## **Durable Shuttle-Driven Pumps For High-Purity Chemicals**

PL30 and PL120 pumps are discontinued. Please upgrade to PSA Series pumps for better performance, improved reliability, shorter lead times, extended pump life, and increased warranty periods. See pump comparison information below or online at: https://wkfluid.com/pl-series/

PL60 pumps are NOT discontinued. PL60 pumps are actively stocked and fully maintained. Although PL60 has no direct replacement, PSA060 pumps are recommended upgrades. See comparisons below and contact White Knight for details.



















PL Series metal-free bellows pumps feature PTFE/PFA fluid paths. They distribute chemicals at temperatures up to 100°C (212°F) and allow for air supply pressures up to 7 Bar (100 psi). They operate continuously throughout their two-year warranty. The pumps are available in three models, PL30, PL60, and PL120, which are capable of maximum flow rates of 30, 60 and 120 lpm, respectively.

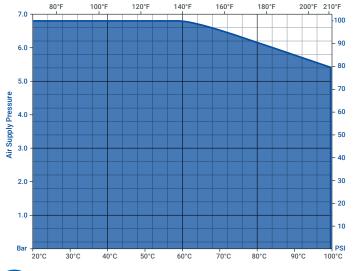
### **Features & Benefits**

- · Metal-Free PTFE/PFA liquid path
- · Safe, leak-free operation due to no-metal design
- No elastomer O-rings, no leaks, never retorque
- Pneumatic Logic<sup>™</sup> minimizes pulsation and vibration
- No preventative maintenance during two-year warranty
- · Durable machined design with minimal parts
- · Polypropylene heads; ceramic in air side
- · A solenoid-driven option is also available

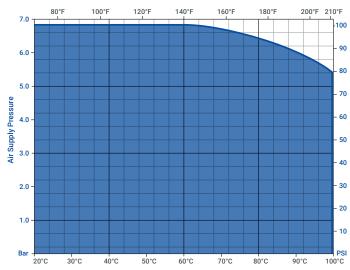
## **PUMP COMPARISONS**

## **Temperature Limits**

#### **PL Series**

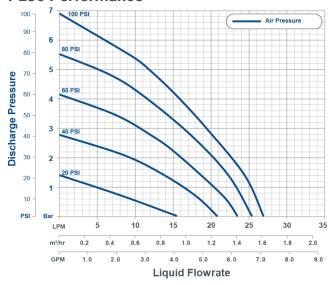


#### **PSA Series**

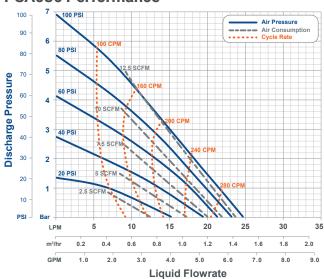


## **PL30 - PSA030 COMPARISON**

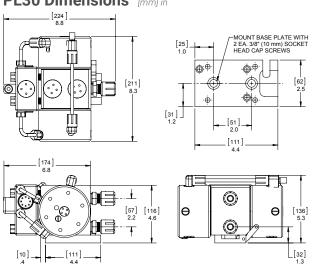
#### **PL30 Performance**



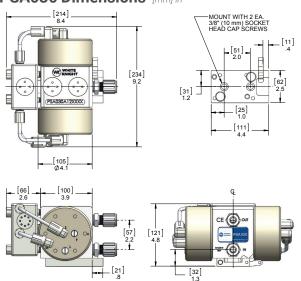
#### **PSA030 Performance**



### PL30 Dimensions [mm] in



#### PSA030 Dimensions [mm] in



### **Specifications**

Model		PL30	PSA030
Max Flow Rate*		30 lpm 7 gpm	24.7 lpm 6.53 gpm
Displacement Per Cycle*		0.090 liters 0.024 gal	0.074 liters 0.019 gal
Cycles per min		≤ 400	≤ 333
Air Connection		1/8 or 1/4 in FNPT	1/4 in FNPT
Weight		3.0 kg 6.5 lb	3.3 kg 7.3 lb
Sound	Pressure**	72.95 dB(a) 80.35 dB(a)	74.00 dB(a) 79.90 dB(a)
	Power**	62.42 dB(a) 70.38 dB(a)	63.01 dB(a) 69.90 dB(a)

