

Air Driven, Liquid High Pressure Pumps and Packaged Pump Systems

**Product Catalogs** 

aerospace climate control electromechanical filtration fluid & gas handling hydraulics pneumatics process control sealing & shielding



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# ASL Pumps Standard 6" Air Driven Liquid

**Product Catalogs** 

aerospace climate control electromechanical filtration fluid & gas handling hydraulics pneumatics process control sealing & shielding



ENGINEERING YOUR SUCCESS.

# Air-Driven, High Flow, High Pressure Liquid Pump Series ASL10-01

Single-Acting, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 1,600 psi (110 bar)
- Air to Liquid Pressure Ratio: 1:11
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 5.22 in<sup>3</sup> (85.5 cm<sup>3</sup>)
- Inlet Connection: 1" FNPT
- Outlet Connection: 1/2" FNPT Female NPT (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 1,600 psi (110 bar) output pressure is 145 psi (10 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 69 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 38 lbs. (17.2 kg)
- Net Weight with Isolation Chamber: 50 lbs. (22.7 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Pump Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.







Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.

and Perfluoroelastomer O-Rings







**Right View** 

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)



**Front View** 



**Right View with Optional Isolation Chamber** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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**Caution!** Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

ISO-9001 Certified Air-Driven, High Flow, High Pressure Liquid Pump - Series ASL10-01

# Air-Driven, High Pressure Liquid Pump Series ASL10-02

Single-Acting, Dual Piston Air Drive

# Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 3,200 psi (221 bar)
- Air to Liquid Pressure Ratio: 1:22
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 5.22 in<sup>3</sup> (85.5 cm<sup>3</sup>)
- Inlet Connection: 1" FNPT
- Outlet Connection: 1/2" FNPT (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 3,200 psi (221 bar) output pressure is 145 psi (10 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 61 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 49 lbs. (22.2 kg)
- Net Weight with Isolation Chamber: 61 lbs. (27.1 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Dual Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



#### Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.



Left View



**Right View** 

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)





**Right View with Optional Isolation Chamber** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL10-02

# Air-Driven, High Flow, High Pressure Liquid Pump Series ASL15-01

Single-Acting, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 2,300 psi (159 bar)
- Air to Liquid Pressure Ratio: 1:16
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 3.62 in<sup>3</sup> (59.3 cm<sup>3</sup>)
- Inlet Connection: 1" FNPT
- Outlet Connection: 1/2" FNPT Female NPT (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 2,300 psi (159 bar) output pressure is 144 psi (9.9 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 69 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 38 lbs. (17.2 kg)
- Net Weight with Isolation Chamber: 50 lbs. (22.7 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Pump Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



- **TB** = Thermoplastic Polyester U-Cup and Buna-N O-Rings
- TC = Thermoplastic Polyester U-Cup and Perfluoroelastomer O-Rings



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.

# Flow Rate vs. Outlet Pressure:



Left View



#### **Right View**

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)



**Front View** 



**Right View with Optional Isolation Chamber** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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ISO-9001 Certified Air-Driven, High Flow, High Pressure Liquid Pump - Series ASL15-01

# Air-Driven, High Pressure Liquid Pump Series ASL15-02

Single-Acting, Dual Piston Air Drive

# Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 4,600 psi (317 bar)
- Air to Liquid Pressure Ratio: 1:32
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 3.62 in<sup>3</sup> (59.3 cm<sup>3</sup>)
- Inlet Connection: 1" FNPT
- Outlet Connection: 1/2" FNPT (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 4,600 psi (317 bar) output pressure is 144 psi (9.9 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 61 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 48 lbs. (21.8 kg)
- Net Weight with Isolation Chamber: 60 lbs. (27.2 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Dual Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.

