



High Flow Chemical Delivery

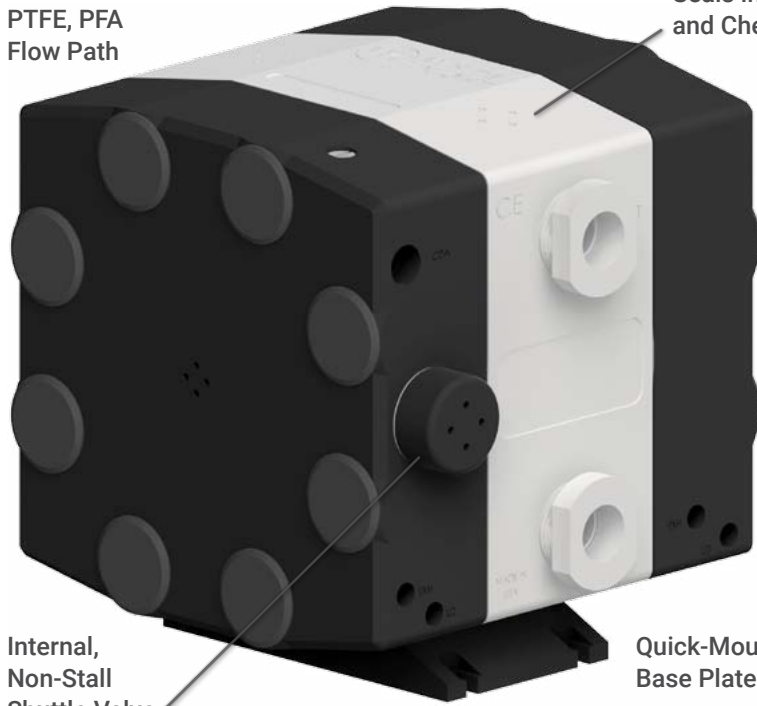
PSB100 air-operated double-diaphragm (AODD) pumps feature PTFE/PFA fluid paths for high-purity chemical delivery, dispense and transfer applications. They are capable of 95 lpm (25 gpm) flow rates and 5.5. Bar (80 psi) air supply pressures. PSB100 pumps are a direct retrofit for other delivery pumps.

Advanced Pump Technologies

No Exposed Metals

PTFE, PFA
Flow Path

Tongue-&-Groove
Seals in Fittings
and Check Caps



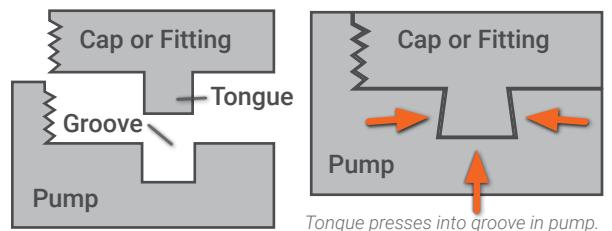
Additional ports
available on back.

<p>HIGH-PURITY</p> <p>≤ 95 LPM (25 GPM)</p>	<p>PRESSURE</p> <p>≤ 5.5 BAR (80 PSI)</p>
<p>TEMPERATURE</p> <p>UP TO 100°C 212°F</p>	<p>SHIFT METHOD</p> <p>INTERNAL SHUTTLE VALVE</p>

Features & Benefits

- Process-safe PTFE, PFA fluid paths ideal for high-purity chemicals
- Corrosion-resistant design with no exposed metals for reliable, safe operation
- Leak-free Tongue-&-Groove seals on check caps and fittings
- High-density PTFE prevents frequent tie bolt retorque
- Durable machined design with minimal parts
- Internal, non-stall shuttle valve saves space and eliminates resets
- Pneumatic Logic™ provides dead-head operation without stall
- ≤ 5.5 Bar (80 psi) supply pressure
- ≤ 95 lpm (25 gpm) flow rates
- ≤ 4 m (12 ft) suction lift
- Various liquid connection options

