

# Sandpiper® Air-Powered Double-Diaphragm Pumps

## Move high-viscosity fluids easily—even sludge!

- High flow rates—up to 106 GPM
- No need to worry about electrical sparking
- Won't lose seal even after repeated servicing
- Easy pump head access for maintenance needs
- No lubrication of valve required

Safely handles abrasive fluids and slurries—ideal for high-viscosity and shear-sensitive materials. Encapsulated muffler provides excellent sound dampening.



### Specifications

- Suction lift:** 10 ft (3 m) H<sub>2</sub>O
- Viscosity:** up to 11,000 cp
- Max temperature:**
  - PP models: 150°F (66°C)
  - PVDF models: 200°F (93°C)
  - SS models: 212°F (100°C)
- Duty cycle:** continuous
- Run dry:** yes

### Search

For our complete line of double-diaphragm pumps, including FDA-compliant units, go to... [ColeParmer.com](http://ColeParmer.com)

### Polypropylene Pumps



Max GPM (LPM)	Max psi (bar)	Port size	Max particle size	Diaphragm material	Air inlet requirements			Catalog number	Price
					Connection	Max psi (bar)	scfm (m <sup>3</sup> /h)		
4 (15.1)	100 (6.9)	¼" NPT(F)	½"	Santoprene® PTFE	¼" NPT(F)	100 (6.9)	1 to 6 (1.7 to 10.2)	<a href="#">GH-74000-70</a> <a href="#">GH-74000-72</a>	
14 (53)	100 (6.9)	½" NPT(F)	⅜"	Santoprene PTFE	¼" NPT(F)	100 (6.9)	2 to 16 (3.4 to 27.2)	<a href="#">GH-74000-00</a> <a href="#">GH-74000-42</a>	
23 (87.1)	100 (6.9)	¾" NPT(F)	⅜"	Santoprene PTFE	¼" NPT(F)	100 (6.9)	4 to 25 (6.8 to 42.5)	<a href="#">GH-74000-11</a> <a href="#">GH-74000-13</a>	
45 (170.3)	100 (6.9)	1" flange	¼"	Santoprene PTFE	½" NPT(F)	100 (6.9)	5 to 45 (8.5 to 76.5)	<a href="#">GH-74000-02</a> <a href="#">GH-74000-12</a>	

### PVDF Pumps

Max GPM (LPM)	Max psi (bar)	Port size	Max particle size	Diaphragm material	Air inlet requirements			Catalog number	Price
					Connection	Max psi (bar)	scfm (m <sup>3</sup> /h)		
4 (15.1)	100 (6.9)	¼" NPT(F)	½"	Santoprene PTFE	¼" NPT(F)	100 (6.9)	1 to 6 (1.7 to 10.2)	<a href="#">GH-74000-80</a> <a href="#">GH-74000-82</a>	
14 (53)	100 (6.9)	½" NPT(F)	⅜"	PTFE	¼" NPT(F)	100 (6.9)	2 to 16 (3.4 to 27.2)	<a href="#">GH-74000-46</a>	
23 (87.1)	100 (6.9)	¾" NPT(F)	⅜"	Santoprene PTFE	¼" NPT(F)	100 (6.9)	4 to 25 (6.8 to 42.5)	<a href="#">GH-74000-21</a> <a href="#">GH-74000-23</a>	
45 (170.3)	100 (6.9)	1" flange	¼"	Santoprene PTFE	½" NPT(F)	100 (6.9)	5 to 45 (8.5 to 76.5)	<a href="#">GH-74000-22</a> <a href="#">GH-74000-32</a>	

### Stainless Steel Pumps

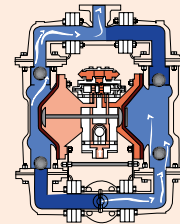
Max GPM (LPM)	Max psi (bar)	Port size	Max particle size	Diaphragm material	Air inlet requirements			Catalog number	Price
					Connection	Max psi (bar)	scfm (m <sup>3</sup> /h)		
4.4 (16.7)	125 (8.6)	¼" NPT(F)	⅛"	PTFE	¼" NPT(F)	125 (8.6)	1 to 8 (1.7 to 13.6)	<a href="#">GH-74007-00</a>	
42 (159)	125 (8.6)	1" NPT(F)	¼"	Santoprene PTFE	½" NPT(F)	125 (8.6)	10 to 50 (17 to 85)	<a href="#">GH-74007-20</a> <a href="#">GH-74007-22</a>	



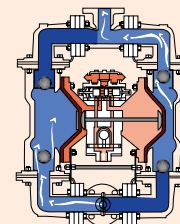
### Teky's Tips

#### How Double-Diaphragm Pumps Work

**Discharge Stroke**—Pressurized air is directed to the left diaphragm, pushing it outward. Liquid is forced from the left outer chamber, through the chamber, an open discharge check valve, and exits the pump at the discharge manifold.



**Suction Stroke**—As the left diaphragm is pushed out, a connecting rod pulls the right diaphragm inward, filling the right chamber with fluid. Liquid enters the pump at the suction manifold, moves through an open suction check valve, and fills the chamber.



**Surge Suppressor**—Liquid pressure pushes the diaphragm upward, and a balancing air cushion keeps the diaphragm centered at midstroke. The diaphragm flexes within the mid-range position, absorbing and equalizing discharge pulsation.

