

Purge Liquid Concentrator

APC Series

APC-20

Reduces purge liquid loss by as much as 98%.

Dramatically improving on the LAKOS Separator's ability to concentrate solids for transfer to disposal or re-use with minimal liquid loss, the Purge Liquid Concentrator expands your opportunities for implementing a broader range of solids-handling systems. Its low-liquid, low-velocity discharge of solids simplifies the handling of excess purged liquid and promotes solids accumulation with less mess and greater concentration into any appropriate solids-handling system (drums, hoppers, etc.).

All hardware is factory pre-assembled, making installation quick and easy. Its electrical control unit (included with each system) offers a wide range of options for programming purge cycle frequency and duration.

General Specifications & Dimensions

Model	APC-20	APC-30	APC-20-LC
Valve Connection Size*	2 inches	3 inches	2 inches
Total Length	42-3/4 inches	43-11/16 inches	36-1/4 inches
	(1086 mm)	(1110 mm)	(921 mm)
Glass Viewing Area**	12 inches	12 inches	1-7/8 inches
	(305 mm)	(305 mm)	(48 mm)
System Weight	75 lbs	113 lbs	108 lbs
	(34 kg)	(51 kg)	(49 kg)
Solids Capacity	50 cubic inches	100 cubic inches	60 cubic inches
	(.8 liter)	(1.6 liters)	(1 liter)

*Consult factory for smaller/larger sizes.

**NOTE: Shorter sight glass available; please consult factory. Model APC-20-LC features two opposing 11/2-inch sightports (see diagram on reverse).



Maximum Operating Pressure: 75 psi (5.2 bar)

Maximum Operating Temperature: 110°F (43°C)

Pinch Valves: Viton liner resists heavy abrasives and corrosives; other liner materials available

Manual Valve: Bronze, full-port ball valve

Collection Chamber: Clear glass with Neoprene gasket; Model APC-20-LC features carbon steel chamber with two glass sightports. Consult factory for other material requirements.

Electrical Control Panel: Includes appropriate solenoids, air pressure regulator gauge, all factory mounted

Power Requirement: 100 to 240 VAC, 50/60 Hz (5 amp max.)

Air Pressure Requirement: 30 psi (2 bar) greater than the inlet pressure to the LAKOS Separator. Use the provided air pressure regulator to adjust this setting



Operation

The Purge Liquid Concentrator provides for the evacuation and concentration of separated solids from a LAKOS Separator for periodic discharge to an appropriate solids-handling device. While accumulating separated solids, valve **A** is open and valve **B** is closed. At a pre-set time interval (ranging from 0 seconds to 300 hours), valve **A** closes and valve **B** opens to discharge the solids. Upon completion of the pre-set purge duration (0 seconds to 300 hours), valve **A** opens and valve **B** closes simultaneously, allowing the concentrator chamber to fill with liquid/solids from the LAKOS Separator.



Installation

- Connect the APC System directly to the purge outlet of the LAKOS Separator (as shown in illustration). IMPORTANT: Be sure that the APC System is installed upright (not at an angle) in order to ensure the proper evacuation of separated solids.
- 2. Mount the electrical control panel in a suitable manner near the APC System. Connect the appropriate wiring and electrical power.
- Connect the air lines as follows:
 4-WAY SOLENOID: Port #2 to Valve B Port #4 to Valve A
- 4. Once power and air pressure are initiated, open the manual valve and adjust the air pressure regulator on the control panel until pneumatic valve (B) is completely closed. (NOTE: This will require air pressure of at least 40 psi (2.8 bar) greater than the inlet water pressure to the LAKOS Separator).
- 5. System can be tested for proper operation (as noted above) by actuating the manual switch on the electrical control panel.
- 6. To adjust the purge cycle (how *often* the APC purges) or the purge duration (how *long* the APC purges), turn the appropriate dial on the electrical control panel (NOTE: These functions are factory pre-set to purge every 2 minutes for 8 seconds.)
- 7. Be sure to provide an adequate solids-handling device below the APC System's discharge. Consult LAKOS for options.
- 8. Please note the maximum operating pressure and temperature for these systems (see chart on reverse).
- 9. To service the APC System, use the manual valve to isolate the APC System from the flow and pressure of the LAKOS Separator, then disconnect power and air pressure. Consult factory for servicing needs.

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