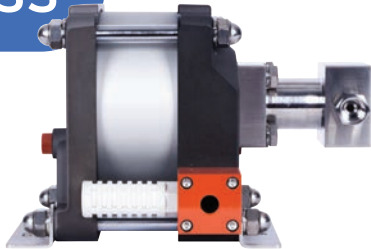


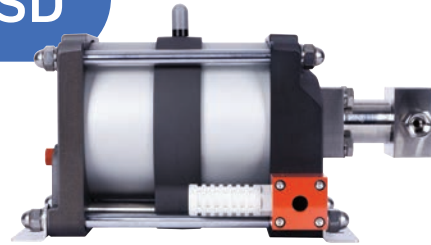
Liquid pumps

LSS



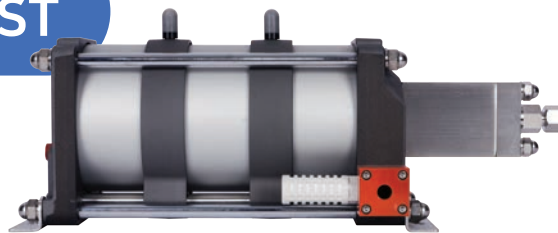
Single stage & Single driven

LSD



Single stage & Double driven

LST



Single stage & Triple driven

• DRIVEN PRINCIPLES

Pumster Air Driven Liquid Pumps are more efficient in energy and are suitable for explosion proof area.

Pumster Air Driven Liquid Pumps work on the principle of Pascal's law.

Large surfaces are charged with a low pressure (Air piston) and generate high pressure (High pressure piston) over the small surfaces. The transmission ratio is based on the piston area of the large air piston in relation to that of the smaller high pressure piston.

• FEATURES OF PRODUCTS



No requirement for electricity



Oil free; no oil replacement & contamination



Suitable for explosion proof area



Available as a complete packaged system



Stay cool when working hard due to a cooling jacket

Liquid pumps

LSS series

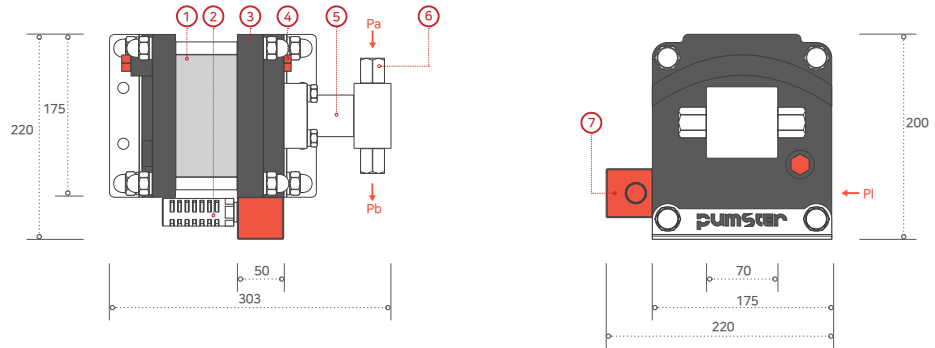
Single stage & Single driven

Specification



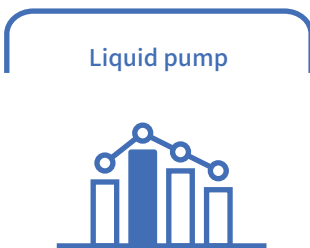
Type : LSS type
 PI – Air driven Inlet
 Pa – Inlet
 Pb – Outlet

- Part name
- ① Driven section
 - ② Silencer
 - ③ Flange
 - ④ Poppet valve
 - ⑤ High pressure cylinder
 - ⑥ Check valve
 - ⑦ Spool valve



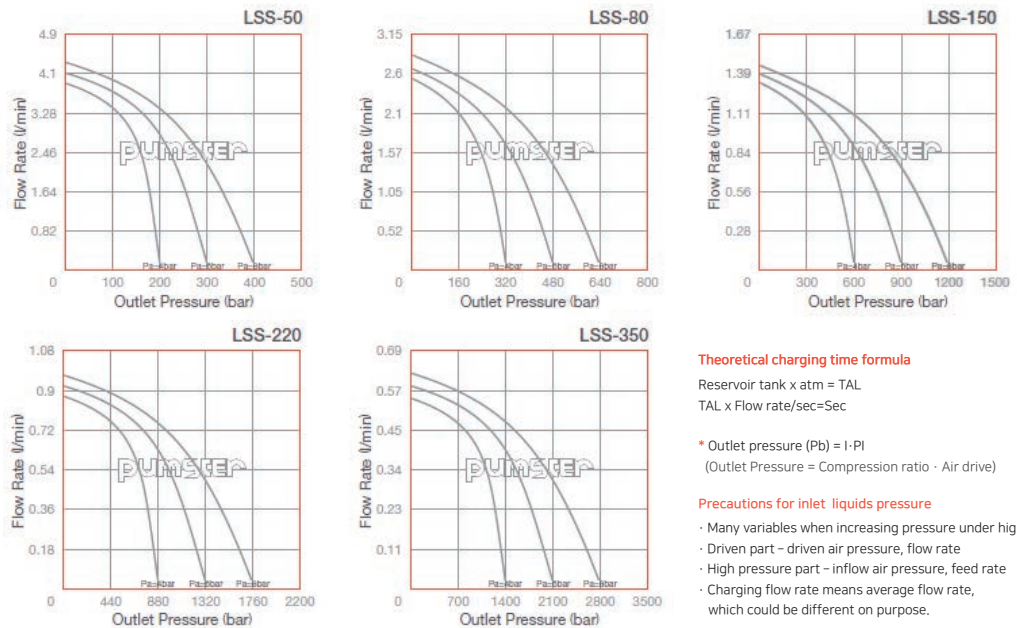
*Product specification below is standard information and it may different depending on purpose.

