

The best solution for the control  
and the transfer of liquids and fluids  
Larius Industrial Technology Solutions

# Pneumatic double diaphragm pumps

Low air consumption, Large capacity, Compact size, High performance



L4

## \*Main products handling

- Paints
- Primer
- Solvents
- Enamels
- Inks
- Resins
- Stickers
- Adhesives
- Dyes
- Glue
- Lacquers
- Lubricants
- Vegetable and mineral oils
- Release agents
- Insulators
- Acids
- Caustics
- Detergents
- Chemical products in general
- Corrosive fluids, abrasive, high-density

*\*Larius analyses the technical specifications sheet of the product to recommend the most suitable equipment for the required use.*

The L 2 and L 4 double diaphragm pumps are an efficient solution for the transfer and transport of low-medium and high-viscosity fluids.

The double diaphragm pumps are composed of two chambers that, in alternating phases, “suction” and “transport” the product.

## Application areas

- Lubrication
- Ink transfer
- Transfer of paints and solvents
- Transfer and paint circulation
- Dosage of chemicals
- Protective coatings
- Fluid Transfer
- Filling-emptying barrels
- Supply of oils
- Graphic arts
- Print
- Tannery
- Flexography
- Woodworking and plywood
- Cosmetic Industry
- Mechanic industry
- Paper industry
- Automotive industry
- Carpentry
- Railways
- Supply ceramic pastes screen printing machines
- Water and liquid waste removal
- Evacuation of fluids

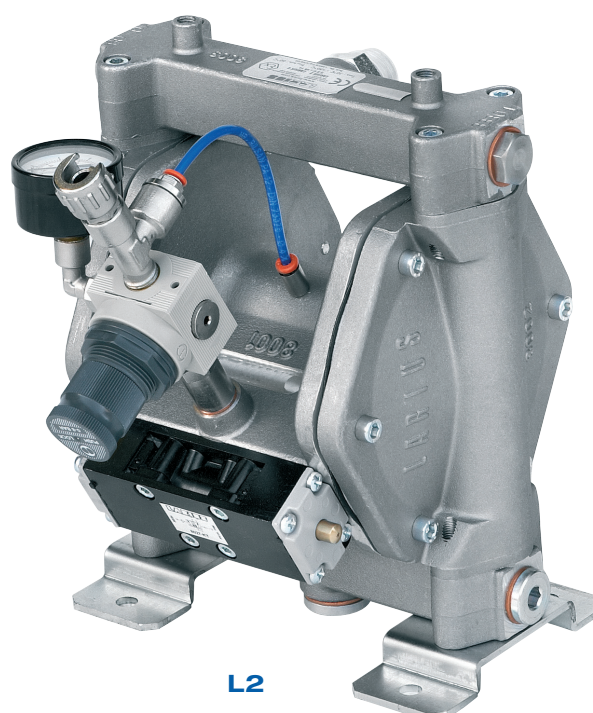
## Double diaphragm pumps L2 - L4 Certified ATEX II 2G cIIB T4

	L2	L4
<b>Pump material</b>	Aluminum - SS	Aluminum - SS
<b>Use</b>	Transfer of low and medium viscosity fluids	Transfer of medium and high viscosity fluids
<b>Diaphragm material</b>	PTFE - Rubber	PTFE - Rubber
<b>Pressure ratio</b>	1:1	1:1
<b>Max. flow rate</b>	21 l / min	40 l / min
<b>Max supply pressure</b>	7 bar	8 bar
<b>Max air consumption l/m</b>	120 l/min	190 l/min
<b>Air inlet</b>	1/4" GAS	1/4" GAS
<b>Material inlet</b>	1/2 "GAS	1"GAS
<b>Outlet material</b>	1/2 "GAS	1"GAS
<b>Max. head metres of suction</b>	5 mt	5 mt
<b>Dimensions</b>	170x230x196	205x320x220
<b>Weight</b>	6 kg	9 kg
<b>Maximum diameter of solid parts</b>	2,4 mm	3 mm

On request are available versions of L2 and L4 transfer pumps in aluminum or SS for abrasive products

### Advantages

- Starting point at minimal work pressure
- High transfer efficiency even with viscous fluids
- Low noise level
- Quick priming and immediate flow of product
- Any leakage of the product
- Reinforced Membranes for long life
- External corrosion and leak-resistant construction to ensure clean fluid parts
- Pump is never plunged inside the drum: only suction hose is plunged in the drum
- Speed fine tuning while maintaining pressure high
- The flow reduces the work cycles and wear
- Mounting on wall brackets or directly on the tank
- Minimum maintenance



L2

# Pneumatic piston pumps

Regular flow of material, absence of pulsations, perfect control of the pumped material



