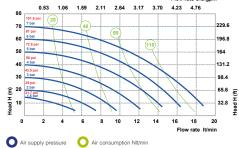
**AISI 316 ELECTRO-POLISHED** 

Fluid connections	3/4" TRI-CLAMP
Air connection	6 mm
Max. Flow rate	20 It/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:	10.000 cps
Displacement per Stroke:	30 CC ~

**ATEX ZONE 2** certification as Standard and, on request, **ATEX ZONE 1**.

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.





The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

Net Weight	Temperature
2,3 Kg	-20°C +95°C

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0018	<b>S =</b> SS POLISHED	<b>HT =</b> HYTREL+PTFE	T = PTFE S = SS	<b>S =</b> SS	<b>T =</b> PTFE	3 = TRI-CLAMP 1 = BSP 6 = DIN	- = zone 2 <b>X =</b> zone 1	<b>AB =</b> STANDARD

#### PHOENIX FOOD 30





**AISI 316 ELECTRO-POLISHED** 

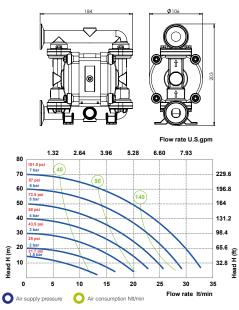
TEC	HNI		ГΔ

Fluid connections	<b>1</b> " TRI-CLAMP
Air connection	6 mm
Max. Flow rate	35 lt/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	3 mm
Noise level:	65 dB
Max Viscosity:	15.000 cps
Displacement per Stroke:	65 CC ~

ATEX ZONE 2 certification as Standard and, on request, ATEX ZONE 1.

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.

#### PERFORMANCE



The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

Net Weight	Temperature
3,8 Kg	-20°C +95°C

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0030	<b>S =</b> SS POLISHED	<b>HT =</b> HYTREL+PTFE	T = PTFE S = SS	<b>S =</b> SS	<b>T =</b> PTFE	3 = TRI-CLAMP 1 = BSP 6 = DIN	- = zone 2 <b>X=</b> zone 1	<b>AB =</b> STANDARD

#### PHOENIX FOOD 60

#### **TECHNICAL DATA**

#### PERFORMANCE



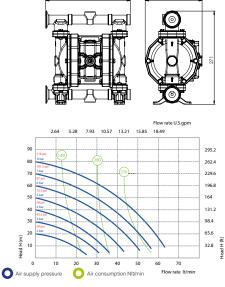


AISI 316 ELECTRO-POLISHED

Fluid connections	<b>1</b> " TRI-CLAMP
Air connection	1/4" BSP
Max. Flow rate	65 lt/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:	72 dB
Max Viscosity:	20.000 cps
Displacement per Stroke	e: 140 CC ~

ATEX ZONE 2 certification as Standard and, on request, ATEX ZONE 1.

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.



The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

Net Weight	Temperature
7,3 Kg	-20°C +95°C

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0060	<b>S =</b> SS POLISHED	<b>HT =</b> HYTREL+PTFE	<b>T =</b> PTFE <b>S =</b> SS	<b>S =</b> SS	T = PTFE	3 = TRI-CLAMP 1 = BSP 6 = DIN	- = zone 2 X = zone 1	<b>AB =</b> STANDARD

### PHOENIX FOOD I20

PF	120



**AISI 316 ELECTRO-POLISHED** 

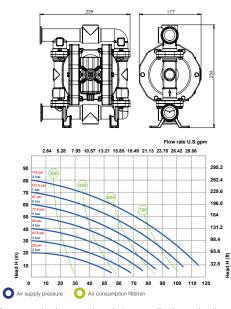
#### **TECHNICAL DATA**

Fluid connections	1"1/2"TRI-CLAME
Air connection	3/8" BSP
Max. Flow rate	120 lt/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 CC ~

**ATEX ZONE 2** certification as Standard and, on request, **ATEX ZONE 1**.

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.