Model	LSS-50	LSS-80	LSS-150	LSS-220	LSS-350
Pressure Ratio	1 : 50	1 : 80	1 : 150	1 : 220	1 : 350
Min. Operating Pressure (kg/cm ²)	5	5	5	5	5
Max. Operating Pressure (kg/cm ²)	7	7	7	7	7
Max. pressure (kg/cm ²)	350	560	1,050	1,540	2,450
Inlet port (inch)	1/2"PT	1/2"PT	1/2"PT	1/2"PT	1/2"PT
Outlet Port (inch)	1/2"PT	9/16"18UNF	9/16"18UNF	9/16"18UNF	9/16"18UNF
Discharge rate (nl/min)	1.1	0.7	0.4	0.27	0.18
Weight (kg)	12	12	12	12	12



LSS series

Performance Graph



Theoretical charging time formula

$$\text{Reservoir tank} \times \text{atm} = \text{TAL}$$

$$\text{TAL} \times \text{Flow rate/sec} = \text{Sec}$$

* Outlet pressure (Pb) = I-PI
 (Outlet Pressure = Compression ratio · Air drive)

Precautions for inlet liquids pressure

- Many variables when increasing pressure under high pressure
- Driven part – driven air pressure, flow rate
- High pressure part – inflow air pressure, feed rate
- Charging flow rate means average flow rate, which could be different on purpose.

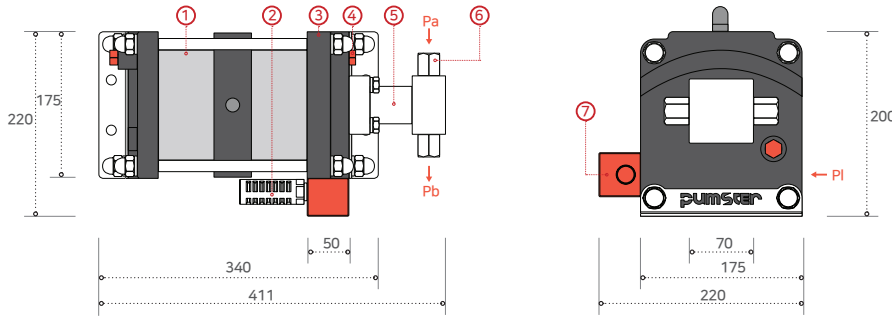
Liquid pumps



LSD series

Single stage & Double driven

Specification



Type : LSD type
 PI - Air driven Inlet
 Pa - Inlet
 Pb - Outlet

- Part name
- ① Driven section
 - ② Silencer
 - ③ Flange
 - ④ Poppet valve
 - ⑤ High pressure cylinder
 - ⑥ Check valve
 - ⑦ Spool valve

*Product specification below is standard information and it may different depending on purpose.

