

# ALIFAR

P U M P S



# DIAPHRAGM PUMPS FOR FOOD AND PHARMACEUTICAL INDUSTRIES

CLOSED PUMP: «P8» MODEL  
OPENED PUMP: «P2-CPS» MODEL



The standard pump range includes 4 sizes and 24 models, with the possibility of additional variants to meet special requirements.

The typology of construction of the single models makes them particularly suitable for transporting liquids and powders for food or pharmaceutical industries.

All models are available in the heated version and the feeder version (with controlled delivery).

Some versions are particularly suitable for transporting viscous liquids (10,000 cps and over).

The electric parts are powered at 24 V A.C. and 24 V D.C. (consumption 15 W).

Particular attention is paid to the use of materials employed in the pump's structure, and the machining of the pump casing and valves, tools which do not have any components which were obtained by casting or pressing.

The materials used, including the diaphragm, housing and balls, come complete with health certification. The standard manufacturing process is devised in accordance with the 3A and ISO standards.

## «P2» MODEL PUMP, HEATED VERSION



«P4» MODEL PUMP

### MATERIALS EMPLOYED IN MANUFACTURE AND FINISHES

**Pump casing:** Aisi 304 and 316 L stainless steel

**Pneumatic parts:** Aluminium, anticorodal

**Diaphragms, housing and balls:** SNF® (-25 +100° C - thermoplastic alloy), teflon® PTFE (+5 +102° C), santoprene®

**Housing and balls:** SNF®, teflon® PTFE, Aisi 304 e 316 L stainless steel

**Connections:** DIN (not included in 3A standards), SMS, Tri-clamp

**Internal finish:** Polished to obtain mirror finish (texture 8 Ra)

**External finish:** Polished to obtain mirror finish

**Optional extras:**

- Internal finish: polished to obtain mirror finish texture ≤ 0,6 Ra (400 Grit)
- Electropolishing
- Passivation

### SUCTION

### DIAMETER OF SOLIDS

Pump model	Dry (without fluid)	Primed	Standard	Special
P15	-4,7	-8,2	17	40
P8	-4,5/-4,7	-8,4	14	32
P4	-5,7/-5,9	-8,4	10	16
P2	-5,1	-7,6	7,5	11
Values expressed in columns of water (mt)			Values expressed in mm	

## GENERAL FEATURES

**Technical particulars which are common to all the various models:**

- ◆ Dry, **self-priming** (even without fluid).
- ◆ Variable **delivery** and controlled delivery (feeder function) in the range from zero to the maximum value without altering the head and priming capacity.
- ◆ Variable **pressure** (up to 22 bar).
- ◆ **Self-lubricating** (do not require lubricated air).
- ◆ **Sanitization** (easy to inspect the entire pump manually, no points where the product is allowed to stagnate, seals suitable for contact with foodstuffs, allowances in the flanged points of less than 3 hundredths).
- ◆ IP67 **protection** of electric controls (control unit and connectors).
- ◆ **Work cycles** for the electric-electronic parts: unlimited.
- ◆ **Control/measurements:** counter of litres of fluid pumped and diaphragm-break alarm.
- ◆ **No contact** between the product and sealing elements.
- ◆ The pump may be **washed externally** using a pressurized jet of water, even when the pump is working. It is normally used simultaneously both as a process pump and a pump for washing the piping.
- ◆ The pump may be **switched on and off** directly or may be started up and stopped by the opening-closing of a valve positioned on the delivery piping. The pump is not liable to block.
- ◆ The **pumping action** does not cause the product to be cut and its delivery can be adjusted.
- ◆ Pumping may also take place at **high temperatures**. In the heated pump, the maximum temperature difference between the heating fluid and the surface in contact with the product is not allowed to exceed 1,5°C.
- ◆ Versions designed for **quick-disassembly** are produced on request.



«P2» MODEL PUMP

In order to facilitate maintenance work, all the various elements used - including housing, balls and diaphragms - are widely available, having been chosen from those conforming to international market standards.

«P15» SINGLE PUMP				«P8» SINGLE PUMP				«P4» SINGLE PUMP				«P2» SINGLE PUMP			
Line pressure	Pressure loss	Delivery	Air consumption	Line pressure	Pressure loss	Delivery	Air consumption	Line pressure	Pressure loss	Delivery	Air consumption	Line pressure	Pressure loss	Delivery	Air consumption
bar	bar	lt./min.	Nmc/h.	bar	bar	lt./min.	Nmc/h.	bar	bar	lt./min.	Nmc/h.	bar	bar	lt./min.	Nmc/h.
7	6,0	100	66	7	6,6	60	72,6	7	6,5	40	13	7	6,4	20	15,6
7	4,9	200	115	7	5,7	120	126	7	5,3	60	16	7	5,8	30	22,5
7	3,4	300	130	7	4,6	180	143	7	4,0	80	25	7	4,7	40	31,0
7	1,8	380	160	7	2,2	220	176	7	2,5	100	34	7	3,6	50	39,0
7	NC	450	NC	7	1,0	240	NC	7	1,1	120	NC	7	2,4	60	NC
10	8,9	100	100	10	NC	60	110	10	8,2	40	50	10	9,0	15	12,0
10	7,7	200	140	10	7,3	120	154	10	7,3	60	76	10	7,8	30	28,0
10	6,0	300	164	10	5,1	180	180	10	5,7	80	95	10	8,4	40	35,0
10	4,0	380	177	10	3,3	220	194	10	2,6	120	NC	10	4,5	50	NC
Max. delivery 450 lt./min.				Max. delivery 240 lt./min.				Max. delivery 125 lt./min.				Max. delivery 68 lt./min.			

The values given in the tables are calculated using water as the fluid. When using a teflon® diaphragm, the deliveries featured in the tables are reduced by between 15 and 25%.

Sole international designer, manufacturer and distributor: **ALIFAR Srl**

Registered office:  
Via Firenze, 18  
I-36065 Mussolente (Vicenza) Italia  
Fax: 0039 0424 031316 - 0039 0424 577210

Head and business office:  
Via Regia, 71/C  
I-35010 Vigonza (Padova) Italia  
Tel. 0039 049 8934593 • Fax 0039 049 8936156

Internet: [www.alifar.it](http://www.alifar.it)  
e-mail: [alifar@alice.it](mailto:alifar@alice.it)  
e-mail: [info@alifar.it](mailto:info@alifar.it)