Typical catalog number: ASL15-02SNPV Т ASL15-02 S Ν PV Isolation Liquid Inlet Liquid Seal Pump Type / Size / Ratio Location Chamber Materials<sup>†</sup> \* S = Side \*N = None \* PV = UHMWPE U-Cup and Viton O-Rings **ASL** = • Standard Liquid High Pressure Pump **PE** = UHMWPE U-Cup and EPDM O-Rings **B** = Bottom  $\mathbf{C} = Included$  6" Dual Piston Air Drive **PB** = UHMWPE U-Cup and Buna-N O-Rings • 1:32 Air-to-Liquid Pressure Ratio PC = UHMWPE U-Cup and Perfluoro-• Maximum 4,600 psi (317 bar) \*Standard for Stock Pumps elastomer O-Rings <sup>†</sup> 2nd character represents o-ring UV = Urethane U-Cup and Viton O-Rings material in the check valves and the u-cup o-ring energizer material in UE = Urethane U-Cup and EPDM O-Rings the "U" and "T" seal options. **UB** = Urethane U-Cup and Buna-N O-Rings UHMWPE u-cup seals comes with TV = Thermoplastic Polyester U-Cup a stainless steel spring energizer and Viton O-Rings TE = ThermoplasticPolyester U-Cup and EPDM O-Rings **TB** = Thermoplastic Polyester U-Cup and Buna-N O-Rings **TC** = Thermoplastic Polyester U-Cup

Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.

and Perfluoroelastomer O-Rings



Left View



**Right View** 

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)





**Right View with Optional Isolation Chamber** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL15-02

# Air-Driven, High Flow, High Pressure Liquid Pump Series ASL25-01

Single-Acting, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 4,000 psi (276 bar)
- Air to Liquid Pressure Ratio: 1:28
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 2.10 in<sup>3</sup> (34.4 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: 1/2" FNPT Female NPT (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 4,000 psi (276 bar) output pressure is 143 psi (9.9 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Max Air Consumption @ 90 psi: 69 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 38 lbs. (17.2 kg)
- Net Weight with Isolation Chamber: 50 lbs. (22.7 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Pump Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.



Left View



**Right View** 



**Front View** 



#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters) **Right View with Optional Isolation Chamber** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
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ISO-9001 Certified Air-Driven, High Flow, High Pressure Liquid Pump - Series ASL25-01

# Air-Driven, High Pressure Liquid Pump Series ASL25-02

Single-Acting, Dual Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 8,100 psi (558 bar)
- Air to Liquid Pressure Ratio: 1:56
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 2.10 in<sup>3</sup> (34.4 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: 1/2" FNPT (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 8,100 psi (558 bar) output pressure is 145 psi (10.0 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 61 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 47 lbs. (21.3 kg)
- Net Weight with Isolation Chamber: 59 lbs. (26.8 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Dual Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.

Typical catalog number: ASL25-02SNPV



Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.



Left View



#### **Right View**

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)





**Right View with Optional Isolation Chamber** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL25-02

# Air-Driven, High Flow, High Pressure Liquid Pump Series ASL35-01

Single-Acting, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 5,600 psi (386 bar)
- Air to Liquid Pressure Ratio: 1:39
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 1.50 in<sup>3</sup> (24.6 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: 1/2" FNPT (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 5,600 psi (386 bar) output pressure is 144 psi (9.9 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Max Air Consumption @ 90 psi: 63 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 38 lbs. (17.2 kg)
- Net Weight with Isolation Chamber: 50 lbs. (22.7 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Pump Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.

and Buna-N O-Rings



Left View



**Right View** 



**Front View** 



**Right View with Optional Isolation Chamber** 

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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**Caution!** Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

ISO-9001 Certified Air-Driven, High Flow, High Pressure Liquid Pump - Series ASL35-01

# Air-Driven, High Pressure Liquid Pump Series ASL35-02

Single-Acting, Dual Piston Air Drive

# Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 11,200 psi (772 bar)
- Air to Liquid Pressure Ratio: 1:78
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 1.50 in<sup>3</sup> (24.6 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: 1/2" FNPT (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 11,200 psi (772 bar) output pressure is 143 psi (9.9 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 56 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 46 lbs. (20.9 kg)
- Net Weight with Isolation Chamber: 58 lbs. (26.3 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.





Single-Acting, Dual Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.

Typical catalog number: ASL35-02SNPV



Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.





Left View



**Right View** 

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)



**Right View with Optional Isolation Chamber** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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**Caution!** Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL35-02

# Air-Driven, High Pressure Liquid Pump Series ASL60-01

Single-Acting, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 10,000 psi (690 bar)
- Air to Liquid Pressure Ratio: 1:70
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 0.84 in<sup>3</sup> (13.7 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: 1/2" FNPT (Contact Parker Autoclave Engineers for Additional Options)

#### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 10,000 psi (690 bar) output pressure is 143 psi (9.9 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Max Air Consumption @ 90 psi: 64 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 32 lbs. (14.5 kg)
- Net Weight with Isolation Chamber: 41 lbs. (18.6 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.




