

**PSB SERIES PUMPS** 

# **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**

Tongue-&-Groove Check Caps Seals



PTFE/PFA Fluid Path Max Flow 95 lpm (25 gpm)

**Max Temp.** 100°C (212°F)

Max Pressure 5.5 Bar (80 psi)

Shift Method Internal shuttle

Industries Semiconductor LEDs & Electronics Flat-Panel Displays Photovoltaic / Solar Aerospace

Applications

Chemical Delivery Chemical Circulation Chemical Dispense Chemical Reclaim Bulk Transport CMP Slurry

Internal, Non-Stall Shuttle Valve

Quick-Install Base Plate

Fitting Options

## **Features & Benefits**

- · Leak-free check caps with tongue-&-groove seals
- High-density PTFE prevents frequent tie bolt retorque
- Durable machined design with minimal parts
- Process-safe PTFE, PFA fluid paths ideal for high-purity chemicals
- Reliable, safe operation; No exposed metals
- Internal, non-stall shuttle valve saves space and eliminates resets
- Pneumatic Logic<sup>™</sup> provides dead-head operation without stall
- · Various liquid connection styles and sizes



 $\label{eq:additional ports} a vailable \, on \, back.$ 



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## Performance



#### **Reading Charts**

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

See green dashed lines in charts for examples.

#### Example:

At 2 Bar (30 lpm) liquid outlet line pressure and 60 psi supply pressure, PSB100 pumps provide 60 lpm (16 gpm), and consume 15 SCFM air.

\* The flows on this chart represent the flow at 5000 feet, adjusted to sea level.

Dimensions



### **Specifications**

Max Fluid Flow Rate	95 lpm (25 gpm)		Max Air/Fluid Temperature	100°C (212°F)
Displacement Per Cycle*	0.074 liters 0.042 gal.		Max Supply Air Pressure	5.5 Bar (80 psi)
Cycles per min	170 max		Min. Startup Air Pressure	1.4 bar (20 psi)
Air Connection	1/2 in. FNPT			
Suction Lift*	3 m (10 ft.)		Fluid Path Materials	PTFE, PFA
Weight	15.7 kg (34.7 lbs.)			

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. Contact White Knight.

