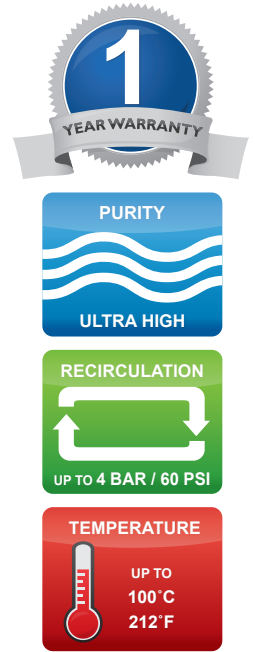
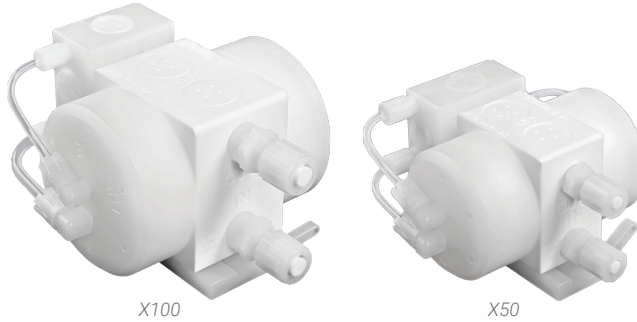


## Reliable PTFE Pumps for High-Purity Chemical Recirculation

*X Series pumps are discontinued. Please upgrade to PSA Series pumps for better performance, improved reliability, shorter lead times, extended pump life, and increased warranty periods. PSR Series pumps are direct replacements. See pump comparison information below or online at: <https://wkfluidhandling.com/x-series/>*

### Overview

X Series pumps are completely metal-free. They feature PTFE/PFA fluid paths and are available in two models capable of 20 and 55 lpm flow rates. They distribute chemicals at temperatures up to 100°C (212°F) and offer air supply pressures up to 4 Bar (60 psi). They perform safely and reliably running continuously throughout their warranty period.



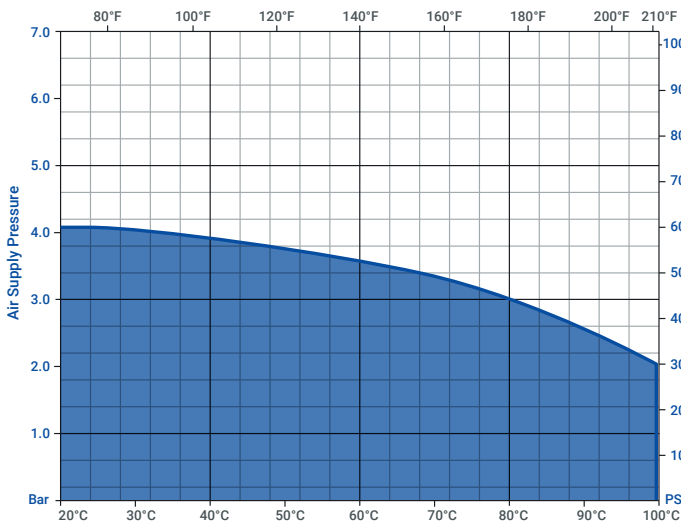
### Features & Benefits

- Nonmetal pumps with PTFE/PFA liquid paths
- Safe, leak-free operation due to no-metal design
- No elastomer O-rings, no leaks, never retorque
- Polypropylene heads; ceramic in air shuttle valve
- Pneumatic Logic™ minimizes pulsation and vibration
- Class 100 cleanroom assembly, testing, and packaging
- Proven reliable to 200 million+ cycles
- No lubrication in shift mechanisms
- No electric motors, which generate heat
- Durable machined design with minimal parts
- Various liquid connection options
- Easy to install and service