#### PERFORMANCE



The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

Net

et Weight	Temperature				
9,6 Kg	-20°C +95°C				

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0120	<b>S =</b> SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	<b>S =</b> SS	T = PTFE	3 = TRI-CLAMP 1 = BSP 6= DIN	- = zone 2 X = zone 1	<b>AB =</b> STANDARD

#### PHOENIX FOOD 170

#### **TECHNICAL DATA**

#### PERFORMANCE

### **PF 170**

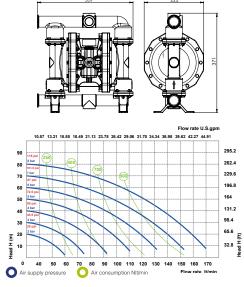


**AISI 316 ELECTRO-POLISHED** 

1"1/2 TRI-CLAMP
1/2" BSP
170 It/min
8 bar
80 m
5 m
9,8 m
7,5 mm
75 dB
35.000 cps
700 CC ~

ATEX ZONE 2 certification as Standard and, on request, ATEX ZONE 1.

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.



The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

Net Weight	Temperature
17,2 Kg	-20°C +95°C

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0170	<b>S =</b> SS POLISHED	HT =HYTREL+PTFE	T = PTFE S = SS	<b>S =</b> SS	<b>T =</b> PTFE	3 = TRI-CLAMP 1 = BSP 6 = DIN	- = zone 2 <b>X =</b> zone 1	<b>AB =</b> STANDARD

#### PHOENIX FOOD 400





**AISI 316 ELECTRO-POLISHED** 

#### **TECHNICAL DATA**

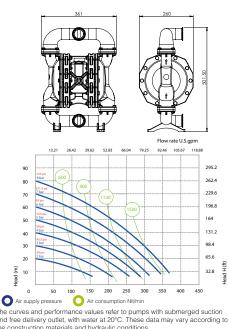
Fluid connections	2" TRI-CLAMP
Air connection	1/2" BSP
Max. Flow rate	380 lt/min
Max air pressure	8 bar
Max delivery head	80 m
Max Suction Lift Dry	5 m
Max Suction Lift Wet	9,8 m
Max Solid passing	8 mm
Noise level:	78 dB
Max Viscosity:	40.000 cps
Displacement per Stroke	1200 CC ~

EX ATEX ZONE 2 certification as Standard and,

on request, ATEX ZONE 1.

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.

#### PERFORMANCE



The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

Net

et Weight	Temperature			
25,3 Kg	-20°C +95°C			

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0400	<b>S =</b> SS POLISHED	<b>HT =</b> HYTREL+PTFE	T = PTFE S = SS	<b>S =</b> SS	<b>T =</b> PTFE	3 = TRI-CLAMP 1 = BSP 6 = DIN	- = zone 2 X = zone 1	<b>EF =</b> STANDARD

#### PHOENIX FOOD 700

#### **TECHNICAL DATA**

#### PERFORMANCE



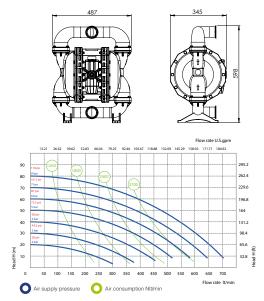


**AISI 316 ELECTRO-POLISHED** 

Fluid connections	2"1/2 TRI-CLAMP
Air connection	3/4" BSP
Max. Flow rate	700 lt/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:	3050 CC ~

ATEX ZONE 2 certification as Standard and, on request, ATEX ZONE 1.

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.



The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at 20°C. These data may vary according to the construction materials and hydraulic conditions.

