

AF

fluing solution





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 CE CONFORMITY MARKING

2	- Hereiter	100
		_
_	-	_
-		
2.7	NC	
-		121
		- (V)





ISO 9001:2008







GOST-R RUSSIA





o fluimac FDA

IN THE LIFE

HOENIX FOOD

_		
Λ		
iant		
IGHI		



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.







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 ¼" to 3".



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 ¼" to 3".





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 C E 😔 🎨 @ Eff 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 C E 😔 🕰 @ Eff 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.



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





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.

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.



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.



Pump 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





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



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 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 Suction Head Lift (ft) 3.28 13.12 16.40 19.68 22.96 26.25 29.53 32.80 Flow (% Pump Rated 40% ٦ Decrease 2 Suction Head Lift (m) With a suction lift of 4 mt, pump rate decreases by

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.

Technical data are approximate and not binding for the manufacturer who reserves the right to change them without notice at any time.









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 ¼" to 3". ATEX certification for zone 2 EX II 3/3 GD c IIB T135°C







Technical data

Fluid connections:	1/4
Air connection:	4 m
Max flow-rate:	8 lt/
Max air pressure:	8 B
Max delivery head:	80
Max Suction Lift Dry:	3 m
Max Suction Lift Wet:	9,8
Max Solid passing:	2,5
Noise level:	62 (
Displacement for cycle:	8 co
Max Viscosity:	6.0

1/4" BSP
4 mm
8 lt/min
8 Bar
80 mt
3 mt
9,8 mt
2,5 mm
62 dB
8 cc
6.000 cps

Performance Flow rate U.S.gpm 0.26 0.53 0.79 1.06 1.32 1.59 1.85 2.11 20 295.2 90 40 8 bar 262.4 80 7 bar 70 229.6 50 6 bar 196.8 60 5 bar 50 164 4 bar 40 131.2 3 bar 98.4 30 2 bar 20 65.6 Head H (m) Ξ Head H 10 32.8 0 2 3 5 4 1 6 7 8 Flow rate It/min O Air supply pressure O 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	
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
	P = PP KC = PVDF+CF O = POMc		T = PTFE S = SS	$\mathbf{K} = PVDF$:	1 = BSP 5 = NPT	- = zone 2	AB = STANDARD



Technical data

Fluid connections:	3
Air connection:	6
Max flow-rate:	2
Max air pressure:	8
Max delivery head:	8
Max Suction Lift Dry:	6
Max Suction Lift Wet:	9
Max Solid passing:	3
Noise level:	6
Displacement for cycle:	3
Max viscosity:	1

3/8" BSP
6 mm
20 lt/min
8 Bar
80 mt
6 mt
9,8 mt
3 mm
65 dB
30 cc
12.000 cps



😓 EX II 3/3 GD c IIB T 135°C

Dimensions A 0 PP PVDF POMc AISI 316 M 7 146 146 148 A (mm) 146 96 96 92 96 B (mm) 0 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 A

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





Technical data

Fluid connections:
Air connection:
Max flow-rate:
Max air pressure:
Max delivery head:
Max Suction Lift Dry:
Max Suction Lift Wet:
Max Solid passing:
Noise level:
Displacement for cycle:
Max Viscosity:

1/2" BSP 6 mm 35 lt/min 8 Bar 80 mt 5 mt 9,8 mt 3,5 mm 65 dB 50 cc 15.000 cps

Performance



😓 EX II 3/3 GD c IIB T 135°C

1)	Im	n		\cap	nc
			101	U	ns

Dimensions					A
	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 O = POMc		S = SS	0 = POMc S = SS	IN = NBR	1 = BSP 2 = Flanged 5 = NPT	- = zone 2	AB = STANDARD

fluimac hoenix



Technical data

Fluid connections:	1/
Air connection:	1/
Max flow-rate:	55
Max air pressure:	8
Max delivery head:	80
Max Suction Lift Dry:	6
Max Suction Lift Wet:	9,
Max Solid passing:	З,
Noise level:	68
Displacement for cycle:	85
Max Viscosity:	20