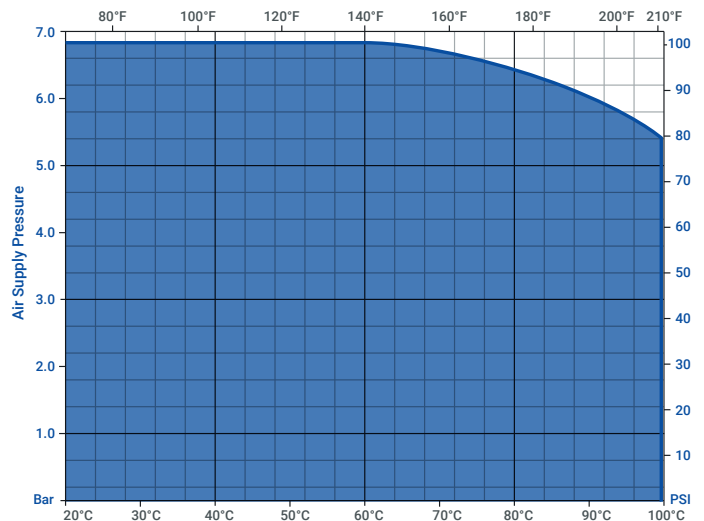
## PUMP COMPARISONS

### Temperature Limits

#### X & PSR Series

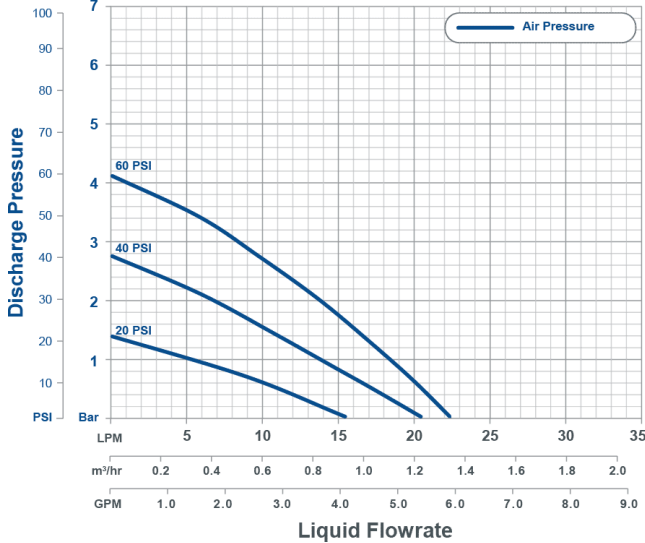


#### PSA Series

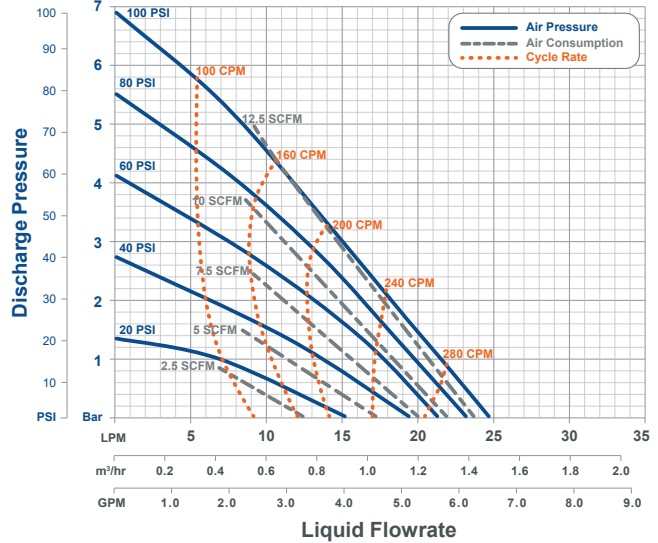


## X50 - PSA030 COMPARISON

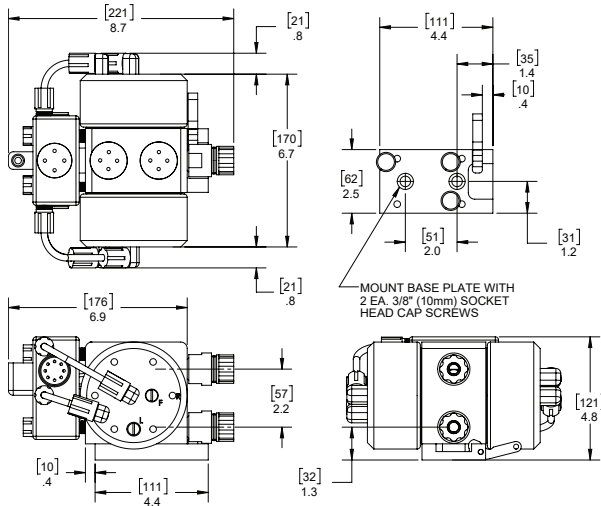
### X50 Performance



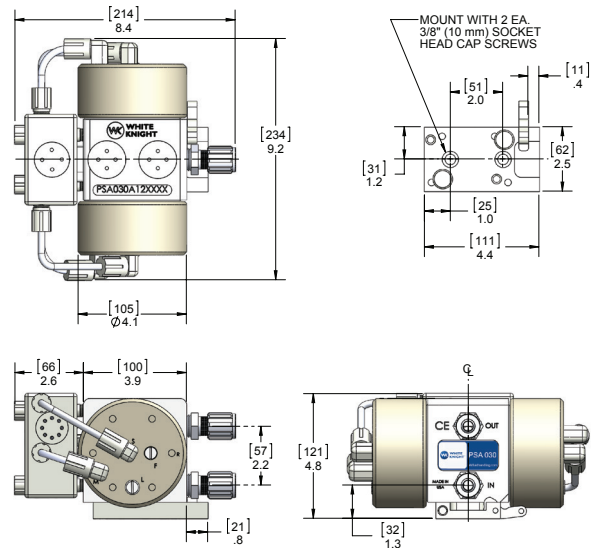
### PSA030 Performance



### X50 Dimensions [mm] in



### PSA030 Dimensions [mm] in



### Specifications

Model	X50	PSA030
<b>Max Flow Rate*</b>	20 lpm 5 gpm	24.7 lpm 6.53 gpm
<b>Displacement Per Cycle*</b>	0.076 liters 0.02 gal	0.074 liters 0.019 gal
<b>Cycles per min</b>	≤ 270	≤ 333
<b>Air Connection</b>	1/8 or 1/4 in FNPT	1/4 in FNPT
<b>Weight</b>	2.6 kg 5.7 lb	3.3 kg 7.3 lb
<b>Sound</b>	<b>Pressure**</b>	69.38 dB(a) 76.55 dB(a)
	<b>Power**</b>	58.52 dB(a) 65.75 dB(a)