Net Weight	Temperature
51 Kg	-20°C +95°C

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF0700	<b>S =</b> SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	<b>S =</b> SS	<b>T =</b> PTFE	3 = TRI-CLAMP 1 = BSP 6 = DIN	- = zone 2 <b>X =</b> zone 1	<b>EF =</b> STANDARD

#### PHOENIX FOOD 1000

## **PF 1000**



**AISI 316 ELECTRO-POLISHED** 

TECH	NIC	AL	DA	TA

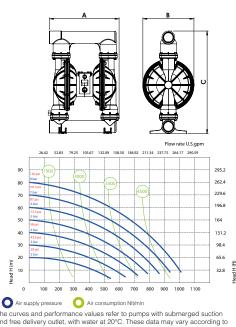
Fluid connections	3" BSP
Air connection	3/4" BSP
Max. Flow rate	1050 lt/min
Max air pressure	8 bar
Max delivery head	80 m
Max Suction Lift Dry	5 m
Max Suction Lift Wet	9,8 m
Max Solid passing	12 mm
Noise level:	82 dB
Max Viscosity:	55.000 cps
Displacement per Stroke:	9750 CC ~

ATEX ZONE 2 certification as Standard and,

on request, ATEX ZONE 1.

Displacement per stroke may vary based on suction condition, discharge head, air pressure and fluid type.

#### PERFORMANCE



The curves and performance values refer to pumps with submerged suction and free delivery outlet, with water at  $20^{\circ}$ C. These data may vary according to the construction materials and hydraulic conditions.

Net

11

Weight	Temperature
1,5 Kg	-20°C +95°C

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF1000	<b>S =</b> SS POLISHED	HT = HYTREL+PTFE	T = PTFE S = SS	<b>S =</b> SS	T = PTFE	3 = TRI-CLAMP 1 = BSP 6 = DIN	- = zone 2 X = zone 1	<b>AB =</b> STANDARD





## SPECIAL PUMPS

Air operated double diaphragms pumps with special features: PHOENIX ATEX certification zone I ATEX ACCURATE PHOENIX remote control DRUM PHOENIX to empty drums and tanks TWIN PHOENIX with double inlet/outlet POWDER PHOENIX to handle powder trasferring SUBMERSIBLE PHOENIX ready to be submerged directly into the fluid













### European ATEX directive 2014/34/UE

### II 2/2 G €x h IIB T4 Gb II -/2 D €x h IIB TI35°C Db X

Ex Safety symbol in agreement with DIN 40012 appendix A

II 2/2 G surface equipment for use in zones with the occasional presence of combustible gases, fumes or fogs, as well as dust, in the air during the normal

II -/2 D operation (EN 1127-1 par. 6.3), in the external and internal zone.

Ex h equipment in protection mode "c", or "b", or "k", in agreement with standard EN 80079-37

IIB except for the following gases: hydrogen, acetylene, carbon sulphide

**IIIB** except for the following dust: conductive dust

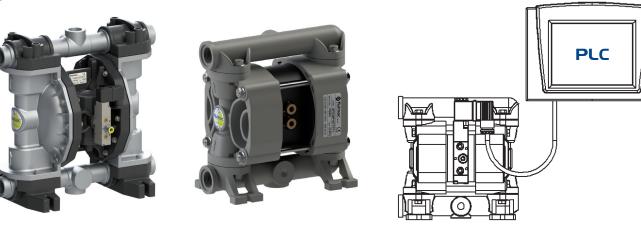
T4/T135°C temperature class admitted.

PUMPS	MAIN APPLICATIONS
ALL RANGE	<ul> <li>Petrol-Chemical Industry</li> <li>Flexographic industry</li> <li>Food industry</li> <li>Painting industry</li> <li>Automotive industry</li> </ul>

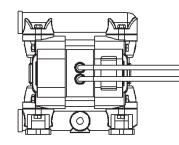
#### **TECHNICAL DATA**

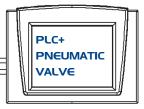
Fluimac has filed with the BUREAU VERITAS certification body the documentation certifying ATEX compliance pursuant to Directive 2014/34/UE for its ranges of AODD pumps and pulsation dampeners, with special construction materials to have zone 1 certification.

















#### PUMPS

AP7 AP18 AP30 AP60 AP90 AP120 AP170 AP252

### MAIN APPLICATIONS

- CHEMICAL INDUSTRY
  WASTE DISPOSAL TECHNOLOGY
  FLEXOGRAPHIC INDUSTRY
  PAINTING INDUSTRY
  PRINTING INDUSTRY
  - WATER TREATMENT

#### aodd.ir

#### **TECHNICAL DATA**

ACCURATE PHOENIX are Pumps that give 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.