Model	PL30	PSA030
Max Fluid	100°C	100°C
Temperature	212°F	212°F
Max Supply	7 Bar	7 Bar
Air Pressure	100 psi	100 psi
Min Startup	1.4 Bar	1.4 Bar
Air Pressure	20 psi	20 psi
Max Suction	1 m	1 m
Lift*	3 ft	3 ft
Fluid Path Materials	PTFE, PFA	PTFE, PFA
Non-Fluid Path	PTFE, PFA,	PTFE, PFA,
Materials	PP, Ceramic	PP, Ceramic
Warranty	2 Years	2 Years

All AP & PSA Series Models		
Stroke Detection	Fiber optic with or without D10 sensor, or solid state pressure switch (NPN or PNP)	
Leak Detection	Fiber optic with or without sensor, or conductivity	
Electronic Control	CPC, CPT, or custom. Call for details.	

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

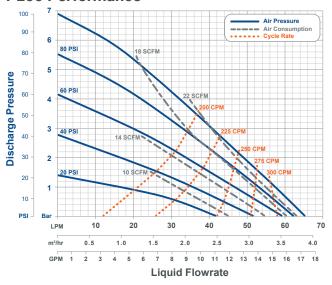
\*\*dB at 100 psi 50 CPM (top) and 100 psi max. CPM (bottom). Sound levels measured in accordance with ISO9614-2:1997.

\*PL30 & PL120 pumps are discontinued. Recommended replacements are Recommended replacements are PSA030 and PSA140 pumps. Although PL60 pumps are NOT discontinued, PSA060 pumps are recommended upgrades. Details: https://wkfluidhandling.com/psa-series/

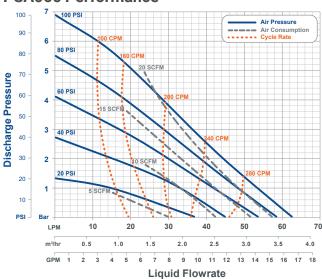


## PL60 - PSA060 COMPARISON

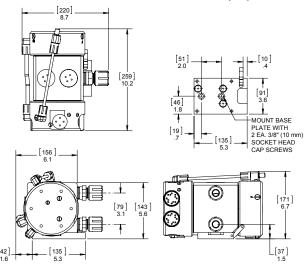
#### **PL60 Performance**



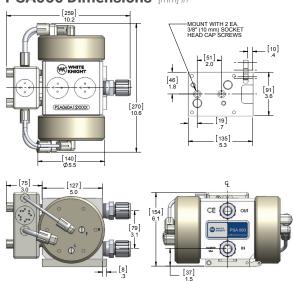
#### **PSA060 Performance**



## PL60 Dimensions Solenoid-Driven Model [mm] in



#### PSA060 Dimensions [mm] in



## **Specifications**

Mod	lel	PL60	PSA060
Max Flow Rate*		60 lpm 15 gpm	62.3 lpm 16.46 gpm
Displacement Per Cycle*		0.143 liters 0.038 gal	0.178 liters 0.047 gal
Cycles per min		≤ 320	≤ 348
Air Connection		1/4 or 3/8 in FNPT	1/4 in FNPT
Weight		5.6 kg 12.3 lb	4.7 kg 10.4 lb
Sound	Pressure**	75.44 dB(a) 83.44 dB(a)	73.11 dB(a) 82.50 dB(a)
	Power**	66.94 dB(a) 75.73 dB(a)	64.29 dB(a) 74.11 dB(a)

Model	PL60	PSA060
Max Fluid	100°C	100°C
Temperature	212°F	212°F
Max Supply	7 Bar	7 Bar
Air Pressure	100 psi	100 psi
Min Startup	1.4 Bar	1.4 Bar
Air Pressure	20 psi	20 psi
Max Suction	1 m	1 m
Lift*	3 ft	3 ft
Fluid Path Materials	PTFE, PFA	PTFE, PFA
Non-Fluid Path	PTFE, PFA,	PTFE, PFA,
Materials	PP, Ceramic	PP, Ceramic
Warranty	2 Years	2 Years

All AP & PSA Series Models		
Stroke Detection	Fiber optic with or without D10 sensor, or solid state pressure switch (NPN or PNP)	
Leak Detection	Fiber optic with or without sensor, or conductivity	
Electronic Control	CPC, CPT, or custom. Call for details.	