<b>Pressure**</b>	74.00 dB(a) 79.90 dB(a)	
<b>Power**</b>	63.01 dB(a) 69.90 dB(a)	

Model	X50	PSA030
<b>Max Fluid Temperature</b>	100°C 212°F	100°C 212°F
<b>Max Supply Air Pressure</b>	4 Bar 60 psi	7 Bar 100 psi
<b>Min Startup Air Pressure</b>	1.4 Bar 20 psi	1.4 Bar 20 psi
<b>Max Suction Lift*</b>	1 m 3 ft	1 m 3 ft
<b>Fluid Path Materials</b>	PTFE, PFA	PTFE, PFA
<b>Non-Fluid Path Materials</b>	PTFE, PFA, PP, Ceramic	PTFE, PFA, PP, Ceramic
<b>Warranty</b>	1 Year	2 Years

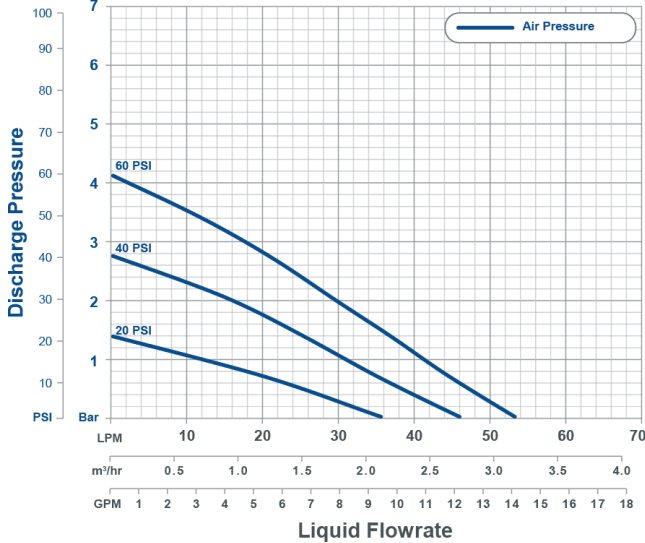
All X & PSA Series Models	
<b>Stroke Detection</b>	Fiber optic with or without D10 sensor, or solid state pressure switch (NPN or PNP)
<b>Leak Detection</b>	Fiber optic with or without sensor, or conductivity
<b>Electronic Control</b>	CPC, CPT, or custom. Call for details.

