

High Flow Chemical Delivery

PSBEC100 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. PSBEC100 pumps are a direct retrofit for other delivery pumps.

Advanced Pump Technologies

Corrosion-Resistant design with No Exposed Metals

Process-safe PTFE, PFA flow path

★ Tongue-&-groove seals in fittings and check caps

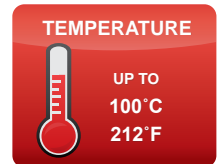
High-density PTFE minimizes cold flow

95 lpm (25 gpm) liquid flow rates

5.5 Bar (80 psi) air supply pressure

Built-in quick exhaust

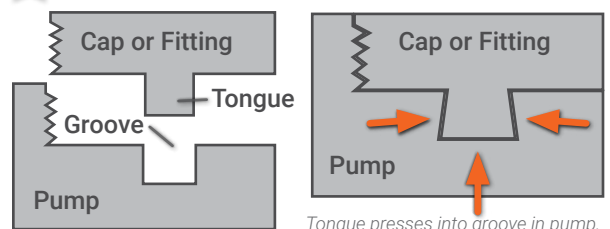
Quick-release base plate



Features & Benefits

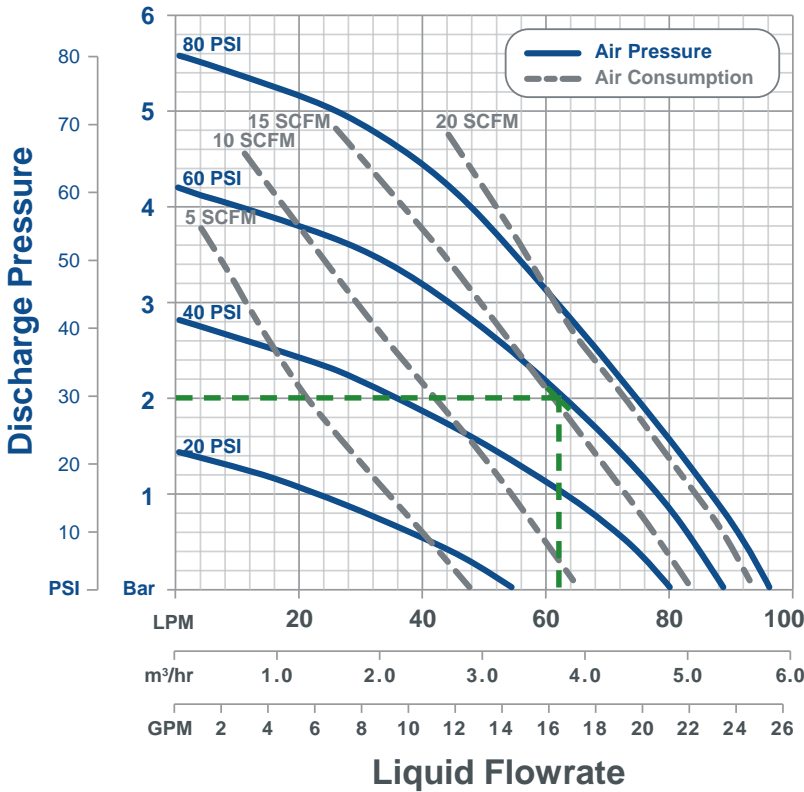
- Process-safe PTFE, PFA flow paths ideal for high-purity chemicals
- Robust PFA diaphragms offer ≤ 5.5 Bar (80 psi) supply pressure
- ≤ 95 lpm (25 gpm) flow rates
- Corrosion-resistant design with no exposed metals for reliable, safe operation
- Leak-free Tongue-&-Groove seals on check caps and fittings
- High-density PTFE prevents frequent tie bolt retorque
- Durable machined design with minimal parts
- External controls simplify pump design
- Built-in quick exhaust system reduces risk of permeation
- Dead-head capable
- ≤ 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.

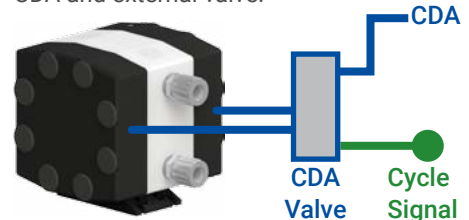
Example: (see green dashed line)

At 2 Bar (30 psi) discharge pressure and 60 psi air supply pressure, PSBEC100 pumps provide 61 lpm (16.5 gpm), and consume 15 SCFM air.

**Chart represents flow at 5000 feet, adjusted to sea level.*

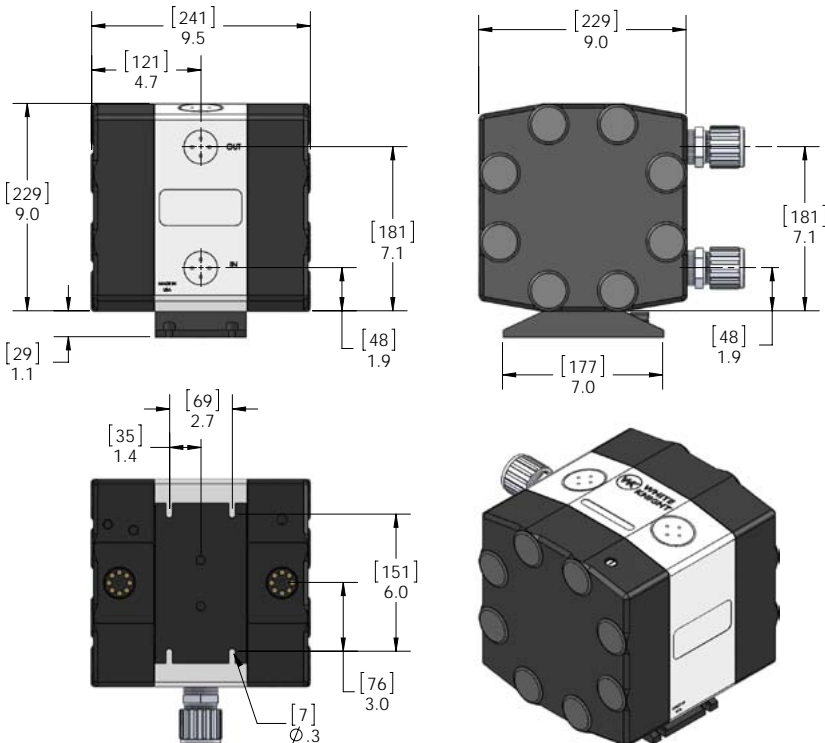
Operation

Simple pump control with CDA and external valve.



Dimensions

Inches (mm)



Specifications

Model	PSBEC100
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	Yes
Leak Detection	Yes

**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.*