**Ghibli**  
30:1 - 40:1

## \*Main products handling

- Alcohol
- Sealants
- Silicones
- Inks
- Mastics
- Adhesives
- Lubricants
- Adhesives and adhesive
- Paints
- Resins
- solvents
- Gear Oils
- Motor Oils
- Filler
- Materials for tanneries
- Waterproofing
- Tints
- Underbody
- Additives
- enamels
- Acrylics
- fats
- Epoxy products
- Soundproofing
- Insulators
- Detergents
- Release agents
- Detergents
- Composite materials and thermosetting
- Cosmetics

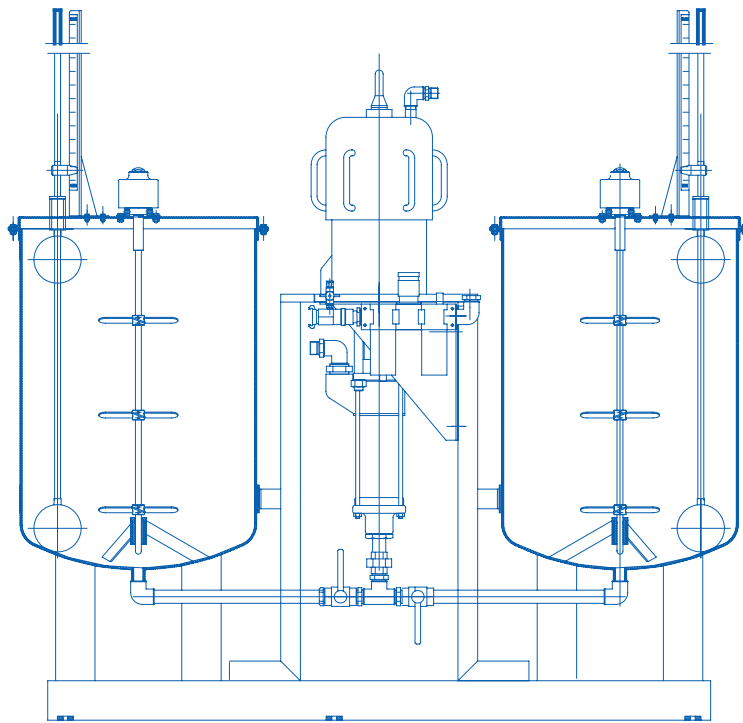
## Main areas of application

- Lubrication
- Ink transfer
- Transferring of paints and solvents
- Transfer and paint circulation
- Chemicals dispensing
- Protective coatings
- Fluid Transfer
- Filling-emptying barrels
- Oils supply
- Graphic arts
- Print
- Flexography
- Tanneries
- Fluids evacuation
- Water and liquid waste removal
- Woodworking and plywood
- Supply ceramic pastes screen printing machines
- Power atomization heads for wetting and humidifying
- Supply of machines for coating and laminating
- Electrical and Electronics for component isolation
- Woodworking and plywood
- Cosmetic Industry
- Construction Industry
- Mechanic industry
- Paper industry
- Cosmetic Industry
- Shipbuilding
- Automotive industry
- Carpentry
- Railways

*\*Larius analyses the technical specifications sheet of the product to recommend the most suitable equipment for the required use.*

## Advantages

- Excellent resistance to abrasion and corrosion
- Ability to handle applications ranging from the passage of corrosive fluids to cleaning fluids
- The constant balancing of a wide range of viscosity reduces the pressure drop during the run
- Starting point at minimal work pressure
- High transfer efficiency even with viscous fluids
- Low noise level
- Quick priming and immediate flow of product
- Any leakage of the product
- Reinforced Membranes for long life
- External corrosion and leak-resistant construction to ensure clean fluid parts
- Speed adjusting keeping high pressure
- The flow reduces the work cycles and wear
- Minimum maintenance



**Omega  
23:1 - 30:1**

The pneumatic transfer pumps work with a compressed air motor that moves the piston vertically from top to bottom and viceversa. The product is suctioned by the lower pump and carried to the exit.

The structure of the “pumping unit” (suction valve, pump piston, material seal gaskets) permits the supply of material when the piston is in the ascending or descending phase.

The flow rate of a pneumatic piston pump depends on the quantity of material that it releases during each cycle and on the number of cycles that it completes (the cycle is the full stroke of the piston in both directions).

Pneumatic piston pumps are divided into two types:

### IN-LINE:

the pneumatic motor and the pump constitute one single body

### DIVORCED:

the pneumatic motor is separated from the pump and the fluid is not in contact with the motor.