\*May vary by configuration. Suction lift diminishes over time. Recommended installation level less than 3 ft above source.  
 \*\*dB at 60 psi 50 CPM (top) and 60 psi max. CPM (bottom). Sound levels measured in accordance with ISO9614-2:1997.

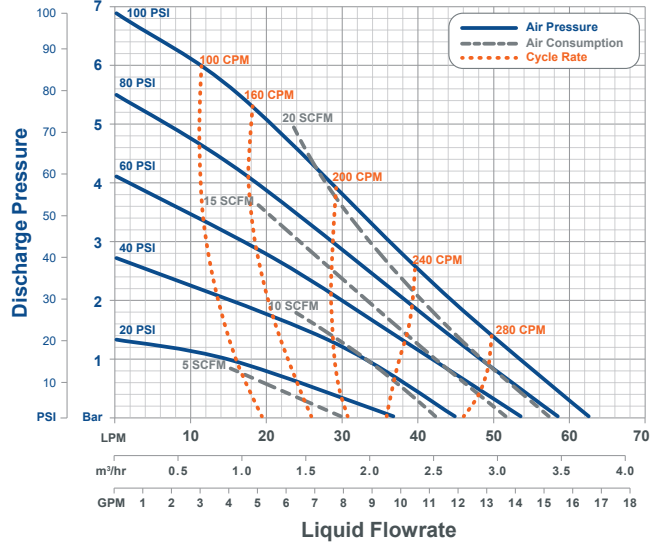
\*X Series pumps are discontinued. Recommended replacements are PSA Series or PSR Series pumps.  
 Details: <https://wkfluidhandling.com/psa-series/>  
 or <https://wkfluidhandling.com/psr-series/>