Left View



## Front View



#### **Right View**

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

#### **Right View with Optional Isolation Chamber**

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL60-01

## Air-Driven, High Pressure Liquid Pump Series ASL60-02

Single-Acting, Dual Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 20,000 psi (1,379 bar)
- Air to Liquid Pressure Ratio: 1:140
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 0.84 in<sup>3</sup> (13.8 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: Parker Autoclave SF562CX20-9/16" Female Medium Pressure (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 20,000 psi (1,379 bar) output pressure is 143 psi (9.9 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 59 SCFM
- Prelubricated at Factory

### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 43 lbs. (19.5 kg)
- Net Weight with Isolation Chamber: 53 lbs. (24.0 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.





Single-Acting, Dual Piston Air Drive Bottom Inlet Shown

Autoclave Engineers

For complete information on available pump options, contact Parker Autoclave Engineers.





Flow Rate vs. Outlet Pressure:







Left View





**Right View with Optional Isolation Chamber** 

**Right View** 

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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**Caution!** Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL60-02

## Air-Driven, High Pressure Liquid Pump Series ASL100-01

Single-Acting, Single Piston Air Drive

### Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 15,000 psi (1034 bar)
- Air to Liquid Pressure Ratio: 1:113
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 0.52 in<sup>3</sup> (8.5 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: 1/2" FNPT (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 15,000 psi (1034 bar) output pressure is 133 psi (9.2 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Max Air Consumption @ 90 psi: 64 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 32 lbs. (14.5 kg)
- Net Weight with Isolation Chamber: 41 lbs. (18.6 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:







Left View



#### A7 (11.94) (11.94) (11.94) (11.94) (11.94) (12.26 (311.40) (335.28) Side Inlet (307.677) Bottom Inlet

**Front View** 

#### **Right View**

#### **Right View with Optional Isolation Chamber**

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimetere)

Secondary Dimensions: (Millimeters)

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL100-01

## Air-Driven, High Pressure Liquid Pump Series ASL100-02

Single-Acting, Dual Piston Air Drive

### Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: *31,000 psi (2,137 bar)*
- Air to Liquid Pressure Ratio: 1:226
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 0.52 in<sup>3</sup> (8.5 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: Parker Autoclave F250C-1/4" Female High Pressure (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*see note
- Nominal air pressure required for 31,000 psi (2,137 bar) output pressure is 137 psi (9.5 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 59 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 42 lbs. (19.1 kg)
- Net Weight with Isolation Chamber: 51 lbs. (23.1 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Dual Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:







Left View





**Right View** 

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters) Right View with Optional Isolation Chamber

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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**Caution!** Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL100-02

## Air-Driven, High Pressure Liquid Pump Series ASL150-01

Single-Acting, Single Piston Air Drive

### Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 21,500 psi (1,482 bar)
- Air to Liquid Pressure Ratio: 1:150
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 0.39 in<sup>3</sup> (6.4 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: Parker Autoclave F250C-1/4" Female High Pressure (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 21,500 psi (1,482 bar) output pressure is 145 psi (10 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 69 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 32 lbs. (14.5 kg)
- Net Weight with Isolation Chamber: 41 lbs. (18.6 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:







Left View



#### ſ $\square$ ۲ 12.26 (311.40) 13.20 (335.28) Side Inlet T 15.50 (393.70) Bottom 1/8" FNPT Drain Port Inlei Isolation Chamber ۲

#### **Right View**

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

**Right View with Optional Isolation Chamber** 

#### **Front View**

.47 (11.94)

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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**Caution!** Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL150-01

## Air-Driven, High Pressure Liquid Pump Series ASL150-02

Single-Acting, Dual Piston Air Drive

### Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility.
- Maximum Outlet Pressure: 43,000 psi (2,965 bar)
- Air to Liquid Pressure Ratio: 1:300
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 0.39 in<sup>3</sup> (6.4 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: Parker Autoclave F250C-1/4" Female High Pressure (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*see note
- Nominal air pressure required for 43,000 psi (2,965 bar) output pressure is 143 psi (9.9 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 64 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 42 lbs. (19.1 kg)
- Net Weight with Isolation Chamber: 51 lbs. (23.1 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.