/2" BSP /4" BSP 5 lt/min Bar 0 mt mt ,8 mt ,5 mm 8 dB 5 cc 0.000 cps

Performance



😓 EX II 3/3 GD c IIB T 135°C

Dimensions

Dimensions					Α
	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	

Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0050	KC = PVDF+CF A = ALU	HT = HYTREL+PTFE MT = Santoprene+Ptfe H = Hytrel M = Santoprene	S = SS	$\mathbf{A} = ALU$ $\mathbf{S} = SS$	$\mathbf{V} = \text{VIION}$ $\mathbf{N} = \text{NBB}$	1 = BSP 2 = Flanged 5 = NPT	- = zone 2	AB = STANDARD

fluimac noenix



Technical data

Fluid connections:	1/
Air connection:	3/
Max flow-rate:	70
Max air pressure:	8
Max delivery head:	80
Max Suction Lift Dry:	6
Max Suction Lift Wet:	9,
Max Solid passing:	З,
Noise level:	72
Displacement for cycle:	10
Max Viscosity:	25

2" BSP /8" BSP 0 lt/min Bar 0 mt mt ,8 mt ,5 mm 2 dB 00 cc 5.000 cps

Performance



😓 EX II 3/3 GD c IIB T 135°C

Dimensions

Dimensions					A	. В
	PP	PVDF	ALU	AISI		TOT
A (mm)	265	265	265	250		Chill Chille
B (mm)	175	175	175	175	i ka	
C (mm)	245	245	245	250		o; (O) ;;o ○
Weight kg	6,5	7	7	9		09100
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

fluimac hoenix



Technical data

Fluid connections:	3
Air connection:	3
Max flow-rate:	1
Max air pressure:	8
Max delivery head:	8
Max Suction Lift Dry:	6
Max Suction Lift Wet:	9
Max Solid passing:	3
Noise level:	7
Displacement for cycle:	1
Max Viscosity:	2

8/4" BSP 8/8" BSP 10 lt/min 8 Bar 30 mt 3 mt 9,8 mt 3,5 mm 2 dB 00 cc 25.000 cps

Performance



😓 EX II 3/3 GD c IIB T 135°C

Dimensions

Dimensions					A
	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	

MODEI	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0100	KC = PVDF+CF	M = SANTOPRENE	$\mathbf{S} = SS$ $\mathbf{D} = FPDM$	P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE		1 = BSP 2 = Flanged 5 = NPT	- = zone 2	AB = STANDARD

fluimac hoenix



PVDF+CF



ALU



AISI 316



Technical data

Fluid connections:	-
Air connection:	-
Max flow-rate:	-
Max air pressure:	8
Max delivery head:	8
Max Suction Lift Dry:	6
Max Suction Lift Wet:	ę
Max Solid passing:	-
Noise level:	7
Displacement for cycle:	3
Max Viscosity:	0

1" BSP 1/2" BSP 170 lt/min 8 Bar 80 mt 6 mt 9,8 mt 7,5 mm 75 dB 330 cc 35.000 cps

Performance 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 44.91 295.2 90 8 bar 400 262.4 80 700 7 bar 229.6 70 6 bar 196.8 60 164 5 bar 50 131.2 4 bar 40 98.4 3 bar 30 2 bar 65.6 20 Head H (m) Ê Head H (32.8 10 150 160 170 0 60 70 90 100 110 120 130 140 40 80 50 O Air supply Flow rate It/min Air consumption NIt/min 0 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.

😓 EX II 3/3 GD c IIB T 135°C

Dimensions					Α	- В
	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
P0160	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





PVDF+CF



ALU



AISI 316



Technical data

Fluid connections:	
Air connection:	
Max flow-rate:	
Max air pressure:	ł
Max delivery head:	ł
Max Suction Lift Dry:	(
Max Suction Lift Wet:	ļ
Max Solid passing:	
Noise level:	
Displacement for cycle:	ļ
Max Viscosity:	÷

1" 1/4 BSP 1/2" BSP 250 lt/min 8 Bar 80 mt 6 mt 9,8 mt 7,5 mm 75 dB 330 cc 35.000 cps



😓 EX II 3/3 GD c IIB T 135°C

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 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

fluimac **Choenix**



PVDF+CF

ALU



AISI 316



Technical data

Fluid connections:
Air connection:
Max flow-rate:
Max air pressure:
Max delivery head:
Max Suction Lift Dry:
Max Suction Lift Wet:
Max Solid passing:
Noise level:
Displacement for cycle:
Max Viscosity:

1" 1/2 BSP 3/4" BSP 550 lt/min 8 Bar 80 mt 5 mt 9,8 mt 8,5 mm 78 dB 1250 cc 50.000 cps

Performance



😓 EX II 3/3 GD c IIB T 135°C

Dimensions					A B
	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	

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0500	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

fluimac ²hoenix



PVDF+CF

ALU



AISI 316



Technical data

Fluid connections:
Air connection:
Max flow-rate:
Max air pressure:
Max delivery head:
Max Suction Lift Dry:
Max Suction Lift Wet:
Max Solid passing:
Noise level:
Displacement for cycle:
Max Viscosity:

2" BSP 3/4" BSP 700 lt/min 8 Bar 80 mt 5 mt 9,8 mt 8,5 mm 78 dB 1250 cc 50.000 cps

Performance



😓 EX II 3/3 GD c IIB T 135°C

Dimensions					A B
	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	

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P 0700	P = PP KC = PVDF+CF	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

fluimac vineor



PVDF



ALU



AISI 316



Technical data

Fluid connections:
Air connection:
Max flow-rate:
Max air pressure:
Max delivery head:
Max Suction Lift Dry:
Max Suction Lift Wet:
Max Solid passing:
Noise level:
Displacement for cycle:
Max Viscosity:

3" BSP 3/4" BSP 1050 lt/min 8 Bar 80 mt 5 mt 9,8 mt 10 mm 78 dB 2825 cc 55.000 cps

Performance Flow rate U.S.gpm 26.42 52.83 79.25 105.67 132.09 158.50 184.92 211.34 237.75 264.17 290.59 295.2 90 900 1600 8 bar 262.4 80 50 7 bar 3500 229.6 70 6 bar 196.8 60 5 bar 164 50 4 bar 131.2 40 3 bar 98.4 30 2 bar 65.6 20 Head H (m) Ξ Head H (32.8 10 300 400 600 700 1000 1100 0 100 200 500 800 900 Flow rate It/min O Air supply pressure O 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	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	$\mathbf{\Delta} = \mathbf{A} \mathbf{U}$	$\mathbf{MT} = SANTOPRENE+PTFE$ $\mathbf{H} = HYTREL$	D = EPDM	K = PVDF A = ALU	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 ¼" to 3". ATEX certification for zone 1 **EX II 2/2 GD c IIB T135°C**



Atex

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

Ex 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.



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0007	PC = PP+CF KC = PVDF+CF OC = POMc+CF	NT = NBR+PTFE	T = PTFE S = SS	$\mathbf{P} = PP$		1 = BSP 5 = NPT	X = zone 1	AB = STANDARD



MODEL			BALLS	EATS	GASKET	CONNECTIONS		PORTS
P0018	PC = PP+CF KC = PVDF+CF OC = POMc+CF S = SS	NT = NBR+PTFE	T = PTFE S = SS		D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 5 = NPT	X = zone 1	AB = STANDARD



Composition DIAPHRAGM $\mathbf{P} = \mathsf{PP}$ PC = PP+CF**HT** = HYTREL+PTFE T = PTFE $\mathbf{D} = \mathsf{EPDM}$ **KC** = PVDF+CF **1** = BSP KC = PVDF+CF V = VITON S = SS X= zone 1 AB = STANDARD P0030 **MT** = SANTOPRENE+PTFE **O** = POMc 2 = FLANGED **OC** = POMc+CF $\mathbf{D} = \mathsf{EPDM}$ **H** = HYTREL N = NBR $\mathbf{S} = SS$ **5** = NPT M = SANTOPRENE $\mathbf{S} = SS$ $\mathbf{N} = \mathsf{NBR}$ T = PTFE **Z** = PE-UHMWE



MODEL CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PC = PP+CF KC = PVDF+CF OC = POMc+CF S = SS	•	T = PTFE S = SS D = EPDM N = NBR	$\mathbf{O} = POMc$ $\mathbf{S} = SS$	V = VITON	1 = BSP 2 = Flanged 5 = NPT	X= zone 1	AB = STANDARD



ALU

PVDF+CF

😓 EX II 2/2 GD c IIB T 135°C

Technical data

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.

