AHL SERIES Double-Acting, Double Piston Air Drive

 Service: Oil, Water, Water/Oil mixture and other fluids depending on material compatibility

• Maximum Operating Temperature: 0-140° F (-18° to 60° C)

• Pressure Head: 15-5 PH Stainless Steel

· Check Valve Glands: 316 Stainless Steel

• Liquid Seal: see Ordering Guide for options

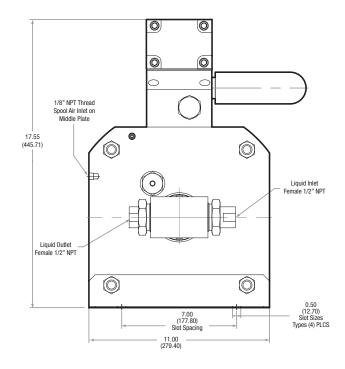
· Air Drive Seals: Buna N



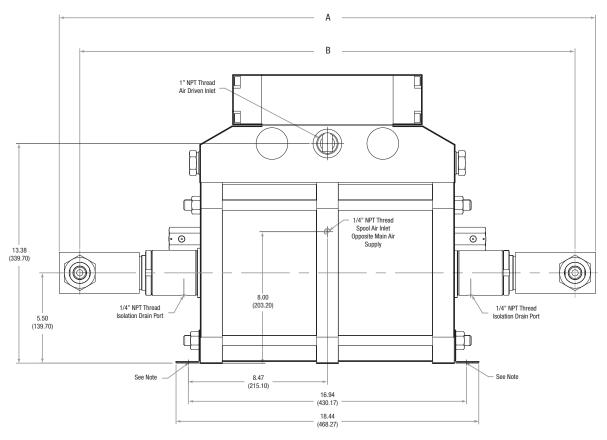
## **Reference Guide**

Duman Madal	Duanassus	Maximum Rated	Displacement Per Cycle .in³ (cm³)	Liquid Connections		
Pump Model Series	Pressure Ratio	Outlet Pressure PSI (bar)		Inlet	Outlet	
AHL Series						
AHL33-2D	1:67	6,700 (462)	15.3 (250.7)	1" FNPT	1/2" FNPT	
AHL66-2D	1:133	13,300 (917)	7.8 (127.8)	1/2" FNPT	1/2" FNPT	

**Air Drive Connection** - All AHL series pumps have a 1" FNPT main air drive supply connection and utilize a 1/8" FNPT pilot port connection for remote start/stop operation. It is recommended to operate the pilot port at a higher air pressure than the main air drive supply pressure for proper function.



Side View



**Front View** 

#### Note:

Each mounting bracket includes (2) x 9/16" (8.73) slots for 1/2" 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

Primary dimensions: Inches Secondary Dimensions: (Millimeters)

Model	Α	В
AHL66	32.66 (829.61)	30.16 (766.11)
AHL33	32.41 (823.21)	30.42 (772.41)

## **Ordering Guide**

Typical catalog number example: AHL66-2DSCUV (catalog number is created based on customer selection of product parameters, see below for example)

AHL66-2D	S	С	UV
Pump Series Type/Size/Ratio	Liquid Inlet Location	Isolation Chamber	Liquid Seal Material (AHL33 and AHL66)
AHL  High Flow Liquid High Pressure Pump  10" Dual Piston Air Drive  1:133 Max. Air-to-Liquid Pressure Ratio  Maximum 13,300 psi (917 bar)  Double Acting Liquid Heads	S* = Side	C* = Included	UV* = Urethane U-Cup and Viton O-Rings UE = Urethane U-Cup and EPDM O-Rings UB = Urethane U-Cup and Buna-N O-Rings TV = Thermoplastic Polyester U-Cup and Viton O-Rings TE = Thermoplastic Polyester U-Cup and EPDM O-Rings TB = Thermoplastic Polyester U-Cup and Buna-N O-Rings TC = Thermoplastic Polyester U-Cup and Perfluoroelastomer O-Rings

<sup>\*</sup> Standard for stock pumps

# **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* (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	

## **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* (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		

Note:
1. Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.
2. Flow valve at approximately 50 psi air drive pressure.

# AFL SERIES Double-Acting, Single Piston Air Drive

 Service: Oil, Water, Water/Oil mixture and other fluids depending on material compatibility

• Maximum Operating Temperature: 0-140° F (-18° to 60° C)

Pressure Head: 15-5 PH Stainless SteelCheck Valve Glands: 316 Stainless Steel

• Liquid Seal: see Ordering Guide for options

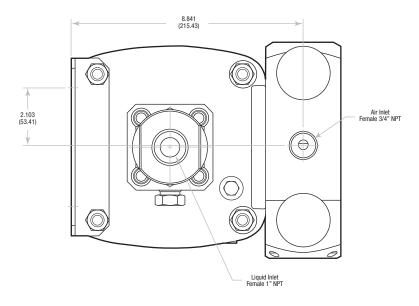
· Air Drive Seals: Buna N



## **Reference Guide**

Division Maidal	Dunganung	Maximum Rated	Displacement Per Cycle in³ (cm³)	Liquid Connections		
Pump Model Series	Pressure Ratio	Outlet Pressure PSI (bar)		Inlet	Outlet	
AFL Series						
AFL35-1D	1:39	5,600 (386)	6.02 (98.7)	1" FNPT	9/16" SF562CX	
AFL60-1D	1:70	10,000 (690)	3.40 (55.7)	1" FNPT	9/16" SF562CX	
AFL100-1D	1:113	15,000 (1034)	2.30 (37.7)	1" FNPT	9/16" SF562CX	

**<u>Air Drive Connection</u>** - All ASL series pumps have a 1" FNPT main air drive supply connection and utilize a 1/8" FNPT pilot port connection for remote start/stop operation. It is recommended to operate the pilot port at a higher air pressure than the main air drive supply pressure for proper function.



**Bottom View**