



WHITE KNIGHT
.....engineer approved™

LHA LAMINAR FLOW PUMPS

Smooth Flow without Pulsation for Advanced Processes

LHA Series laminar flow pumps offer steady flow rates up to 30 lpm and feature process-safe PTFE/PFA flow paths. They are capable of up to 100°C (212°F) fluid temperatures, 5.5 Bar (80 psi) air supply pressures, and suction lift up to 3 m (10 ft).

Advanced Technologies

Process-Safe PTFE/PFA Flow Path

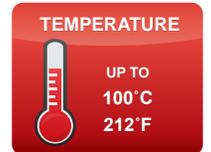
Laminar flow up to 30 lpm

No Elastomer O-rings

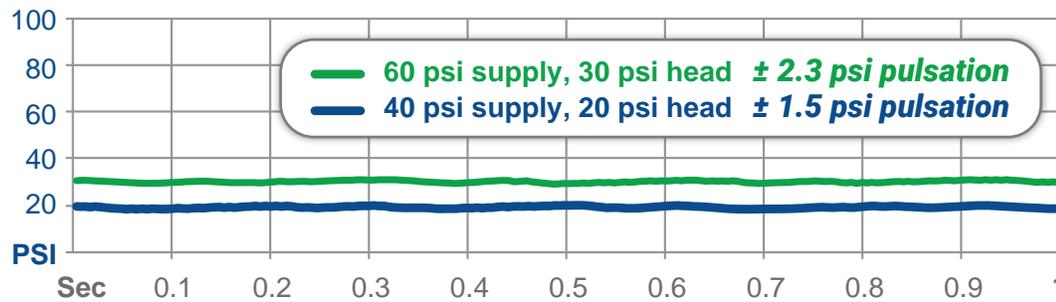
Proven Robust Bellows

Dead-head capable

High Suction lift



Pulsation

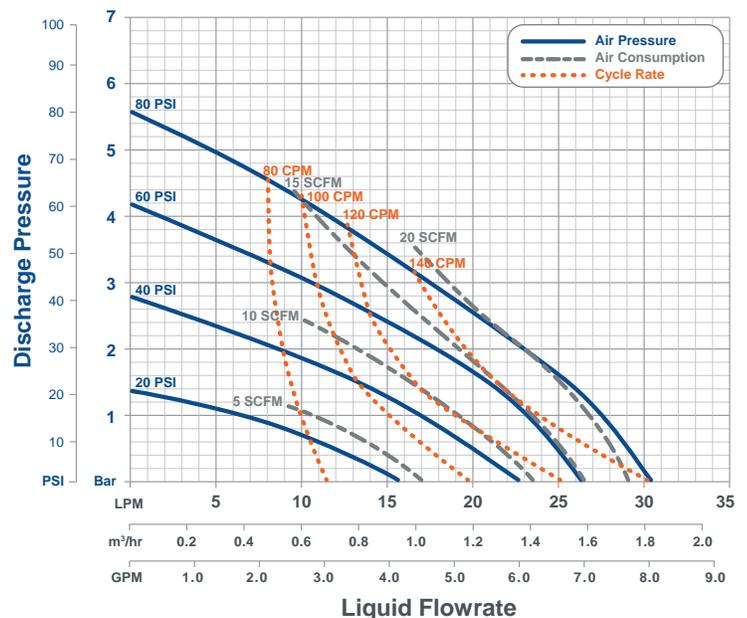


Features & Benefits

- Process-safe PTFE/PFA flow paths
- Laminar flow ≤ 30 lpm*
- Air supply pressures ≤ 80 psi
- Suction lift ≤ 3 m (10 ft)
- Proven bellows technology
- Reliable operation with leak-free seals
- Durable machined design
- Dead-head capable
- Analog signal stroke detection
- Fiber optic and conductivity leak detect
- Copolymer check cages minimize wear and extend life
- Class 100 cleanroom assembly, testing, and packaging
- No preventative maintenance during two-year warranty

*Dependent on model, air supply and head pressure

Performance



<https://wkfluidhandling.com/lha-series/>





Specifications

Model	LHA030
Flow Rate*	≤ 31 lpm (8.2 gpm)
Air Connection	1/4 in FNPT
Fluid Temperature	≤ 100°C (212°F)
Supply Air Pressure	≤ 5.5 Bar (80 psi)
Startup Air Pressure	≥ 1.4 Bar (20 psi)
Required Air Volume	> 26 SCFM
Suction Lift*	≤ 3 m (10 ft)
Fluid Path Materials	PTFE, PFA
Non-Fluid Path Materials	PTFE, PFA, PP, Viton, neodymium, PET-P, UHMW
Stroke Detection	Hall Effect Sensor (NPN or PNP)
Leak Detection	Fiber optic with or without sensor, or conductivity
Electronic Control	Call for details.