### DRUM PHOENIX

#### PUMPS

DP18 - DP30 - DP60 - DP120 - DP170

#### MAIN APPLICATIONS

- CHEMICAL INDUSTRY
- WASTE DISPOSAL TECHNOLOGY
- AUTOMOTIVE INDUSTRY
- FOOD INDUSTRY



#### **TECHNICAL DATA**

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.

### SUBMERSIBLE PHOENIX

#### PUMPS

ALL RANGE

#### MAIN APPLICATIONS

- CHEMICAL INDUSTRY
- WASTE DISPOSAL TECHNOLOGY
- FOOD INDUSTRY
- PETROL-CHEMICAL INDUSTRY



#### TECHNICAL DATA

SUBMERSIBLE pumps may be submerged into the liquid. It is important to make sure that all components which are in contact with the liquid are chemically compatible. The air exhaust must be led to the atmosphere by means of a hose.

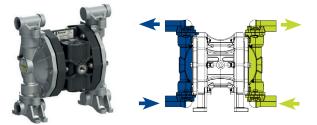
### TWIN PHOENIX

#### PUMPS

ALL RANGE

### MAIN APPLICATIONS

- 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.

### POWDER PHOENIX

#### PUMPS

PP400 - PP700 IN ALU AND SS

#### MAIN APPLICATIONS

- PAINTING INDUSTRY
- WASTEWATER TECHNOLOGY
- PRINTING INDUSTRY
- FOOD INDUSTRY
- CHEMICAL INDUSTRY



#### TECHNICAL DATA

aod

POWDER pumps are designed to move bulk powders more effectively throughout your process vs. other unsafe and labor intensive means.

These heavy duty pumps will consistently transfer fine-grained, low-bulk density dry powders in a dust-free operation.



## DAMPER

Pneumatic, automatic pulsation dampeners Realized in: PP, PVDF, ALUMINIUM, SS AISI 316, POMc Applicable to all size of pumps. ATEX ZONE 2 AND ZONE I CERTIFICATION Available also in FOOD version.





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, setting automatically 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.

#### 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.



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;
- FILLING:

Eliminates inconsistent filling and splashing;

• TRANSFER:

Eliminates harmful water hammer, preventing pipe and valve damage.

### INSTALLATION









DAMPER 20 TECHNICAL DATA		DII	MENSION	IS		
D2C	Fluid cor Air conn Max air p Capacity	nnections <b>3/4" BSP</b> ection <b>6 mm</b> pressure <b>8 bar</b>	A (mm) B (mm) Net Weight Kg ( Max Temperature +	PP       PVDF         119       119         143       143         0,65       0,7         65°C       +95°C         -4°C       -20°C	POMc 119 143 0,65 +80°C -5°C	AISI 119 143 2 +95°C -20°C
MODEL	CASING	DIAPHRAGM	CONNECTIONS	PORTS		
D020	<b>P =</b> PP <b>KC =</b> PVDF+CF <b>O =</b> POMc <b>S =</b> SS	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE	1 = BSP 2 = FLANGE 5 = NPT	<b>T =</b> STANDA	RD	

#### DAMPER 25

D25

### **TECHNICAL DATA**

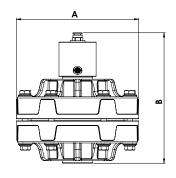
Fluid connections	1" BSP
Air connection	8 mm
Max air pressure	8 bar
Capacity Volume	200 CC ~

(E) ATEX ZONE 2 certification as Standard and, on request, ATEX ZONE 1.



