

PIEZO

MATERIALS OF CONSTRUCTION:

PP, PVDF, POMc, POMc+CF

Flow-rate 8 lt/min

ATEX VERSION AVAILABLE

FLUIMAC developed and patented a new pump model, PIEZO PUMP, a unique pump, designed for the environmental remediation applications.

PIEZO PUMP is an easily transportable pneumatic system, which can be installed inside wells with a minimum internal diameter of 4" for the following purposes:

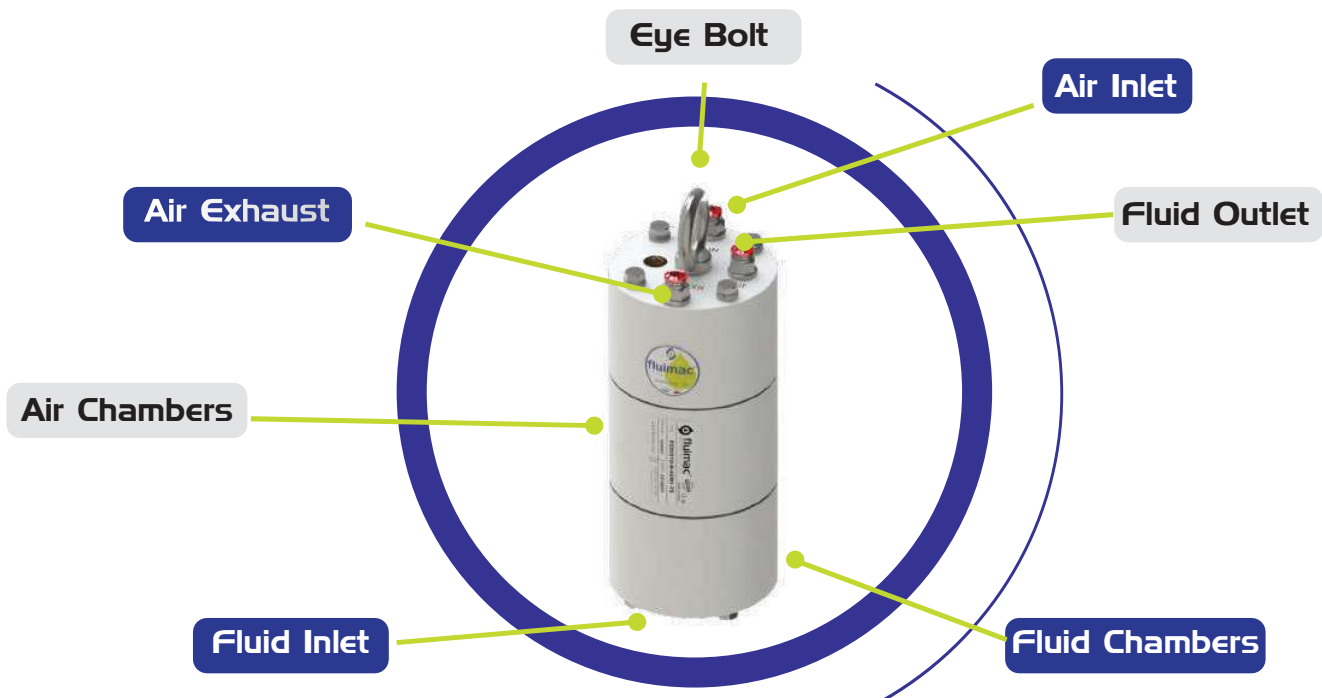
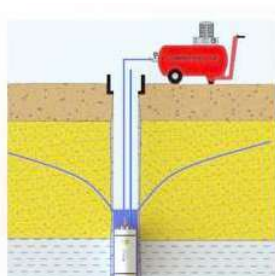
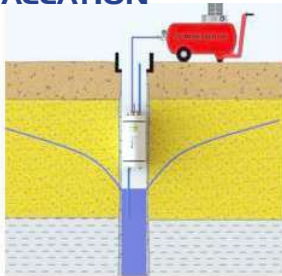
- Groundwater pumping as part of remediation activities or remediation plants;
- Recovery Technology for LNAPL / DNAPL (light / dense non-aqueous phase liquid);
- Oil handling in ATEX classified areas;
- Low-flow representative sampling at different depths inside environmental monitoring wells;
- Excellent tool for environmental emergency response activities.

FEATURES:

- Operation with high subsidence value of water level (max. approx. 50 m);
- Possibility to work both above and below the water level;
- Can work with solids in the water flow (max. approx. 2.5 mm);
- Constant pumping at low flow rates (approx. 0.25-4.00 l/min)
- Easy flow management through compressed air supply;
- Lightweight, compact and compatible with 4" wells;
- Possibility to send the air exhaust out of the well.