## X100 - PSA060 COMPARISON

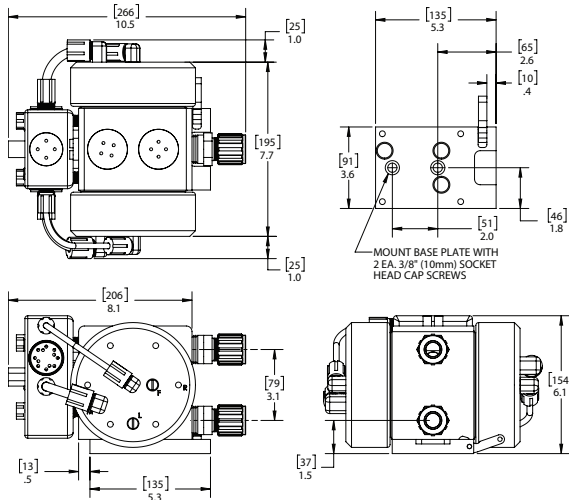
### X100 Performance



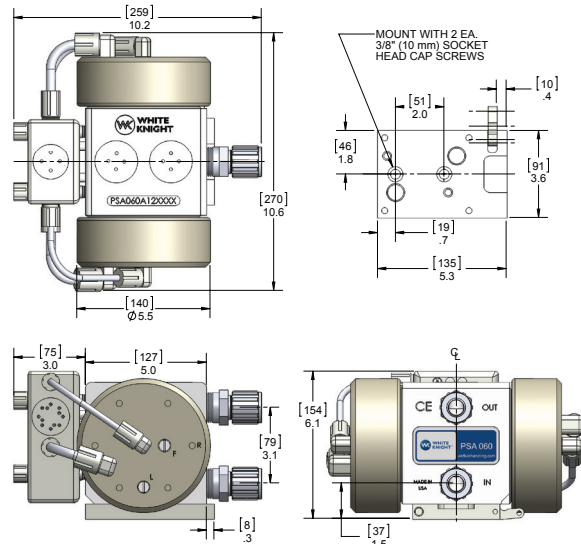
### PSA060 Performance



### X100 Dimensions [mm] in



### PSA060 Dimensions [mm] in



### Specifications

Model	X100	PSA060
<b>Max Flow Rate*</b>	55 lpm 14 gpm	62.3 lpm 16.46 gpm
<b>Displacement Per Cycle*</b>	0.189 liters 0.05 gal	0.178 liters 0.047 gal
<b>Cycles per min</b>	≤ 300	≤ 348
<b>Air Connection</b>	1/4 or 3/8 in FNPT	1/4 in FNPT
<b>Weight</b>	5.1 kg 11.1 lb	4.7 kg 10.4 lb
<b>Sound</b>	<b>Pressure**</b>	72.38 dB(a) 79.12 dB(a)
	<b>Power**</b>	64.31 dB(a) 71.98 dB(a)
<b>Pressure**</b>	73.11 dB(a) 82.50 dB(a)	
<b>Power**</b>	64.29 dB(a) 74.11 dB(a)	

Model	X100	PSA060
<b>Max Fluid Temperature</b>	100°C 212°F	100°C 212°F
<b>Max Supply Air Pressure</b>	4 Bar 60 psi	7 Bar 100 psi
<b>Min Startup Air Pressure</b>	1.4 Bar 20 psi	1.4 Bar 20 psi
<b>Max Suction Lift*</b>	1 m 3 ft	1 m 3 ft
<b>Fluid Path Materials</b>	PTFE, PFA	PTFE, PFA
<b>Non-Fluid Path Materials</b>	PTFE, PFA, PP, Ceramic	PTFE, PFA, PP, Ceramic
<b>Warranty</b>	1 Year	2 Years

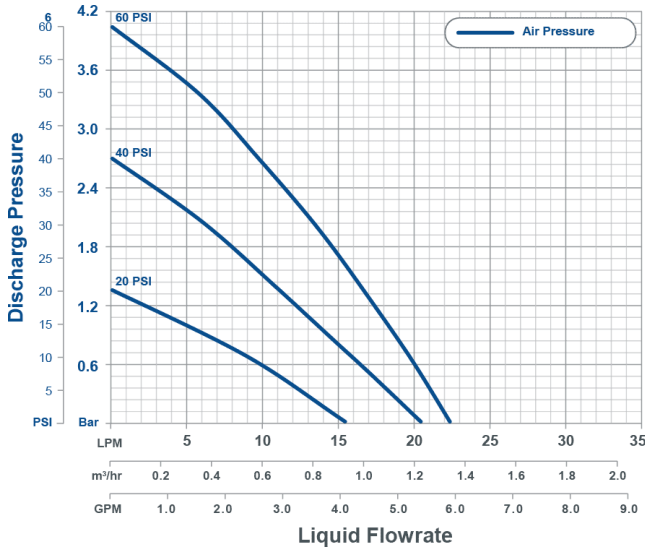
All X & PSA Series Models	
<b>Stroke Detection</b>	Fiber optic with or without D10 sensor, or solid state pressure switch (NPN or PNP)
<b>Leak Detection</b>	Fiber optic with or without sensor, or conductivity
<b>Electronic Control</b>	CPC, CPT, or custom. Call for details.

\*May vary by configuration. Suction lift diminishes over time. Recommended installation level less than 3 ft above source.  
 \*\*dB at 60 psi 50 CPM (top) and 60 psi max. CPM (bottom). Sound levels measured in accordance with ISO9614-2:1997.