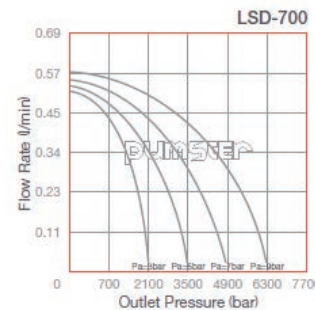
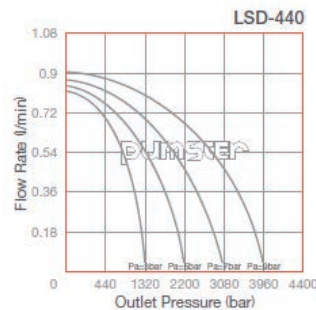
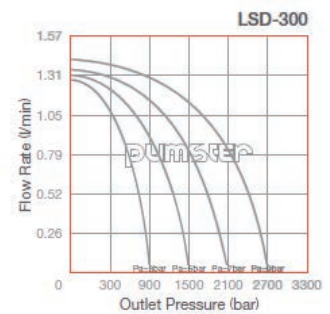
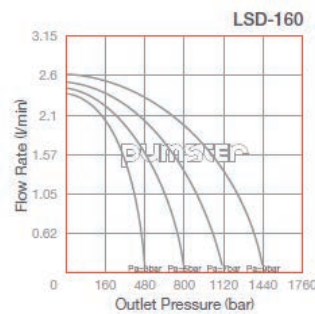
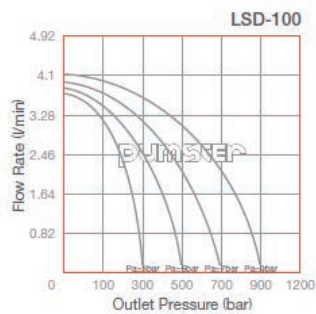
Model	LSD-100	LSD-160	LSD-300	LSD-440	LSD-700
Pressure Ratio	1 : 100	1 : 160	1 : 300	1 : 440	1 : 700
Min. Operating Pressure (kg/cm ²)	5	5	5	5	5
Max. Operating Pressure (kg/cm ²)	7	7	7	7	7
Max. pressure (kg/cm ²)	700	1,120	2,100	3,080	4,900
Inlet port (inch)	1/2"PT	1/2"PT	1/2"PT	1/2"PT	1/2"PT
Outlet Port (inch)	1/2"PT	9/16"18UNF	9/16"18UNF	9/16"18UNF	9/16"18UNF
Discharge rate (nl/min)	0.9	0.6	0.3	0.22	0.15
Weight (kg)	17	17	17	17	17

Liquid pump



LSD series

Performance Graph



Theoretical charging time formula

Reservoir tank x atm = TAL
 TAL x Flow rate/sec = Sec

* Outlet pressure (Pb) = I-PI
 (Outlet Pressure = Compression ratio · Air drive)

Precautions for inlet liquids pressure

- Many variables when increasing pressure under high pressure
- Driven part - driven air pressure, flow rate
- High pressure part - inflow air pressure, feed rate
- Charging flow rate means average flow rate, which could be different on purpose.

Liquid pumps

LST series

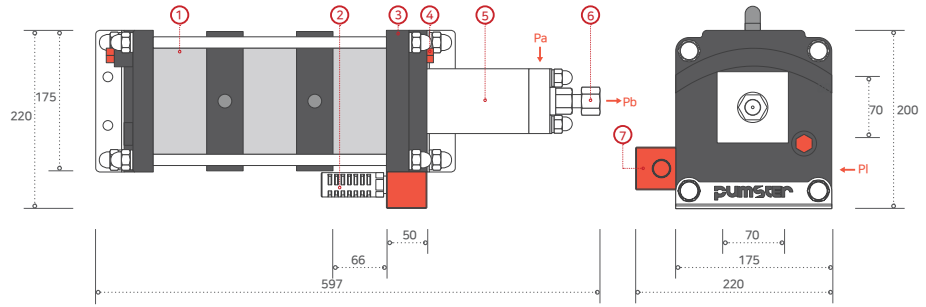
Single stage & Triple driven

Specification



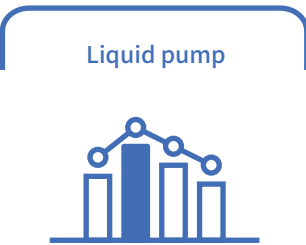
Type : LST type
 PI – Air driven Inlet
 Pa – Inlet
 Pb – Outlet

- Part name
- ① Driven section
 - ② Silencer
 - ③ Flange
 - ④ Poppet valve
 - ⑤ High pressure cylinder
 - ⑥ Check valve
 - ⑦ Spool valve



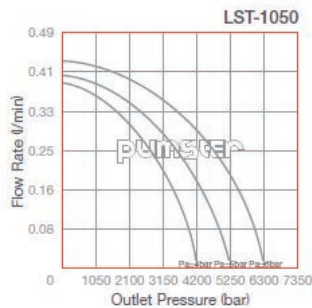
*Product specification below is standard information and it may differ depending on purpose.

Model	LST-1050
Pressure Ratio	1 : 1,050
Min. Operating Pressure (kg/cm ²)	5
Max. Operating Pressure (kg/cm ²)	7
Max. pressure (kg/cm ²)	7,350
Inlet port (inch)	1/2"PT
Outlet Port (inch)	9/16"18UNF
Discharge rate (nl/min)	0.12
Weight (kg)	25



LST series

Performance Graph



Theoretical charging time formula

$$\text{Reservoir tank x atm} = \text{TAL}$$

$$\text{TAL x Flow rate/sec} = \text{Sec}$$

* Outlet pressure (Pb) = I-PI
 (Outlet Pressure = Compression ratio · Air drive)

Precautions for inlet liquids pressure

- Many variables when increasing pressure under high pressure
- Driven part – driven air pressure, flow rate
- High pressure part – inflow air pressure, feed rate
- Charging flow rate means average flow rate, which could be different on purpose.