Com	position							
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0065	PC = PP+CF KC = PVDF+CF A = ALU S = SS	M = SANTOPRENE	T = PTFE S = SS D = EPDM N = NBR	KC = PVDF+CF A = ALU	D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = Flanged 5 = NPT	X = zone 1	AB = STANDARD

AISI 316



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0160	PC = PP+CF KC = PVDF+CF A = ALU	M = SANTOPRENE	T = PTFE S = SS D = EPDM N = NBB		V = VITON	1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARD



MODE	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P025	$\begin{array}{l} \textbf{HT} = \textbf{HYTREL} + \textbf{PTFE} \\ \textbf{MT} = \textbf{SANTOPRENE} + \textbf{PTFE} \\ \textbf{H} = \textbf{HYTREL} \\ \textbf{M} = \textbf{SANTOPRENE} \\ \textbf{D} = \textbf{EPDM} \\ \textbf{N} = \textbf{NBR} \end{array}$		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



MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0500	KC = PVDF+CF	M = SANTOPRENE	T = PTFE S = SS D = EPDM N = NBB		D = EPDM V = VITON N = NBR T = PTFE	1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARD



MODE	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
P0250	KC = PVDF+CF			P = PP KC = PVDF+CF A = ALU S = SS Z = PE-UHMWE		1 = BSP 2 = FLANGED 5 = NPT	X = zone 1	AB = STANDARD







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



Composition DIAPHRAGM T = PTFE $\mathbf{D} = \mathsf{EPDM}$ **MT** = SANTOPRENE+PTFE $\mathbf{S} = SS$ $\mathbf{V} = \mathsf{VITON}$ $\mathbf{A} = \mathsf{ALU}$ $\mathbf{A} = \mathsf{ALU}$ **1** = BSP **P1000 S** = SS X = zone 1 AB = STANDARD H = HYTREL $\mathbf{D} = \mathsf{EPDM}$ **S** = SS $\mathbf{N} = \mathbf{NBR}$ 2 = FLANGED **M** = SANTOPRENE $\mathbf{N} = \mathsf{NBR}$ $\mathbf{T} = \mathsf{PTFE}$





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. 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 mmMax flow-rate:20 lt/minMax air pressure:8 BarMax 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: Air connection: Max flow-rate: Max air pressure: Max viscosity: Tri-Clamp 1" 6 mm 35 lt/min 8 Bar 15.000 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.

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

Fluid connections:Tri-Clamp 1"Air connection:1/4" BSPMax flow-rate:55 lt/minMax air pressure:8 BarMax 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

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

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

Pump solution



AISI 316 ELECTRO-POLISHED



Technical data

Fluid connections:Tri-Clamp 1"1/2Air connection:1/2" BSPMax flow-rate:170 lt/minMax air pressure:8 BarMax viscosity:35.000 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

(

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

Performance



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

Tri-Clamp 2"1/2 Fluid connections: Air connection: 3/4" BSP 700 lt/min Max flow-rate: 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.

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: Air connection: Max flow-rate: Max air pressure: Max viscosity:

3" BSP 3/4" BSP 1050 lt/min 8 Bar 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 CASI	NG DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PF1000 S = S POLIS	S Shed ht = Hytrel+	PTFE T = PTFE S = SS	S = SS	T = PTFE	3 = TRI-CLAMP 1 = BSP	- = zone 2 X = zone 1	AB = STANDARC



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









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.

01

Note: PLC and computer system not included.



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.



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

PUMPS

DP65 - DP100

DP160

DP18 - DP30 - DP50

• Chemical industry • Waste disposal technology Automotive industry Food industry



- 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.
- Filling
- Eliminates inconsistent filling and splashing.
- Transfer
- Eliminates harmful water hammer, preventing pipe and valve damage.





How it works

The pulsating flow of the discharge forces the diaphragm upwards where it is cushioned by the air in the chamber.

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



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



















Technical data Fluid connections: Air connection:

Max air pressure:

2" 12 mm 8 Bar APPLY TO: 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.



VALVES, FITTINGS AND CONNECTIONS IN PP, PVC, INOX



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

FLUIMAC S.r.I.

Via Po, angolo Via Tevere 21043, Castiglione Olona (VA) Tel.: +39 0331 866688 Fax: +39 0331 864870

www.fluimac.com info@fluimac.com