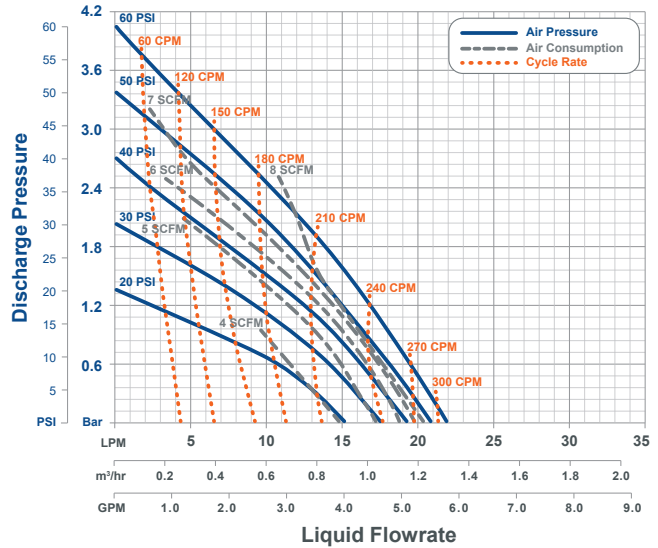
\*X Series pumps are discontinued. Recommended replacements are PSA Series or PSR Series pumps. Details: <https://wkfluidhandling.com/psa-series/> or <https://wkfluidhandling.com/psr-series/>

## X50 - PSR025 COMPARISON

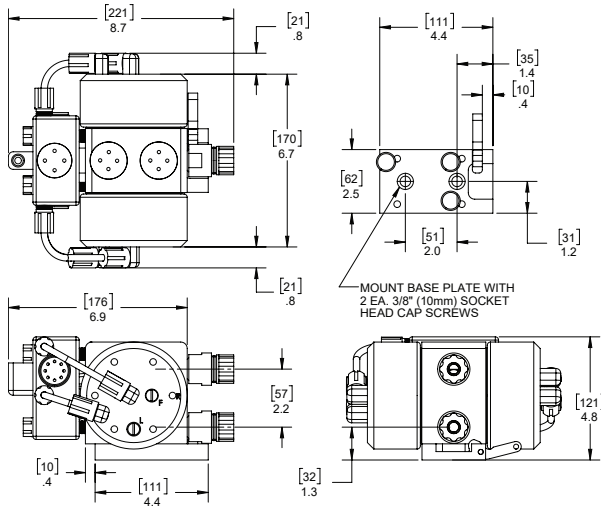
### X50 Performance



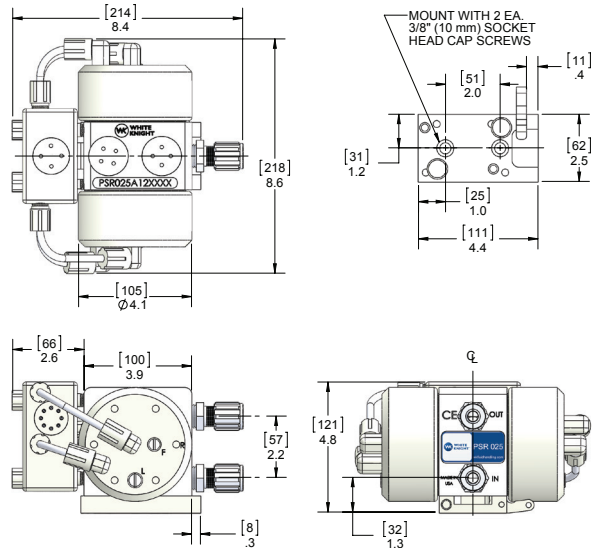
### PSR025 Performance



### X50 Dimensions [mm] in



### PSR025 Dimensions [mm] in



### Specifications

Model	X50	PSR025
<b>Max Flow Rate*</b>	20 lpm 5 gpm	21.9 lpm 5.79 gpm
<b>Displacement Per Cycle*</b>	0.076 liters 0.02 gal	0.076 liters 0.020 gal
<b>Cycles per min</b>	≤ 270	≤ 300
<b>Air Connection</b>	1/8 or 1/4 in FNPT	1/4 in FNPT
<b>Weight</b>	2.6 kg 5.7 lb	2.5 kg 5.5 lb
<b>Sound</b>	<b>Pressure**</b>	69.38 dB(a) 76.55 dB(a)
	<b>Power**</b>	58.52 dB(a) 65.75 dB(a)

