



ITEM

2022

GAS BOOSTER

LIQUID PUMP

PRESSURE TESTING

# PRODUCT CATALOG



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**LIQUID PUMP**

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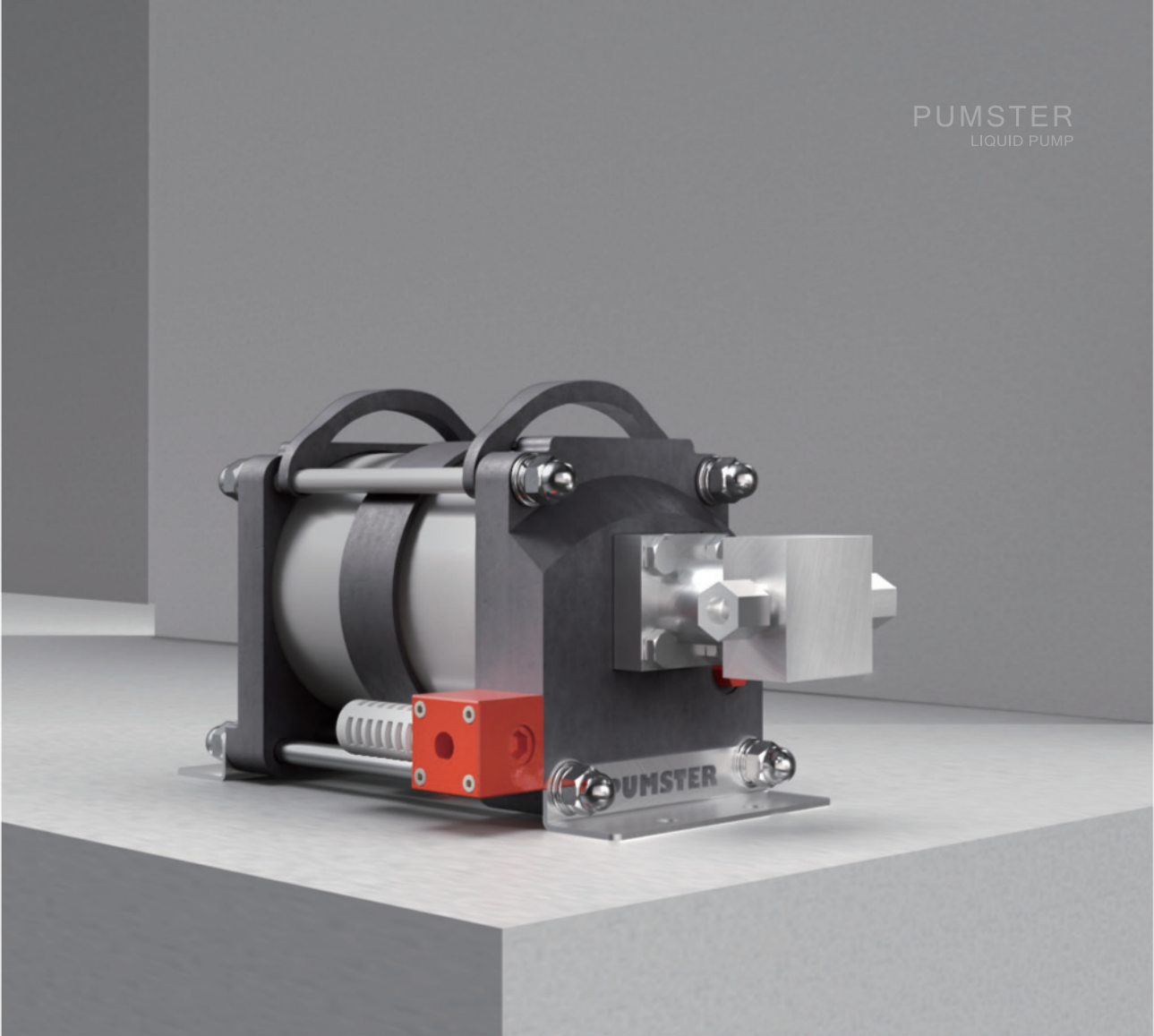
# Pneumatic operation by applying **Pascal's Law**

**Liquid pump** pressurizing through Cross-section ratio by Pascal's Law, create big energy by converting air pressure to straight reciprocal movement.