Single-Acting, Dual Piston Air Drive Bottom Inlet Shown

Autoclave Engineers

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:







Left View





**Right View** 

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

#### **Right View with Optional Isolation Chamber**

Air-Driven, High Pressure Liquid Pump - Series ASL150-02

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL150-02

## Air-Driven, High Pressure Liquid Pump Series ASL250-01

Single-Acting, Single Piston Air Drive

### Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 38,400 psi (2,648 bar)
- Air to Liquid Pressure Ratio: 1:265
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 0.22 in<sup>3</sup> (3.6 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: Parker Autoclave F250C-1/4" Female High Pressure (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 38,400 psi (2,648 bar) output pressure is 145 psi (10 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 69 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 32 lbs. (14.5 kg)
- Net Weight with Isolation Chamber: 41 lbs. (18.6 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:







Left View



# 13.20 (311.40) (35.28) Side Inlet Isolation Chamber

#### **Right View**

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

#### **Right View with Optional Isolation Chamber**

Front View

.47 (11.94)

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL250-01

## Air-Driven, High Pressure Liquid Pump Series ASL250-02

Single-Acting, Dual Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 60,000 psi (4,137 bar)
- Air to Liquid Pressure Ratio: 1:530
- Isolation Chamber (prevents process contamination of air section): Standard
- Volume Displacement Per Stroke: 0.22 in<sup>3</sup> (3.6 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: *Parker Autoclave F250C-1/4*" Female High Pressure (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 60,000 psi (4,137 bar) output pressure is 113 psi (7.8 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 64 SCFM
- Prelubricated at Factory

### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight with Isolation Chamber: 54 lbs. (24.5 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Plunger: Tungsten Cobalt
- Check Valve Glands: 15-5 PH Stainless Steel
- Liquid Seal: See Ordering Guide for options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Dual Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:





**Right View** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL250-02

## Air-Driven, High Pressure Liquid Pump Series ASL400-01

Single-Acting, Single Piston Air Drive

### Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 57,700 psi (3,978 bar)
- Air to Liquid Pressure Ratio: 1:398
- Isolation Chamber (prevents process contamination of air section): Optional
- Volume Displacement Per Stroke: 0.14 in<sup>3</sup> (2.3 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: Parker Autoclave F250C-1/4" Female High Pressure (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 57,700 psi (3,978 bar) output pressure is 145 psi (10 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 90 psi: 70 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight without Isolation Chamber: 32 lbs. (14.5 kg)
- Net Weight with Isolation Chamber: 41 lbs. (18.6 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 15-5 PH Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:





Left View



#### **Right View**

#### Note:

Each Mounting Bracket includes (2) x 13/32" (10.32) Slots for 3/8" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)



**Front View** 

#### **Right View with Optional Isolation Chamber**

Air-Driven, High Pressure Liquid Pump - Series ASL400-01

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL400-01

## Air-Driven, High Pressure Liquid Pump Series ASL400-02

Single-Acting, Dual Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 60,000 psi (4,137 bar)
- Air to Liquid Pressure Ratio: 1:796
- Isolation Chamber (prevents process contamination of air section): Standard
- Volume Displacement Per Stroke: 0.14 in<sup>3</sup> (2.3 cm<sup>3</sup>)
- Inlet Connection: 1/2" FNPT
- Outlet Connection: *Parker Autoclave F250C-1/4" Female High Pressure* (Contact Parker Autoclave Engineers for Additional Options)

### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 60,000 psi (4,137 bar) output pressure is 75 psi (5.2 bar)
- Inlet Port: 1/2" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1/2" FNPT
- Air Consumption @ 75 psi: 48 SCFM
- Prelubricated at Factory

### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 54 lbs. (24.5 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Plunger: Tungsten Cobalt
- Check Valve Glands: 15-5 PH Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Dual Piston Air Drive Bottom Inlet Shown

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:




**Right View** 

**Technical Specifications & Performance Data** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ASL400-02



# ACL Pumps Compact 3" Air Driven Liquid

**Product Catalogs** 

aerospace climate control electromechanical filtration fluid & gas handling hydraulics pneumatics process control sealing & shielding



ENGINEERING YOUR SUCCESS.