INSTALLATION



PZ 0001

P-

TT

S

MODEL	SIZE	CASING	DIAPHRAGM	BALL
PZ PIEZO PUMP 	1 8 lt/min 1/4" BSPP	 P POLYPROPYLENE Wide chemical compatibility. General purpose. Reinforced with glass-fiber.  K PVDF Strong chemical resistance to acids. High temperature resistance. Groundable.  O ACETAL Wide range of solvent and hydrocarbons resistance. Good level of abrasion resistance.  OC CONDUCTIVE ACETAL Wide range of solvent and hydrocarbons. Good level of abrasion resistance. Groundable.	 N NBR Good for petroleum-based fluids, water, oils, hydrocarbons and MILD chemicals.  T PTFE Widest chemical compatibility, extreme corrosion resistance, non-adhesive, high heat resistance.	 T PTFE Widest chemical compatibility, extreme corrosion resistance, non-adhesive, high heat resistance.  S SS High level of corrosion and abrasion resistance. Good for viscous fluids.

O

V

1

-

TS

BALL SEAT

GASKET

CONNECTIONS

ATEX ZONE
CERTIFICATION

PORTS

**P**
POLYPROPYLENE

Wide chemical compatibility.
General purpose.

**K**
PVDF

Strong chemical resistance to acids.
High temperature resistance.

**O**
ACETAL

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

**V**
VITON

High heat resistance.
Good resistance to aggressive chemicals and hydrocarbons.

**N**
NBR

Good for petroleum-based fluids, water, oils, hydrocarbons and MILD chemicals.

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BSP THREADED



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ATEX ZONE 2

II 3/3 G Ex h IIC T4 Gc

II 3 D Ex h IIIB T135°C Dc X

X

ATEX ZONE 1

II 2/2 G Ex h IIC T4 Gb

II 2 D Ex h IIIB T135°C Db X



TABLE CODE

PIEZO PUMP



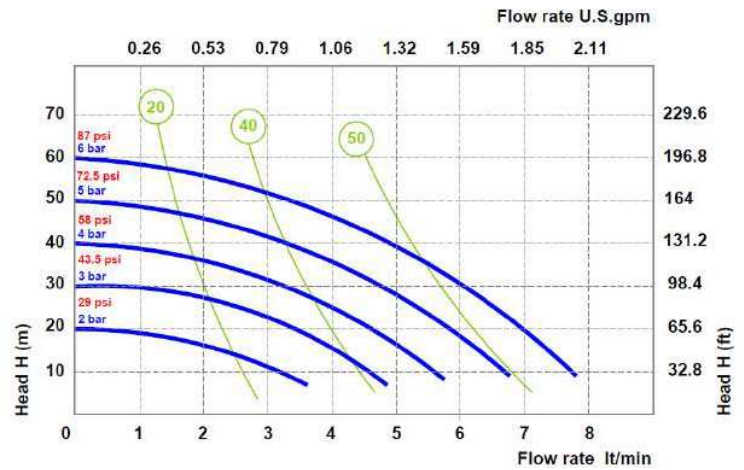
TECHNICAL DATA

Fluid connections	1/4" BSP
Air connection	1/4" BSP
Max. Flow rate	8 lt/min
Max air pressure	6 bar
Max delivery head	60 m
Max Suction Lift Dry	3 m
Max Solid passing	2 mm
Noise level	65 dB
Max Viscosity	5.000 cps
Displacement per Stroke	24 CC ~

II 3/3 G Ex h IIB T4 Gc
 II -/3 D Ex h IIB T135°C Dc X

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

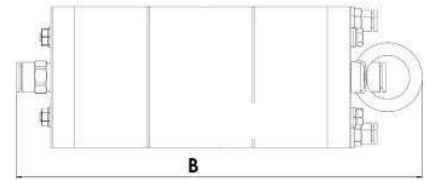
PERFORMANCE



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

DIMENSIONS

	A	B	Net Weight	Temperature
POMC+CF	90 mm	242 mm	1,7 kg	- 5 °C + 80 °C
POMc	90 mm	242 mm	1,7 kg	- 5 °C + 80 °C
PVDF	90 mm	242 mm	2,2 kg	- 20 °C + 69
PP	90 mm	242 mm	1,7 kg	- 4 °C + 65 °C



COMPOSITION

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
PZ001	O = POMc P = PP K = PVDF OC = POM+CF	N = NBR TT = PTFE+PTFE	T = PTFE S = SS	O = POMc P = PP K = PVDF	N = NBR V = VITON D = EDPM	1 = BSP	- = ZONE 2 X = ZONE 1	TS = STANDARD