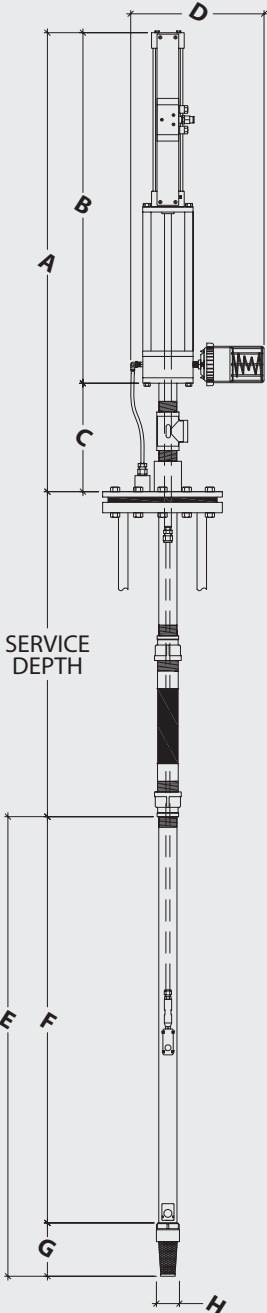


V-2 Pneumatic Elevated-Temp Piston Pump™

TECHNICAL SPECS.

- Operational depth: 243 ft. (74 m)
- Flow range: To 5 US gpm, 7,200 gpd; (18.9 lpm, 27,250 lpd)
- Well casing size: 3 in. (7.62 cm) or greater

PUMP DIMENSIONS



DIMENSIONS (IN INCHES)

A.	Above Well Height	43.0
B.	Driver Height.....	33.0
C.	Discharge Tee + Coupling Height....	10.0
D.	Driver Diameter	12.0
E.	Foot Valve Assembly	43.0
F.	Foot Valve Length.....	38.0
G.	Intake Screen Length	5.0
H.	Largest Downhole Diameter	2.9



For Fluids 150°F to 300°F
MODEL 102: ABOVE-WELL DRIVER MOTOR

Surface-grade power, maintenance

Blackhawk's V-2 Elevated-Temp Pneumatic Piston Pump™ is specially designed to handle elevated temperature pumping of virtually any fluid, regardless of chemical composition, from 150°F to 300°F (65°C to 120°C).*

The Model 102 pump maintains steady flows of 5 gallons per minute to depths of 243 feet. Model 101 pumps to 2 gpm at 555 feet.

Maximum speed is 40 full strokes (up and down) per minute. Optimal speed for long pump life is 20 strokes per minute.

The V-2 Elevated-Temp is a reciprocating-rod, positive-

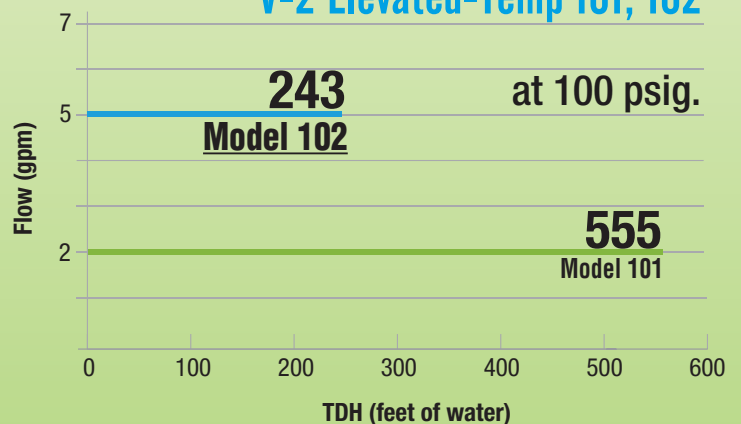
displacement piston pump powered by industrial-quality compressed air. The motor is a surface grade, above the wellhead, allowing simplified installation and maintenance.

Power is direct from the surface to the sucker-rod assembly. No air enters the well or contacts the pumped fluid. Fluid inlet is at pump bottom intake and removes fluid to 0 submergence depth.

*For landfills below 150°F, use standard Blackhawk pneumatic, electric or solar models. Above 300°F, contact Blackhawk to customize pumps with ultra-high-temperature components.