# Air-Driven, High Pressure Liquid Pump Series ACL72-01

Single-Acting, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 12,500 psi (862 bar)
- Air to Liquid Pressure Ratio: 1:88
- Volume Displacement Per Stroke: 0.09 in<sup>3</sup> (1.47 cm<sup>3</sup>)
- Inlet Connection: 3/8" FNPT
- Outlet Connection: Parker Autoclave F250C-1/4" Female High Pressure (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 12,500 psi (862 bar) output pressure is 142 psi (9.8 bar)
- Inlet Port: 1/4" FNPT
- Exhaust Port (muffler removed): 1/4" FNPT
- Air Consumption @ 90 psi: 13 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 8 lbs. (3.6 kg)
- Pressure Head: 316 Stainless Steel
- Plunger: 440 Stainless Steel
- Check Valve Glands: 15-5PH Stainless Steel
- Liquid Seal: See Ordering Guide for options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Bottom Inlet Shown

MADE IN THE U.S.A.

For complete information on available pump options, contact Parker Autoclave Engineers.



#### Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.





#### **Right View**

#### Note:

Each Mounting Bracket includes (2) x 3/8" (9.53) Slots for 5/16" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ACL72-01

# Air-Driven, High Pressure Liquid Pump Series ACL189-01

Single-Acting, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 31,900 psi (2,200 bar)
- Air to Liquid Pressure Ratio: 1:220
- Volume Displacement Per Stroke: 0.04 in<sup>3</sup> (.66 cm<sup>3</sup>)
- Inlet Connection: 3/8" FNPT
- Outlet Connection: Parker Autoclave F250C-1/4" Female High Pressure (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 31,900 psi (2,200 bar) output pressure is 145 psi (10 bar)
- Inlet Port: 1/4" FNPT
- Exhaust Port (muffler removed): 1/4" FNPT
- Air Consumption @ 90 psi: 13 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 8 lbs. (3.6 kg)
- Pressure Head: 316 Stainless Steel
- Plunger: 440 Stainless Steel
- Check Valve Glands: 15-5PH Stainless Steel
- Liquid Seal: See Ordering Guide for options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Single-Acting, Single Piston Air Drive Bottom Inlet Shown

MADE IN THE U.S.A.

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.



**Right View** 

#### Note:

Each Mounting Bracket includes (2) x 3/8" (9.53) Slots for 5/16" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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**Caution!** Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series ACL189-01



# ACHL Pumps Compact 3" Hand Lever Liquid

**Product Catalogs** 

aerospace climate control electromechanical filtration fluid & gas handling hydraulics pneumatics process control sealing & shielding



ENGINEERING YOUR SUCCESS.

# Hand Lever/Air Driven, High Pressure Liquid Pump Series ACHL189-01

Single-Acting, Single Piston Air Drive w/ Hand Lever

## Manual Operation

• Pump comes standard with hand lever for precise pressure control, remote locations or emergency back-up applications.

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility.
- Maximum Outlet Pressure: 31,900 psi (2,200 bar)
- Maximum Air to Liquid Pressure Ratio: 1:213
- Volume Displacement Per Stroke: 0.035 in<sup>3</sup> (.57 cm<sup>3</sup>)
- Inlet Connection: 3/8" FNPT
- Outlet Connection: *Parker Autoclave F250C-1/4*" Female High Pressure (Contact Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Pump can be operated with air even with manual hand lever attached
- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*see note
- Nominal air pressure required for 31,900 psi (2,200 bar) output pressure is 148 psi (10 bar)
- Inlet Port: 1/4" FNPT
- Exhaust Port (muffler removed): 1/4" FNPT
- Air Consumption @ 90 psi: 13 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 9 lbs. (4.1 kg)
- Pressure Head: 316 Stainless Steel
- Plunger: 440 Stainless Steel
- Check Valve Glands: 15-5PH Stainless Steel
- Liquid Seal: See Ordering Guide for options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.



Single-Acting, Single Piston Air Drive w/ Hand Lever Bottom Inlet Shown





MADE IN THE U.S.A.

For complete information on available pump options, contact Parker Autoclave Engineers.



• Maximum 31,900 psi (2,200 bar)

*Standard for Stock Pumps	

Air Pressure (PSI)	Stall Pressure (PSI)	Hand Lever Force (LBF)
20	3435	12
40	7890	21
60	12350	30
80	16810	39
100	21265	48
120	25725	57
148	31900	70

#### **Stall Pressure Note:**

The pump's air piston is returned using a coil spring. Depending on the position of the piston during stall stroke, the stall pressure can vary ±350 psi from the values shown on the chart. For precise pressure control, Parker Autoclave Engineers recommends using the manual hand lever.

## Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.





14.69 (373.1) (25.4) (19.1) (19.1) (19.1) (19.1) (19.1) (19.1) (19.1) (172.7)

#### Note:

Each Mounting Bracket includes (2) 11/32" (8.73) holes for 5/16" Bolts. Bottom Inlet Pump Head and Side Inlet Pump Head are mutually exclusive. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

Hand Lever/Air- Driven, High Pressure Liquid Pump - Series ACHL189-01

**Right View** 



**Back View** 

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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ISO-9001 Certified Hand Lever/Air- Driven, High Pressure Liquid Pump - Series ACHL189-01



## AHL Pumps High Volume Air Driven

**Product Catalogs** 

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ENGINEERING YOUR SUCCESS.

# Air-Driven, High Flow, High Pressure Liquid Pump Series AHL33-2D

Double-Acting, Dual Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 6,700 PSI (462 bar)
- Air to Liquid Pressure Ratio: 1:67
- Isolation Chamber (prevents process contamination of air section): Standard
- Volume Displacement Per Stroke: 15.3 in<sup>3</sup> (250.7 cm<sup>3</sup>)
- Dual Inlet Connections: 1" FNPT
- Dual Outlet Connections: 1/2" FNPT (Contact Parker Autoclave Engineers for Additional Options)

#### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 20-100 psi (1.4-6.9 bar) \*See note
- Nominal air pressure required for 6,700 PSI (462 bar) output pressure is 100 psi (6.9 bar)
- Inlet Port: 1" female FNPT
- Pilot Port: 1/8" female FNPT
- Exhaust Ports (mufflers removed): 1" female BSP
- Air Consumption @ 50 PSI air (0 PSI liquid): 290 SCFM
- Prelubricated at Factory

Note: Maximum air drive pressure is limited by maximum output pressure.

#### **General Specifications**

- Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 160 lbs (73 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer - 3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for options
- Air Drive Seals: Buna N



For complete information on available pump options, contact Parker Autoclave Engineers.



#### Liquid Flow Rate vs. Outlet Pressure:

**AHL33-2DSC Series** 

Approximate air drive pressure: 100 psi			
Pressure (PSI)	Pressure (bar)	Flow (gpm)	Flow (liter/min)
0	0	7.6 <sup>*</sup> see note 2	28.8 *see note 2
1000	69	6.1	23.0
2000	138	5.7	21.5
3000	207	4.9	18.4
4000	276	4.0	15.2
5000	345	3.2	12.3
6000	414	1.8	6.9

Nominal Liquid Pressure (Stalled)			
Air Drive Pressure		Liquid Pressure	
PSI	bar	PSI	bar
20	1.4	1340	92.4
30	2.1	2010	138.6
40	2.8	2680	184.8
50	3.4	3350	231.0
60	4.1	4020	277.2
70	4.8	4690	323.4
80	5.5	5360	369.6
90	6.2	6030	415.8
100	6.9	6700	461.9

Notes:

1. Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.

2. Flow value at approximately 50 psi air drive pressure.



Side View



Note:

change without notice.

Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

Air-Driven, High Pressure Liquid Pump - Series AHL33-2D

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series AHL33-2D

# Air-Driven, High Flow, High Pressure Liquid Pump Series AHL66-2D

Double-Acting, Dual Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 13,300 PSI (917 bar)
- Air to Liquid Pressure Ratio: 1:133
- Isolation Chamber (prevents process contamination of air section): Standard
- Volume Displacement Per Stroke: 7.8 in<sup>3</sup> (127.8 cm<sup>3</sup>)
- Dual Inlet Connections: 1/2" FNPT
- Dual Outlet Connections: 1/2" FNPT (Contact Parker Autoclave Engineers for Additional Options)

#### Technical Data: Air Side Specifications

- Air Drive Pressure Range: 20-100 psi (1.4-6.9 bar) \*See note
- Nominal air pressure required for 13,300 PSI (917 bar) output pressure is 100 psi (6.9 bar)
- Inlet Port: 1" female FNPT
- Pilot Port: 1/8" female FNPT
- Exhaust Ports (mufflers removed): 1" female BSP
- Air Consumption @ 50 PSI air (0 PSI liquid): 290 SCFM
- Prelubricated at Factory

Note: Maximum air drive pressure is limited by maximum output pressure.