Model	X50	PSR025
<b>Max Fluid Temperature</b>	100°C 212°F	100°C 212°F
<b>Max Supply Air Pressure</b>	4 Bar 60 psi	4 Bar 60 psi
<b>Min Startup Air Pressure</b>	1.4 Bar 20 psi	1.4 Bar 20 psi
<b>Max Suction Lift*</b>	1 m 3 ft	1 m 3 ft
<b>Fluid Path Materials</b>	PTFE, PFA	PTFE, PFA
<b>Non-Fluid Path Materials</b>	PTFE, PFA, PP, Ceramic	PTFE, PFA, PP, Ceramic
<b>Warranty</b>	1 Year	1 Year

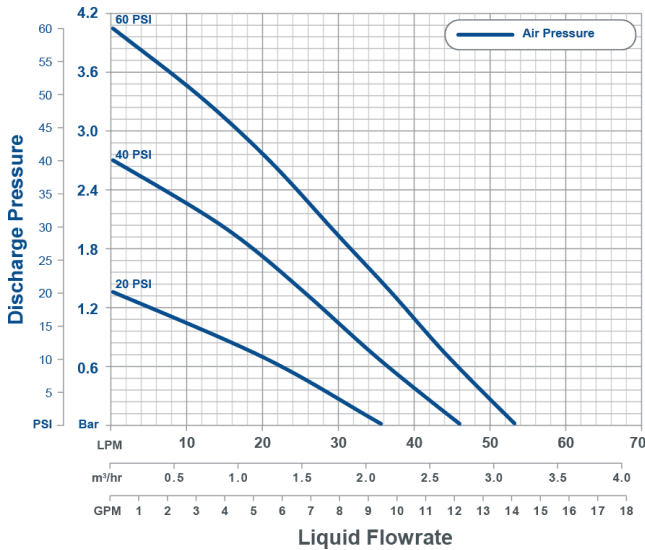
All X & PSR Series Models	
<b>Stroke Detection</b>	Fiber optic with or without D10 sensor, or solid state pressure switch (NPN or PNP)
<b>Leak Detection</b>	Fiber optic with or without sensor, or conductivity
<b>Electronic Control</b>	CPC, CPT, or custom. Call for details.

\*May vary by configuration. Suction lift diminishes over time. Recommended installation level less than 3 ft above source.  
 \*\*dB at 60 psi 50 CPM (top) and 60 psi max. CPM (bottom). Sound levels measured in accordance with ISO9614-2:1997.

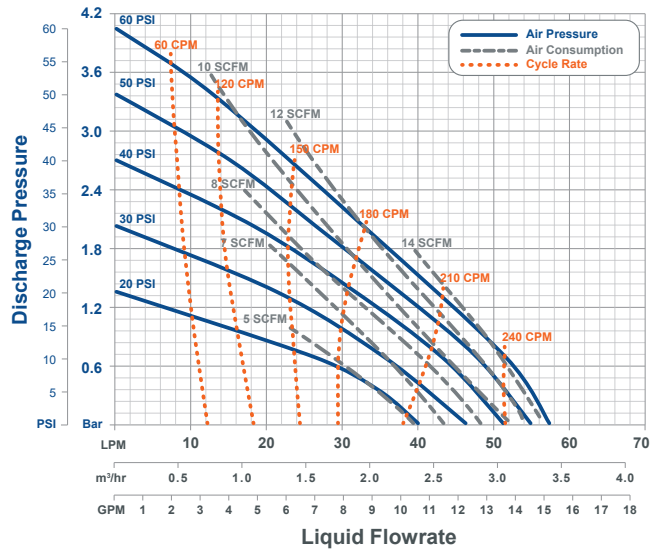
\*X Series pumps are discontinued. Recommended replacements are PSA Series or PSR Series pumps. Details: <https://wkfluidhandling.com/psa-series/> or <https://wkfluidhandling.com/psr-series/>