FLOW vs. DEPTH

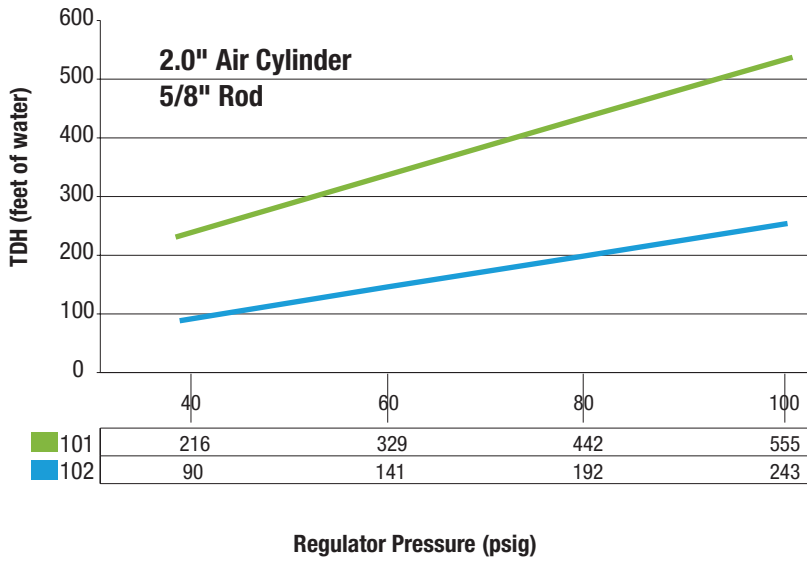
V-2 Elevated-Temp 101, 102



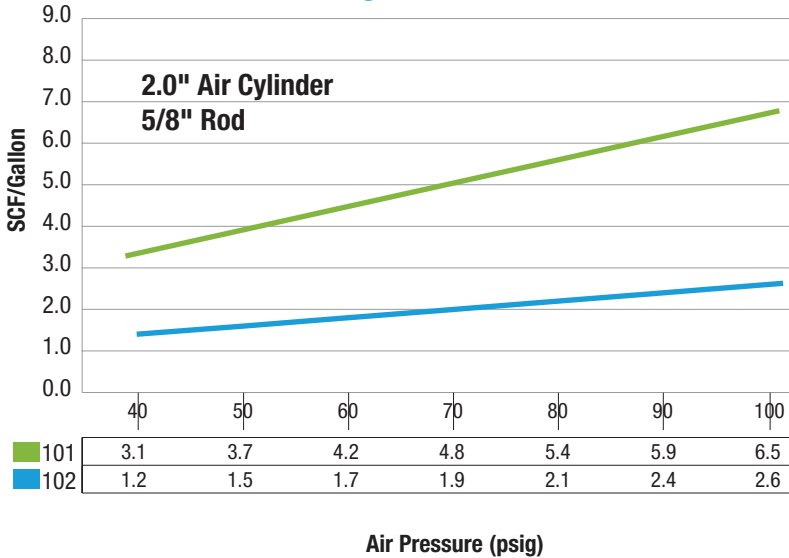
V-2 Elevated-Temp Pneumatic Piston Pump™

MODEL 102: Flows to 5 US gpm

Depth x Regulator Pressure



SCF x Regulator Pressure



Performance Data

Operating Depth	243 ft. (74 m)
Flow Range	To 5 US gpm, 7,200 gpd; (18.9 lpm, 27,250 lpd)
Recommended Discharge Pressure	50 psig
Maximum Lift	243 feet of water
Strokes per Minute	5 - 40
Max. Strokes per Minute	40
(variable speed control adjusts to well conditions; liquid drawn down to top of screen)	
Discharge per Stroke	.125 US gal / .48 liter
Temperature Range	150°F to 300°F / 65°C to 120°C

Technical Data

Max. External Diameter	2.9 in. (7.37 cm)
Total Cylinder Length	38 in. (96.5 cm)
Connection To Riser Pipe	2 in. (5.08 cm)
Recommended Internal Bore-Hole Diameter	3 to 4 in. (7.62 cm to 10.16 cm) or greater
Weight Of Cylinder	10 lb. (4.53 kg)
Discharge Size	2 in. (5.08 cm) NPT
Installation	Any angle from vertical to horizontal
Driver Weight	35 lbs. (15.8 kg)
Driver Rod Weight	12 lbs. per 100 feet (3.7 kg per 100 m)
Foot Valve Assembly Weight	10 lb. (4.53 kg)
Min. Well Casing Size	3 in. (7.62 cm)
Pneumatic Air Connection	3/8 in NPT, 3/8 in. OD tubing

Available Options

- Drive-rod auto oiler
- Pressure-relief valve
- Programmable pneumatic timer
- Cylinder oiler & filter regulator
- Flow meter
- Pneumatic cylinder counter
- Well seals & kits
- Factory-fresh seal replacements
- Factory driver-refurbishment program

Visit www.blackhawkco.com to see why motors above the wellhead mean less-costly, more compliant, safer operations.

The best-performing environmental pump in the business