#### **General Specifications**

- Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 160 lbs (73 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer - 3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for options
- Air Drive Seals: Buna N



For complete information on available pump options, contact Parker Autoclave Engineers.



#### Liquid Flow Rate vs. Outlet Pressure:

**AHL66-2DSC Series** 

Approximate air drive pressure: 100 psi			
Pressure (PSI)	Pressure (bar)	Flow (gpm)	Flow (liter/min)
0	0	3.6 <sup>*</sup> see note 2	13.7 *see note 2
1000	69	3.4	12.9
2000	138	3.1	12.0
3000	207	2.9	11.2
4000	276	2.7	10.3
5000	345	2.5	9.5
6000	414	2.3	8.7
7000	483	2.2	8.2
8000	552	2.0	7.7
9000	621	1.8	6.7
10000	690	1.5	5.7
11000	759	1.3	4.8
12000	828	1.0	3.9

Nominal Liquid Pressure (Stalled)			
Air Drive Pressure		Liquid Pressure	
PSI	bar	PSI	bar
20	1.4	2660	183.4
30	2.1	3990	275.2
40	2.8	5320	366.9
50	3.4	6650	458.6
60	4.1	7980	550.3
70	4.8	9310	642.1
80	5.5	10640	733.8
90	6.2	11970	825.5
100	6.9	13300	917.2

Notes:

1. Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.

2. Flow value at approximately 50 psi air drive pressure.

and Perfluoroelastomer O-Rings

**C** = Perfluoroelastomer O-Rings



Side View



Note:

change without notice.

Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

Air-Driven, High Pressure Liquid Pump - Series AHL66-2D

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series AHL66-2D



## AFL Pumps Double-Acting, Single Ended, High Flow Liquid Pump

**Product Catalogs** 



aerospace climate control electromechanical filtration fluid & gas handling hydraulics pneumatics process control sealing & shielding

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# Air-Driven, High Pressure Liquid Pump Series AFL35-1D

Double-Acting, Single Ended, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 5,600 psi (386 bar)
- Air to Liquid Pressure Ratio: 1:39
- Isolation Chamber (prevents process contamination of air section): Standard
- Volume Displacement Per Stroke: 6.02 in<sup>3</sup> (98.7 cm<sup>3</sup>)
- Inlet Connection: 1" NPT
- Outlet Connection: Parker Autoclave Engineers SF562CX10-9/16" Female Medium Pressure (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 5,600 psi (386 bar) output pressure is 144 psi (9.9 bar)
- Inlet Port: 3/4" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1" NPT
- Max Air Consumption @ 90 psi: 167 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 51.8 lbs. (23.5 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Double-Acting, Single Piston Air Drive

MADE IN THE U.S.A.

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.





**Front View** 



Left View

Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series AFL35-1D

# Air-Driven, High Pressure Liquid Pump Series AFL60-1D

Double-Acting, Single Ended, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 10,000 psi (690 bar)
- Air to Liquid Pressure Ratio: 1:70
- Isolation Chamber (prevents process contamination of air section): Standard
- Volume Displacement Per Stroke: 3.40 in<sup>3</sup> (55.7cm<sup>3</sup>)
- Inlet Connection: 1" NPT
- Outlet Connection: Parker Autoclave Engineers SF562CX10-9/16" Female Medium Pressure (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*see note
- Nominal air pressure required for 10,000 psi (690 bar) output pressure is 143 psi (9.9 bar)
- Inlet Port: 3/4" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1" NPT
- Max Air Consumption @ 90 psi: 167 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 51.8 lbs. (23.5 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.



**Double-Acting, Single Piston Air Drive** 



MADE IN THE U.S.A.



For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.