## X100 - PSR050 COMPARISON

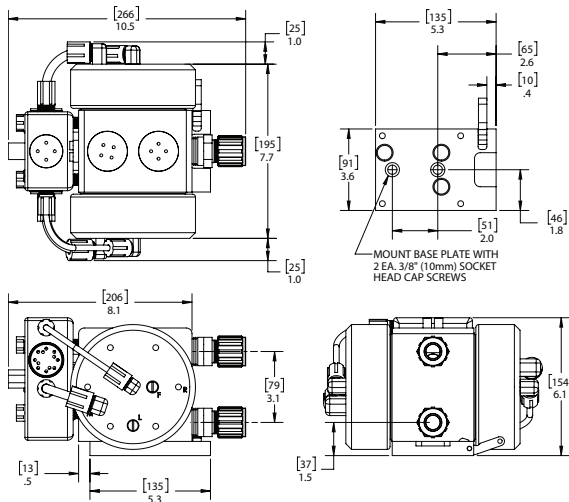
### X100 Performance



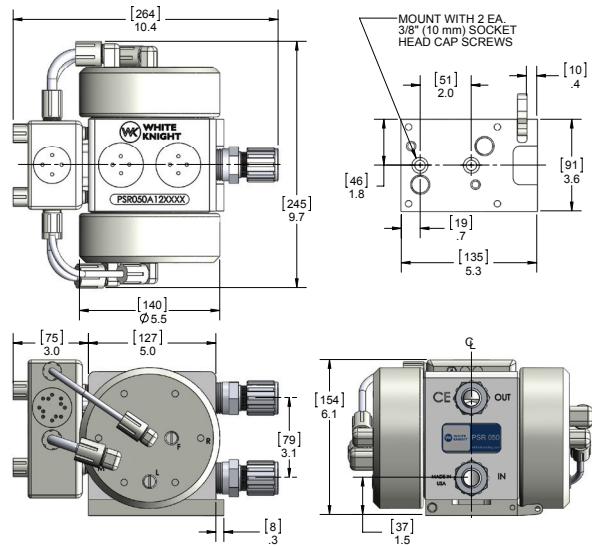
### PSR050 Performance



### X100 Dimensions [mm] in



### PSR050 Dimensions [mm] in



### Specifications

Model	X100	PSR050
<b>Max Flow Rate*</b>	55 lpm 14 gpm	57.5 lpm 15.19 gpm
<b>Displacement Per Cycle*</b>	0.189 liters 0.05 gal	0.189 liters 0.050 gal
<b>Cycles per min</b>	≤ 300	≤ 258
<b>Air Connection</b>	1/4 or 3/8 in FNPT	1/4 in FNPT
<b>Weight</b>	5.1 kg 11.1 lb	5.0 kg 11.0 lb
<b>Sound</b>	<b>Pressure**</b>	72.38 dB(a) 79.12 dB(a)
	<b>Power**</b>	64.31 dB(a) 71.98 dB(a)

Model	X100	PSR050
<b>Max Fluid Temperature</b>	100°C 212°F	100°C 212°F
<b>Max Supply Air Pressure</b>	4 Bar 60 psi	4 Bar 60 psi
<b>Min Startup Air Pressure</b>	1.4 Bar 20 psi	1.4 Bar 20 psi
<b>Max Suction Lift*</b>	1 m 3 ft	1 m 3 ft
<b>Fluid Path Materials</b>	PTFE, PFA	PTFE, PFA
<b>Non-Fluid Path Materials</b>	PTFE, PFA, PP, Ceramic	PTFE, PFA, PP, Ceramic
<b>Warranty</b>	1 Year	1 Year

All X & PSR Series Models	
<b>Stroke Detection</b>	Fiber optic with or without D10 sensor, or solid state pressure switch (NPN or PNP)
<b>Leak Detection</b>	Fiber optic with or without sensor, or conductivity
<b>Electronic Control</b>	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 60 psi 50 CPM (top) and 60 psi max. CPM (bottom). Sound levels measured in accordance with ISO9614-2:1997.

\*X Series pumps are discontinued. Recommended replacements are PSA Series or PSR Series pumps.  
 Details: <https://wkfluidhandling.com/psa-series/>  
 or <https://wkfluidhandling.com/psr-series/>