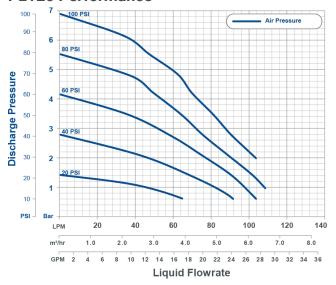
\*May vary by configuration. Suction lift diminishes over time. Recommended installation level less than 3 ft above source. \*\*dB at 100 psi 50 CPM (top) and 100 psi max. CPM (bottom). Sound levels measured in accordance with ISO9614-2:1997.

\*PL30 & PL120 pumps are discontinued. Recommended replacements are Recommended replacements are PSA030 and PSA140 pumps. Although PL60 pumps are NOT discontinued, PSA060 pumps are recommended upgrades. Details: https://wkfluidhandling.com/psa-series/

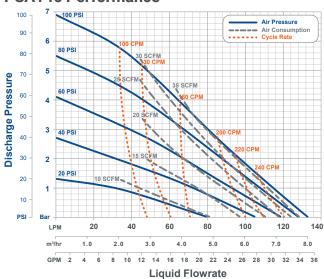


## PL60 - PSA060 COMPARISON

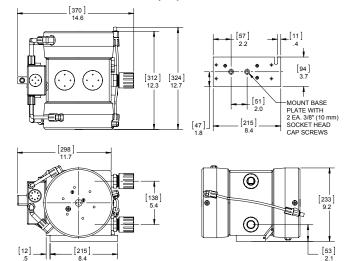
#### PL120 Performance



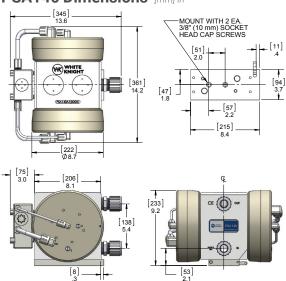
#### **PSA140 Performance**



#### PL120 Dimensions [mm] in



#### **PSA140 Dimensions** [mm] in



## **Specifications**

Mod	lel	PL120	PSA140
Max Flow Rate*		120 lpm (32 gpm)	123 lpm 32.5 gpm
Displacement Per Cycle*		0.692 liters (0.183 gal)	0.500 liters 0.132 gal
Cycles per min		≤ 130	≤ 273
Air Connection		1/4 or 3/8 in FNPT	3/8 in FNPT
Weight		18.4 kg (40.4 lb)	16.6 kg 36.6 lb
Sound	Pressure**	81.98 dB(a) 91.60 dB(a)	81.98 dB(a) 91.60 dB(a)
	Power**	76.37 dB(a) 83.16 dB(a)	76.37 dB(a) 83.16 dB(a)

Model	PL60	PSA060
Max Fluid	100°C	100°C
Temperature	212°F	212°F
Max Supply	7 Bar	7 Bar
Air Pressure	100 psi	100 psi
Min Startup	1.4 Bar	1.4 Bar
Air Pressure	20 psi	20 psi
Max Suction	1 m	1 m
Lift*	3 ft	3 ft
Fluid Path Materials	PTFE, PFA	PTFE, PFA
Non-Fluid Path	PTFE, PFA,	PTFE, PFA,
Materials	PP, Ceramic	PP, Ceramic
Warranty	2 Years	2 Years

All AP & PSA Series Models		
Stroke Detection	Fiber optic with or without D10 sensor, or solid state pressure switch (NPN or PNP)	
Leak Detection	Fiber optic with or without sensor, or conductivity	
Electronic Control	CPC, CPT, or custom. Call for details.	

\*May vary by configuration. Suction lift diminishes over time. Recommended installation level less than 3 ft above source. \*\*dB at 100 psi 50 CPM (top) and 100 psi max. CPM (bottom). Sound levels measured in accordance with ISO9614-2:1997.

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