# Pneumatic piston pump range

Certified Atex  II 2 G c IIB T4 - Certified Atex  II 2 G c IIB T6

MODEL	Version	Measurements	Ø motor	Piston stroke	Max. flow rate	Supply Pressure	Air consumption at 60 cycles/min	Air inlet	Material inlet	Material Outlet	Max/min cycles	C.C. cycle
<b>P33 1:1</b> ATEX: II 2G c IIB T4 Divorced	Std and SS	long stubby	35 mm (1" 3/8)	100 mm (4")	20 l/min	Max. 12 bar	3 bar 70 l/m 5 bar 110 l/m 7 bar 150 l/m	1/4" GAS	<b>Divorced long ball valve</b> <b>Divorced stubby</b> M36X2	3/4" GAS	100	200
<b>P31 2:1</b> ATEX: II 2G c IIB T4 Divorced	Std and SS	long stubby	35 mm (1" 3/8)	100 mm (4")	10 l/min	Max. 12 bar	3 bar 70 l/m 5 bar 110 l/m 7 bar 150 l/m	1/4" GAS	<b>Divorced long ball valve</b> <b>Divorced stubby</b> M36X2	3/4" GAS	100	100
<b>VEGA 5:1</b> Divorced In-line	Std And SS	long medium short	76 mm (3")	76 mm (3")	10 l/min	Max. 8 bar	3 bar 198 l/m 5 bar 330 l/m 7 bar 462 l/m	3/8" GAS	<b>long - medium ball valve short</b> M36X2	<b>In-line</b> 1/2" GAS <b>Divorced</b> 3/4" GAS	66	170
<b>VEGA 34:1</b> Divorced	SS		76 mm (3")	76 mm (3")	1,4 l/min	Max. 8 bar	3 bar 198 l/m 5 bar 330 l/m 7 bar 462 l/m	3/8" GAS	3/4" GAS (M)	3/8" GAS (F)	75	19
<b>GHIBLI 3:1</b> Divorced	Std and SS	long medium short	108 mm (4" 1/4)	102 mm (4")	45 l/min	Max. 7 bar	3 bar 500 l/m 5 bar 840 l/m 7 bar 1200 l/m	1/2" GAS	1 1/2" GAS	1" GAS	66	680
<b>GHIBLI 10:1</b> Divorced	Std and SS	long medium short	108 mm (4" 1/4)	102 mm (4")	12 l/min	Max. 7 bar	3 bar 500 l/m 5 bar 840 l/m 7 bar 1200 l/m	1/2" GAS	<b>long - medium ball valve short</b> M36X2	3/4" GAS	60	250
<b>GHIBLI 30:1</b> Divorced	Std and SS		108 mm (4" 1/4)	102 mm (4")	4,0 l/min	Max. 7 bar	3 bar 500 l/m 5 bar 840 l/m 7 bar 1200 l/m	1/2" GAS (F)	3/4" GAS (M)	3/8" GAS (F)	60	60
<b>GHIBLI 40:1</b> Divorced	Std and SS		108 mm (4" 1/4)	102 mm (4")	3,0 l/min	Max. 7 bar	3 bar 500 l/m 5 bar 840 l/m 7 bar 1200 l/m	1/2" GAS (F)	3/4" GAS (M)	3/8" GAS (F)	60	45
<b>SIRIO 27:1</b> Divorced	SS		230 mm (9")	102 mm (4")	9,2 l/min	Max. 6 bar	3 bar 760 l/m 5 bar 1260 l/m 7 bar 1760 l/m	3/4" GAS (F)	1" GAS (F)	3/4" GAS	60	153
<b>SIRIO 30:1</b> Plunger Piston Divorced	SS		230 mm (9")	102 mm (4")	7,5 l/min	Max. 6 bar	3 bar 760 l/m 5 bar 1260 l/m 7 bar 1760 l/m	3/4" GAS (F)	3/4" GAS (F)	1/2" GAS	60	125
<b>SIRIO 32:1</b> Divorced	SS		230 mm (9")	102 mm (4")	8,2 l/min	Max. 6 bar	3 bar 760 l/m 5 bar 1260 l/m 7 bar 1760 l/m	3/4" GAS (F)	1" GAS (F)	3/4" GAS	60	137
<b>SIRIO 45:1</b> Plunger Piston Divorced	SS		230 mm (9")	102 mm (4")	5 l/min	Max. 6 bar	3 bar 760 l/m 5 bar 1260 l/m 7 bar 1760 l/m	3/4" GAS (F)	3/4" GAS (F)	3/4" GAS	60	83