See Note

7.39 (187.79)

Front View



Left View

Each Mounting Bracket includes (2) x 9/16" (14.29) slots for 1/2" Bolts. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series AFL60-1D

# Air-Driven, High Pressure Liquid Pump Series AFL100-1D

Double-Acting, Single Ended, Single Piston Air Drive

## Technical Data: Liquid Side Specifications

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 15,000 psi (1034 bar)
- Air to Liquid Pressure Ratio: 1:113
- Isolation Chamber (prevents process contamination of air section): Standard
- Volume Displacement Per Stroke: 2.30 in<sup>3</sup> (37.7 cm<sup>3</sup>)
- Inlet Connection: 1" NPT
- Outlet Connection: Parker Autoclave Engineers SF562CX10-9/16" Female Medium Pressure (Contact Parker Autoclave Engineers for Additional Options)

## Technical Data: Air Side Specifications

- Air Drive Pressure Range: 15-150 psi (1-10 bar) \*See note
- Nominal air pressure required for 15,000 psi (1034 bar) output pressure is 132.75 psi (9.15 bar)
- Inlet Port: 3/4" FNPT
- Pilot Port: 1/8" FNPT (unregulated air)
- Exhaust Port (muffler removed): 1" NPT
- Max Air Consumption @ 90 psi: 167 SCFM
- Prelubricated at Factory

#### **General Specifications**

- Maximum Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 51.8 lbs. (23.5 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer -3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
- Liquid Seal: See Ordering Guide for Options
- Air Drive Seals: Buna N

Note: Maximum air drive pressure is limited by maximum output pressure.







Double-Acting, Single Piston Air Drive

MADE IN THE U.S.A.

For complete information on available pump options, contact Parker Autoclave Engineers.



Flow Rate vs. Outlet Pressure:



Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.
# Dimensional Data:



Each Mounting Bracket includes (2) x 9/16" (14.29) slots for 1/2" Bolts. All dimensions are for reference only and are subject to change without notice. Primary Dimensions: Inches Secondary Dimensions: (Millimeters)



Front View



Left View

**Technical Specifications & Performance Data** 

# Accessories Available:

- Air Control Packages
- Pneumatic Pilot switches and Solenoid Valves
- Stroke Counter
- Relief Valve / Safety Heads
- · Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





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**Caution!** Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

ISO-9001 Certified Air-Driven, High Pressure Liquid Pump - Series AFL100-1D

# Packaged Pressure Systems







AUTOCLAVE ENGINEER



## **Packaged Pressure Systems**

Since our beginning in 1946, Parker Autoclave Engineers has been the world's market leader in the development and manufacture of high and ultra-high pressure components, valves and systems. At our modern factory in Erie Pennsylvania, USA we have engineers with the specialized experience to design and create products commonly used to control pressures exceeding 100,000 psi (6900 bar) while consistently exceeding customer expectations.

Using the knowledge developed over the last 65 years, Parker Autoclave Engineers Packaged Pressure Systems have been developed to incorporate any of our Air-Driven, High Pressure Liquid pumps, valves and fittings into a wide range of self-contained portable, or custom framed modules that "plug and play" for virtually any test, control, or injection system you can imagine. They vary in size, flow capability, output pressure and can include optional features such as chart recording, data logging, cycle counters, injection controllers and almost any kind of electric or pneumatic valve control option. Applications include: Hydrostatic/Burst/Leak/Functional testing, Chemical injection,Valve/ Hose/Gauge testing, Bolt tensioning, Hydraulic Control systems, Laboratory Research and Autofrettage systems.



## Portable Pressure Systems

Move your high pressure test stand anywhere you need it to be...

Powder Coated Steel, Stainless Steel or Aluminum Frame Options Single or Dual Pump Systems with or without reservoir Utilizes any Combination ASL, ACL, ACHL, AFL, or AHL Air-Driven Liquid Pumps Outlet Pressures to 60,000 PSI (4140 bar) – Flows to 7.6 GPM (29 lpm) Vertical or Horizontal Frame Designs with Optional Casters Totally Self Contained-Electricity not Required, Only Air All Air Controls Included, No Lubrication Needed Isolation Valves, Relief Valves, Rupture Disks, Stroke Counters and other Options Available



## **Custom Pressure Systems**

Modify the Standard Design to Incorporate Specified Instruments or Request Fit-for-Purpose Designs

Powder Coated Steel, Aluminum or Stainless Steel Open/Enclosed Frame Options Fit-for-Purpose Enclosures/Benches/Reels or Test Chambers Utilize any Parker Autoclave Engineers Air-Driven Liquid Pump Options Include All Standard Options plus: Remote Controlled Valves, Chart Recorders, Data Loggers, PLC or Computer Controls, and Digital Displays.

### WARNING

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# ISO-9001 Certified