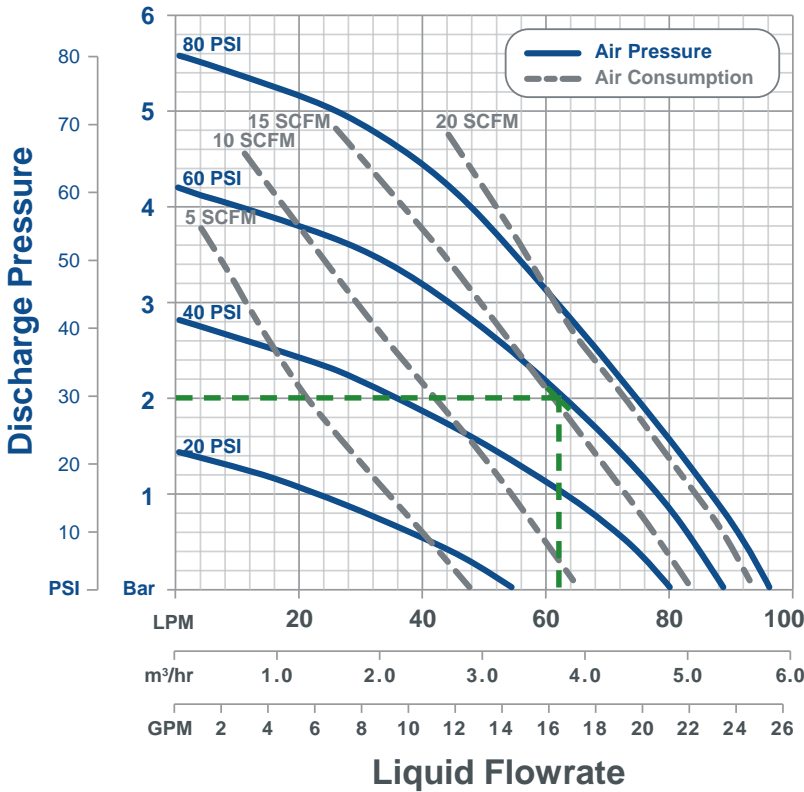
Tongue-&-Groove Seal Technology



White Knight Tongue-and-Groove seals are the most reliable and re-useable sealing technology available in high-purity pumps. They are machined into mated pump parts that act as barriers to liquid leaks. They are designed so that the tongues expand diametrically within the grooves to create an interference fit which provides reliable, effect sealing.



Performance



Reading Charts

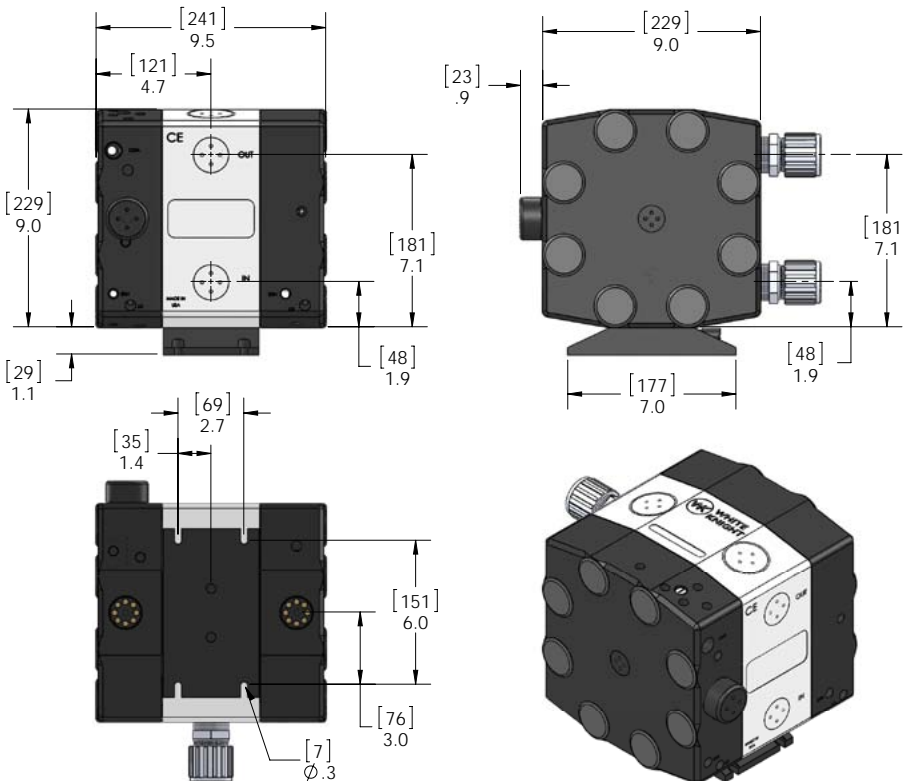
Draw a horizontal line from your discharge pressure and a vertical line through your desired flow rate. At their intersection, estimate required air supply pressure, cycle rate and air consumption.

Example: (see green dashed line)
At 2 Bar (30 psi) discharge pressure and 60 psi air supply pressure, PSB100 pumps provide 61 lpm (16.5 gpm), and consume 15 SCFM air.

*Chart represents flow at 5,000 ft, adjusted to sea level.

Dimensions

[mm] inches



Specifications

Model	PSB100
Max Flow Rate	95 lpm (25 gpm)
Displacement Per Cycle*	0.074 l (0.042 gal)
Cycles per min	170 max
Air Connection	1/2 in. FNPT
Suction Lift*	≤ 4 m (12 ft)
Weight	15.7 kg (34.7 lb)
Max Air/Fluid Temperature	100°C (212°F)
Max Supply Air Pressure	5.5 Bar (80 psi)
Min. Startup Air Pressure	1.4 bar (20 psi)
Fluid Path Materials	PTFE, PFA
Stroke Detection	Solid state pressure switch (NPN or PNP)
Leak Detection	Conductivity
Electronic Control	CPC, CPT, or custom. Contact White Knight.

*May vary by configuration and system. Suction lift diminishes over time. Recommended installation level less than 4 m (12 ft) above source. To calculate displacement, divide flow rate by CPM. Contact White Knight for details.