Air Signals	Two 5-way valves (center vent) or Four 3-way valves (normally closed) <i>Valves with metal seals are recommended for longer life.</i>
Electrical Requirements	24 VDC Power Power consumption depends on current draw on external devices: • Controller power alone 4 watts • Max Digital Output current 500 mA sourcing or 24 mA sinking • Max Analog Output current 10 mA total voltage output or 20 mA with 4-20 mA conversion board

Pump Connections

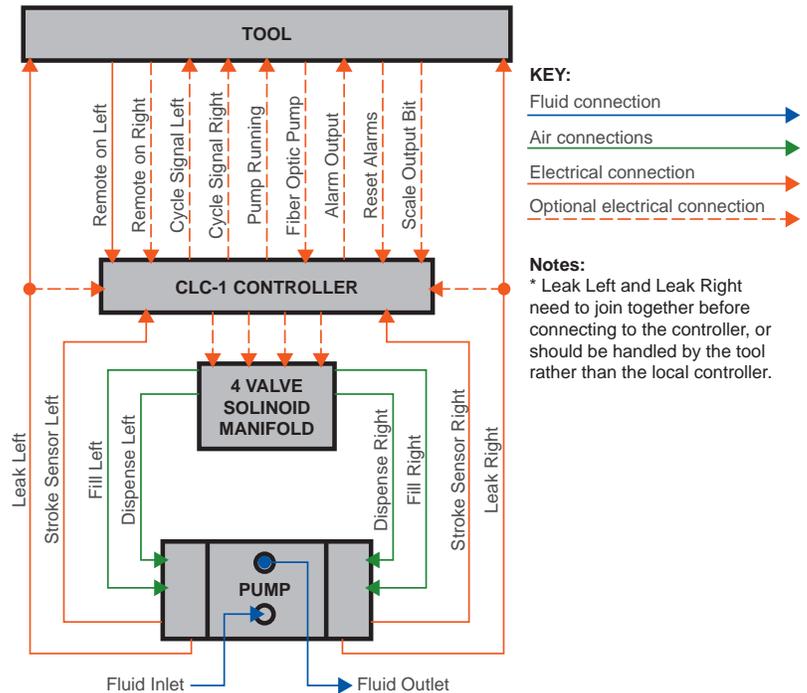
- Four air connections 1/4-in NPT with quick exhaust connectors (one fill and one dispense for each side)
- Two leak detect sensor connections 1/4-in NPT (one for each side)
- Two fluid connections configurable to various tube connections (one inlet and one outlet)
- Two analog hall effect stroke sensing.

Controller Connections

Digital Outputs	• Four solenoid signals • Two stroke rate signals (for tool feedback) • Pump running signal (for tool feedback) • Alarm output (for tool feedback)
Digital Inputs	• Remote signal left • Remote signal right • Enable scaled output signal • Retrain pump sensors • Leak detect input • Reset Alarms
Analog Inputs	Two stroke sensors

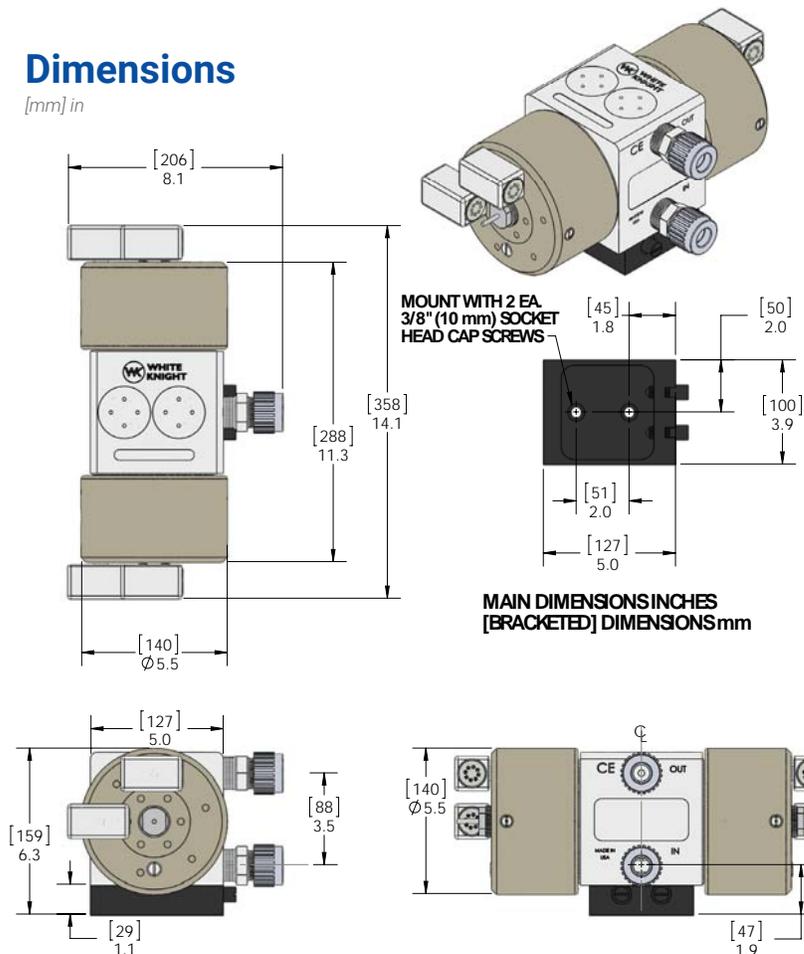
* May vary by configuration. Suction lift diminishes over time. Recommended installation level less than 3 ft above source.

Wiring Diagram



Dimensions

[mm] in



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