P33 1:1  
P31 2:1



Vega 5:1



Vega 34:1



Ghibli 3:1



Ghibli 10:1



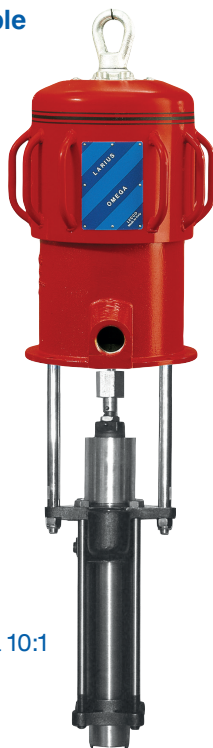
Ghibli 30:1  
Ghibli 40:1

MODEL	Version	Measurements	Ø motor	Piston stroke	Max. flow rate	Supply Pressure	Air consumption at 60 cycles/min	Air inlet	Material inlet	Material Outlet	Max/min cycles	C.C. cycle
<b>OMEGA 5:1</b> Divorced	SS		254 mm (10")	120 mm (4" 3/4)	66 l/min	Max. 7 bar	3 bar 1100 l/m 5 bar 1800 l/m 7 bar 2500 l/m	3/4" GAS	1 1/2" GAS (F)	1 1/2" GAS	60	1100
<b>OMEGA 10:1</b> Divorced	SS		178 mm (7")	120 mm (4" 3/4)	32 l/min	Max. 7 bar	3 bar 1100 l/m 5 bar 1800 l/m 7 bar 2500 l/m	3/4" GAS	1 1/2" GAS (F)	1 1/2" GAS	60	530
<b>OMEGA 15:1</b> Divorced	SS		178 mm (7")	120 mm (4" 3/4)	23 l/min	Max. 7 bar	3 bar 1100 l/m 5 bar 1800 l/m 7 bar 2500 l/m	3/4" GAS	1 1/2" GAS (F)	1 1/2" GAS	60	380
<b>OMEGA 23:1</b> Divorced	Std and SS		178 mm (7")	120 mm (4" 3/4)	14 l/min	Max. 7 bar	3 bar 1100 l/m 5 bar 1800 l/m 7 bar 2500 l/m	3/4" GAS (F)	1 1/2" GAS (F)	1" GAS (F)	60	230
<b>OMEGA 30:1</b> Divorced	Std and SS		178 mm (7")	120 mm (4" 3/4)	12 l/min	Max. 7 bar	3 bar 1100 l/m 5 bar 1800 l/m 7 bar 2500 l/m	3/4" GAS (F)	1 1/2" GAS (F)	1" GAS (F)	60	200
<b>NOVA 10:1</b> Divorced	SS		254 mm (10")	120 mm (4" 3/4)	66 l/min	Max. 7 bar	3 bar 2200 l/m 5 bar 3600 l/m 7 bar 5000 l/m	3/4" GAS	1 1/2" GAS (F)	1 1/2" GAS	60	1100
<b>NOVA 20:1</b> Divorced	SS		254 mm (10")	120 mm (4" 3/4)	32 l/min	Max. 7 bar	3 bar 2200 l/m 5 bar 3600 l/m 7 bar 5000 l/m	3/4" GAS	1 1/2" GAS (F)	1 1/2" GAS	60	530
<b>NOVA 45:1</b> Divorced	Std and SS		254 mm (10")	120 mm (4" 3/4)	14 l/min	Max. 7 bar	3 bar 2200 l/m 5 bar 3600 l/m 7 bar 5000 l/m	3/4" GAS (F)	1 1/2" GAS (F)	1" GAS (F)	60	230
<b>NOVA 60:1</b> Divorced	Std and SS		254 mm (10")	120 mm (4" 3/4)	12 l/min	Max. 7 bar	3 bar 2200 l/m 5 bar 3600 l/m 7 bar 5000 l/m	3/4" GAS (F)	1 1/2" GAS (F)	1" GAS (F)	60	200
<b>NOVA 68:1</b> Divorced	SS		254 mm (10")	120 mm (4" 3/4)	11 l/min	Max. 7 bar	3 bar 2200 l/m 5 bar 3600 l/m 7 bar 5000 l/m	3/4" GAS (F)	1 1/2" GAS (F)	1" GAS (F)	60	180

❄️ **Pneumatic ice-breaker motor capable of reducing power loss due to freezing**



Sirio 27:1  
Sirio 30:1  
Sirio 32:1  
Sirio 45:1



Omega 10:1



Omega 23:1  
Omega 30:1



Nova 10:1  
Nova 20:1  
Nova 45:1  
Nova 60:1  
Nova 68:1

## Technological solutions for any type of project

Larius S.r.l designs and manufactures professional diaphragm and piston pumps for transfer liquids and fluids.

Thanks in part to collaboration with major manufacturers of materials that are tested in the company in order to ensure a perfect synergy between the product and the pump that distributes it.

In order to meet the operational needs of the user, Larius cooperates with university engineering centres to test increasingly innovative and resistant components that make our pumps operation-ready in small spaces and large alike in extreme working conditions.

- Commissioned and ready to use equipment
- Original accessories and spare parts
- Qualified technical assistance
- Personalised technical courses, theoretical and practical, to learn how the equipment operates and its technical specifications

Larius works on an international level with a vast network of distributors, service centres and specialised consultants at your complete disposal.

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**Your job is our job every day.**

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### **Larius S.r.l.**

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