In this point, **inflowed liquid through IN Check valve is compressed and outflowed / pressurized to the Out Check valve.**

- For the compression of liquid substances such as water or oil.
- Gurantess more than 1M times of durability of main seal.
- No requirement for electricity.
- Oil free, no requirement for oil replacement, contamination.
- Suitable for explosion proof area.
- Diversely compatible for different models accoring to using pressure and flow rate.





# LSD SERIES

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Single stage & Double driven

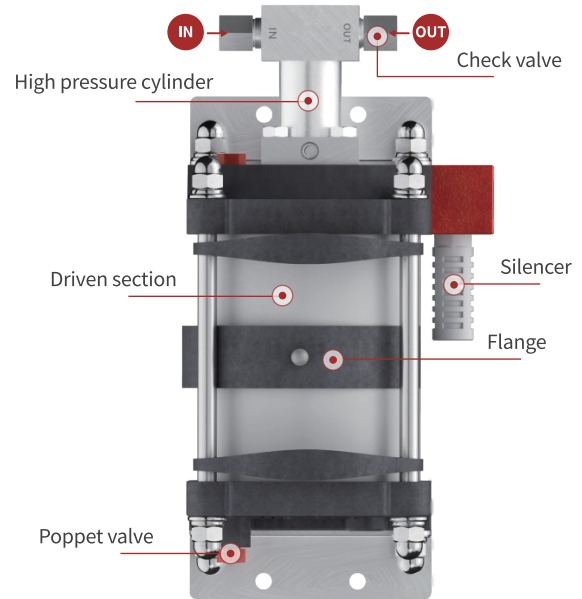
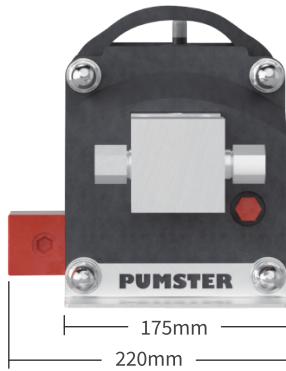
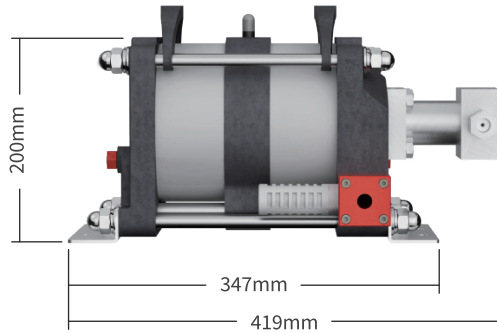
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Liquid Pump LSD consists of single stage and double driven parts.

There is **5 types depending on compression ratio.**

( compression ratio: 1 : 100 / 160 / 300 / 440 / 700 )

# LSD SPECIFICATION



※ Please contact sales staff if you need further assistance.

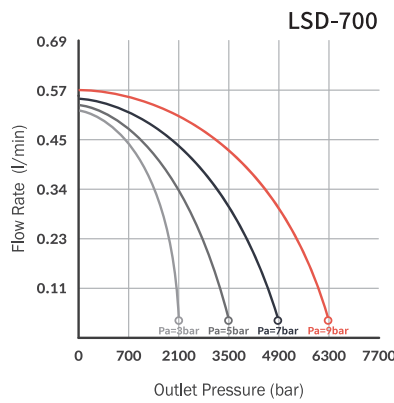
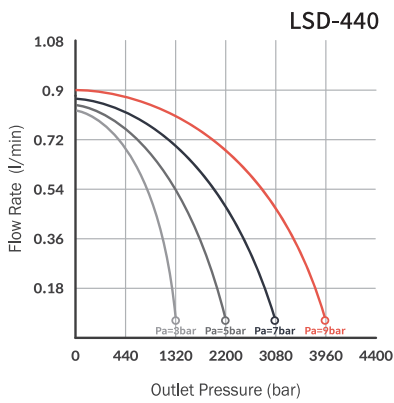
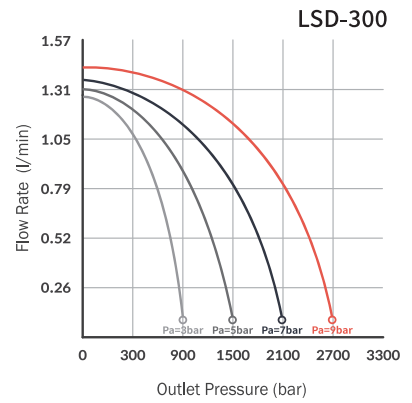
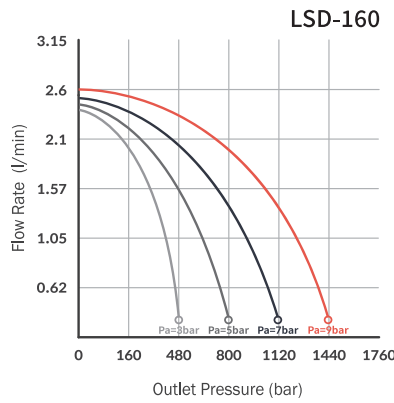
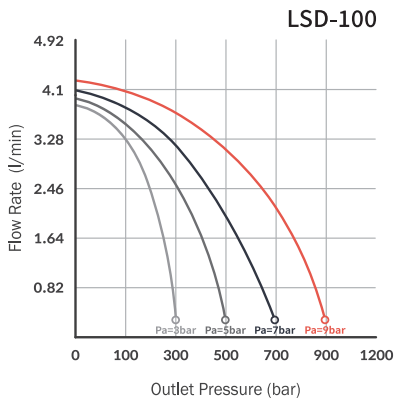
Model	LSD - 100	LSD - 160	LSD - 300	LSD - 440	LSD - 700
Ratio	1 : 100	1 : 160	1 : 300	1 : 440	1 : 700
Air Drive Pressure (kg / cm <sup>2</sup> )	5 ~ 10				
Max. Pressure (kg / cm <sup>2</sup> )	700	1,120	2,100	3,080	4,900
Connections (Inlet / outlet)	1/2"PT / 9/16" 18 UNF				
Weight (kg)	17				

※ M,P(kg/cm<sup>2</sup>) = Ratio \* Air Drive Pressure(kg/cm<sup>2</sup>) ※ M,P is calculated with 7 bar(standardized air pressure).

※ Weight is approximate value.



# LSD PERFORMANCE CURVES



**Theoretical charging time formula**

Reservoir tank x atm = TAL  
 TAL / (Flow rate/sec) = total charging time

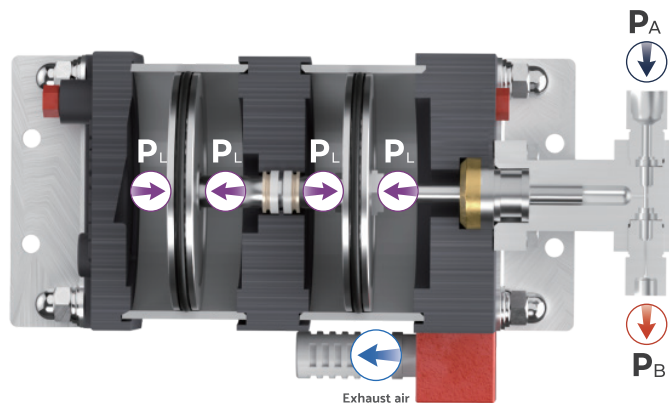
\* Outlet pressure (Pb) = IPI  
 (Outlet Pressure = Compression ratio · Air drive)

**Precautions**

- There are lots of variables when increasing pressure under high pressure.
- Driven part: driven air pressure, flow rate
- High pressure part: inflow liquid pressure, feed rate
- Actual flow rate will be different depending on utility.

# LSD OVERVIEW

**P<sub>A</sub>** Suction liquid  
**P<sub>B</sub>** Discharging liquid  
**P<sub>L</sub>** Air drive





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