#### DIMENSIONS

	PP	PVDF	РОМс	AISI
A (mm)	181	181	181	181
B (mm)	195	195	195	182
Net Weight Kg	1,75	2	1,9	6,7
Max Temperature	+65°C	+95°C	+80°C	+95°C
Min Temperature	-4°C	-20°C	-5°C	-20°C



PVDF+CF

PP

	N/-	
-0	IVIC	



#### CONNECTION

T = STANDARD AB = SS

D025

- **P** = PP **KC** = PVDF+CF **O** = POMc **S** = SS
- HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM N = NBR

1 = BSP 2 = FLANGE 5 = NPT

DAMPER 40	TECHNICAL DATA		DIMENSIONS				
D40 iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Fluid connections Air connection Max air pressure Capacity Volume ATEX ZONE 2 certification on request, ATEX ZONE APPLY 170 - 252 POMC	TO:	A (mm) B (mm) Net Weight Kg Max Temperature Min Temperature	PP 231 270 4 +65°C -4°C	PVDF 231 270 4,6 +95°C -20°C	POMc 231 270 4,2 +80°C -5°C	AISI 231 267 5,6 +95°C -20°C
MODEL CASIN			CONNECTIONS		PORTS		
D040         P = PP           KC = PVDF-1           O = POMc           S = SS	HT = HYTRE MT = SANTO H = HYTREL M = SANTOF D = EPDM N = NBR	PRENE+PTFE	1 = BSP 2 = FLANGE 5 = NPT		<b>t =</b> standaf	RD	
DAMPER 50	TECHNICA	L DATA	D	IMEN	SION	5	
D50	Fluid connections Air connection	2" BSP 12 mm	A (mm)	PP	PVDF	ALU	AISI



PP



**PVDF+CF** 

<b>e</b>



Max air pressure

Capacity Volume



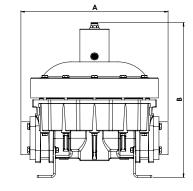
8 bar

EX ATEX ZONE 2 certification as Standard and, on request, ATEX ZONE 1.

**APPLY TO:** 

2900 CC ~

	PP	PVDF	ALU	AISI
A (mm)	404	404	400	402
B (mm)	425	425	425	408
Net Weight Kg	14	17	14,5	21,6
Max Temperature	+65°C	+95°C	+80°C	+95°C
Min Temperature	-4°C	-20°C	-5°C	-20°C



MODEL	CASING	DIAPHRAGM	O-RING	CONNECTIONS
D050	P = PP KC = PVDF+CF A = ALU S = SS	HT = HYTREL+PTFE MT = SANTOPRENE+PTFE H = HYTREL M = SANTOPRENE D = EPDM	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGE 5 = NPT

N = NBR

**AB =** STANDARD

34





#### AIR REGULATION KIT

Adjust and set air pressure and airflow-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 line.



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

DIAPHRAGM FAILURE

DETECTION FLUID-GUARD

The Leak Detector provide a signal and the

pump can be shut down when diaphragms



#### INOX TROLLEY

It makes pumps transportable.



### ANTI VIBRATION

Reduces physical vibration from AODD pump operation.



#### REINFORCED PVC HOSE

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



#### PNEUMATIC BATCH CONTROL

fail.

impurity.

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



### ELECTRONIC BATCH

Electronic batcher can control any FLUIMAC AODD pump allowing you to set the cycles amount and count the strokes.



**BASKET STRAINER FILTERS IN PP** Installed on the suction of the pumps, protects them from suspended solids and



**GEMINI CONTROL** Electronic Control System for accurate pumps. This system allows you to use AODD pump as dosing system.

#### PRESSURE BOOSTER

Where the line pressure is not enough, this system doubles the in let pressure to supply correctly the air to the pump.



**FOOT BALL VALVE** Realized in PP and PVDF. Size available 1" - 1"1/4 - 1"1/2 - 2" Used to prevent the suction hose from emptying.





VALVES FITTINGS AND CONNECTIONS IN PP, PVC, INOX



FLANGE CONNECTION KIT

It modifies a pump with BSP connection into a flanged pump.

WALL FIXING BRACKET Wall fixing bracket for diaphragm

pumps, for all sizes.





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### AUTHORIZED PARTNER:



