

AODD Pumps & Liquidtrol

Air Operated Pumps and Pump Controls for Automatic or Manual Dispensing

Knight's Air Operated Double Diaphragm pump is the engine that drives an entire range of new chemical management solutions for the Food Chain Hygiene, Laundry, and Industrial markets. In combination with the Liquidtrol, the Uniflow becomes a cost-effective chemical control system with accurate liquid dispensing for food & beverage, dairy, laundry, and industrial applications.



KAP-50



KAP-25

Push Button Timer Feed



Liquidtrol - ATC 500

24 Hour Program Feed



Liquidtrol - ATC 300

Repeat Cycle Timer Feed



Liquidtrol - ATC 200

Manual Button Feed



Pneumatic Pump Activator

Air Operated Double Diaphragm Pumps

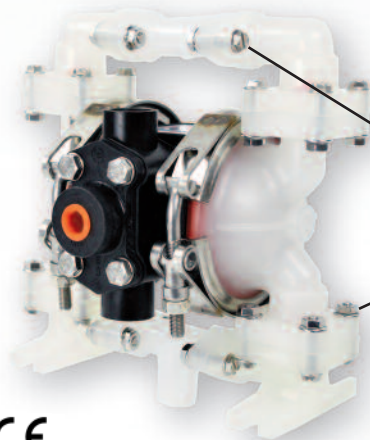
- AODD's are engineered for aggressive chemical, heavy duty applications.
- Extensive range of plastics and elastomers for all chemicals
- Reliable bolted design
- High Speed Flow: KAP-50 (14 gpm) and KAP-25 (4 gpm)
- Optional stainless steel cabinets
- Value Pricing

KAP-25 1/2" Pump

The KAP-25 is a proven and reliable 1/4" air operated double diaphragm pump that delivers 4 gallons per minute pumping power. The condense AODD design is ideal for on-demand intermittent pumping requirements. The KAP-25 is built for years of operation and low cost of ownership.

The KAP-25 features a patented ESADS+Plus system. This in-line serviceable air valve system ensures reliable and accurate performance.

Available in Polypropylene and Kynar wetted materials of construction, with Santoprene, Viton or PTFE interior.



CE

4 gal/min
15 liters/min

Simple and Reliable
Fewer moving parts for reliable performance and longer life

Reliable Construction
All bolted construction allows for ease of maintenance and low repair costs.

Durable
Diaphragm connecting rod is corrosion resistant and guaranteed not to yield under tension.

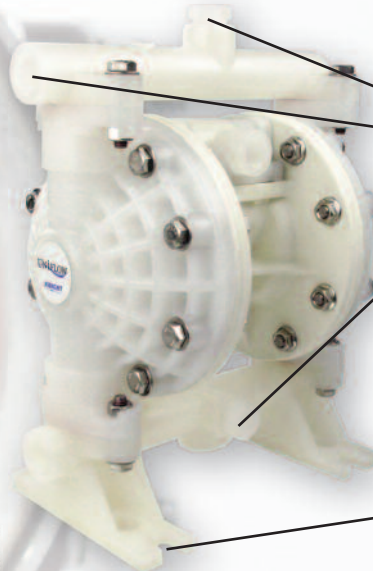
UNIFLOW KAP-50 1/2" Pump

The Uniflow KAP-50 1/2" pumps feature an Air Valve System with Shoe Valve technology. Multiple suction/discharge ports that provide several liquid and plumbing options.

Constructed of **heavy duty plastic**, the center section resists corrosion from even the most aggressive chemicals, while providing injection speed and uniform flow under the most rigorous environmental conditions.

Fast priming and the industry's best life cycle performance will improve your chemical process with the **lowest possible cost of ownership**.

The KAP-50 1/2" size pumps are for the jobs that require higher flow rates with accuracy and reliability.



CE

14 gal/min
53 liters/min

Multiple Porting Options
Top, side and end porting for both inlet and discharge

Accurate
Repeatable, high output, or controlled metering.

Adaptable Footprint
Allows for drop-in placement in existing system configurations

UNIFLOW Pump Enclosures for KAP-25 and Uniflow KAP-50 AODD pumps

Knight Uniflow AODD pump enclosures satisfy the need of plant operators and chemical suppliers who require the protection and safety advantages offered by a rugged stainless steel enclosure for high pressure chemical feed pumps that operate in, wet and hostile plant environments.



KAP-25
Pump Enclosure



KAP-50
Pump Enclosure



Features and Benefits

- #304 stainless steel body, cover with hinge
- Protect plant personnel from exposure to chemicals
- Prevent tampering by plant personnel
- Optional regulator/filter/gauge installed
- Chemical name label pack included
- Private label available
- Optional KAP-25/50 AODD pumps installed
- Wall mount
- Bottom suction/discharge
- Bottom air inlet/air regulator location



Electronic Pump Controller

Advanced Technology for Controlling and Pumping Industrial Chemicals and Other Liquids

The Liquidtrol Chemical Control System is an advanced controller for the Uniflow Air Operated Double Diaphragm Pump. In combination with the Uniflow, Liquidtrol's cost-effective microprocessor electronics initiates, limits, cycles, triggers or regulates pumping activity. Knight offers three versions depending on whether you want to control the pumping activity through a time feed, event feed, or cycle feed.



ATC500 "Time Feed"

Microprocessor Limit Time with 0-12 min Programmable Run Time w/Lock-out Function

- Start Feed By Pressing Button
- Start Feed By Electronic Signal
- Control Feed By Electronic Signal
- Optional Remote Activator

ATC300 "Event Feed"

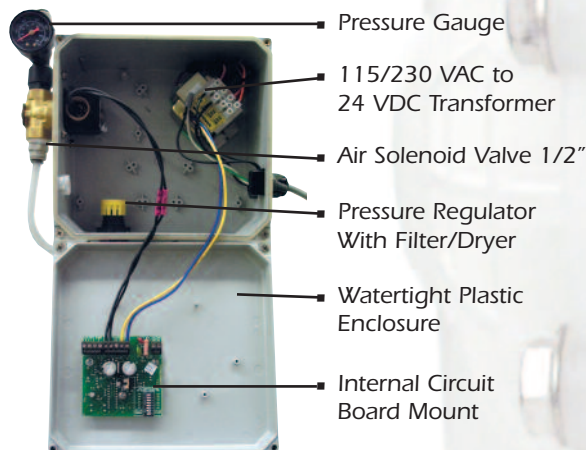
Microprocessor Event Timer

- 20 Programmable Feed Events/Per Day
- Battery Backup 24 Hour Clock
- LCD Display
- Non-Volatile Memory

ATC200 "Cycle Feed"

Microprocessor Cycle Timer

- 0 - 2 Minute Pump On Time
- 0 - 90 Minute Pump Off Time
- Apply Power To Start Cycle



Features & Benefits:

- Preassembled/Configured Pump Control
- Quick, Simple Installation and Programming
- Watertight Thermo Plastic Control Enclosure w/Built-in Air Solenoid Pressure Regulator, Pressure Gauge and Filter/Dryer
- Private Labeling Available

Liquidtrol Applications

- Fill Jeri Jugs, Portable Foamers, Buckets And Other Containers
- Automatic Feed For CIP Tanks
- Automatic Feed For COP Tanks
- Track/Conveyor Lube Feed
- Bulk Transfer To Day Tanks
- Waste Water Treatment
- Municipal Water Treatment



UNIFLOW Pneumatic Pump Activator

Introducing the industries first "out of box" pneumatic air pump switch for manual fluid feed applications.

This manually operated air switch is designed to operate any air operated double-diaphragm pump up to 1/2" port size or 12 SCFM. The built-in spring return provides "momentary" operation of the air pump. The pump activator turns the air supply off when the button is not fully depressed. The pump activator eliminates the worry of employees becoming distracted, leaving their chemical fill task unmanaged, creating an unsafe environment, or a costly chemical spill. This is the "safe and full proof" alternative to ball valves and on-off air switches that can be left accidentally running by operators.

Features and Benefits

- #304 stainless steel case with mounting
- Spring return to off state
- Large palm style button
- Color stickers to identify chemical/fluid color
- Optional pressure regulator mounts on side
- Easy to install/use



Great for jug or bucket fill operations

Cost effective alternative to timer feed

ORDERING INFORMATION

Air Operated Double Diaphragm Pump Units

KAP-25

Includes: Kynar suction and discharge fittings

Part Number	Description
1600826	KAP-25SP 1/4" AODD Pump, Polypropylene/Santoprene, 4 GPM (15 LPM)
1600827	KAP-25TP 1/4" AODD Pump, Polypropylene/PTF, 4 GPM (15 LPM)
1600828	KAP-25SK 1/4" AODD Pump, Kynar/Santoprene, 4 GPM (15 LPM)

CABINET FOR KAP-25 AODD PUMPS

Part Number	Description
7640638	AODD Pump Cabinet, Stainless Steel for 1/4" AODD Pumps w/ Mounting hardware

KAP-50

Includes: Kynar suction and discharge fittings

Part Number	Description
1600968	KAP-50 AODD Pump Poly Santoprene w/ Fittings, Hose Clamps and Suction Screen
1600945	KAP-50 AODD Pump Poly/PTFE w/ Fittings, Hose Clamps and Suction Screen
1600979	KAP-50 AODD Pump Kynar/Santoprene w/ Fittings, Hose Clamps and Suction Screen
1600986	KAP-50 AODD Pump Kynar/PTFE w/ Fittings, Hose Clamps and Suction Screen
1600979-1	KAP-50SK 1/2" AODD Pump Kynar Body/Santo W/O Kit
1600968-1	KAP-50SP 1/2" AODD Pump Polypro Body/Santo W/O Kit
1600986-1	KAP-50TK 1/2" AODD Pump Kynar Body/PTFE W/O Kit
1600945-1	KAP-50TP 1/2" AODD Pump Polypro Body/PTFE W/O Kit

CABINET FOR KAP-50 AODD PUMPS

Part Number	Description
7640631	AODD pump cabinet, stainless steel for 1/2" AODD pumps w/ mounting hardware
7407128	Regulator/ Filter/ Gauge mounted in case

KAP-25 & KAP-50 OPTIONS

Part Number	Description
0600508	Air pressure Regulator/gauge Kit with mounting bracket, air fitting and ball valve
2200082	Air Operated A/S valve with PTFE seals 3/8"
0200905	Plastic wall bracket for AODD pumps with mounting hardware
7541100	Stainless steel container shelf for 2, 2.5 or 5 gallons containers

Air Pump Controllers

LIQUIDTROL AIR PUMP TIMER CONTROLS

Part Number	Description
7641075-07	ATC-500: Air Pump Control w/ Limit Timer, Air Solenoid, Regulator, Filter/Dryer, Gauge (115/230 VAC)
7641073-07	ATC-300: Air Pump Control w/ Programmable Event Timer, Air solenoid, Regulator, Filter/Dryer, Gauge (115/230 VAC)
7641072-07	ATC-200: Air Pump Control w/Cycle Timer, Air Solenoid, Regulator, Filter/Dryer, Gauge (115/230 VAC)

AIR PUMP PNEUMATIC PUMP ACTIVATOR

Part Number	Description
7640619	AODD momentary switch
7407013	Kit, regulator, w/ bracket and hardware

KAP-25 System Specifications

	English	Metric
Flow Rate		
Adjustable to :	0-4 gpm	0-15 lpm
Port Size		
Inlet and Outlet	1/4" NPTF (BSP)	
Air Inlet	0.25" NPTF	
Air Exhaust	0.25" NPTF	
Max. Particle Size		
Diameter	0.10"	2.5 mm
Dimensions		
Length	7.2"	235 mm
Width	7.0"	198 mm
Height	5.5"	140 mm
Suction Lift	Dry	Wet
Santoprene	10' (3.0m)	20' (6.0m)
PTFE	5' (2.0m)	10' (3.0m)

KAP-50 System Specifications

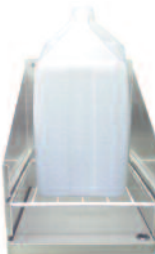
	English	Metric
Flow Rate		
Adjustable to :	0-14 gpm	0-53 lpm
Port Size		
Inlet and Outlet	1" 150# ANSI DIN #25 Flange	
Air Inlet	0.375" NPTF	
Air Exhaust	0.375" NPTF	
Max. Particle Size		
Diameter	0.0625"	1.6 mm
Dimensions		
Length	8.5"	216 mm
Width	9.30"	236 mm
Height	10.06"	256 mm
Suction Lift	Dry	Wet
Santoprene	15' (4.5m)	25' (7.5m)
PTFE	5' (1.5m)	10' (3.0m)



Mounting Bracket

- * Economical thermoplastic
- * Fits KAP-25 and KAP-50
- * Strong, chemical resistant
- * Easy to work with
- * Includes mounting hardware

Part Number: 0200905



Stainless Steel Shelf

Rugged container shelf with adjustable rack and drip tray. New drip tray design offers more effective chemical drainage. Fits 2, 2.5 or 5 gallon containers.

Part Number: 7541100

KNIGHT LIMITED WARRANTY

Knights controls and pump systems are warranted against defects in material and workmanship for a period of ONE YEAR. All Electronic Control Boards have a TWO YEAR warranty. Warranty applies only to the replacement or repair of such parts when returned to the factory with a KRA number, freight prepaid and found to be defective upon factory inspection. Rubber and synthetic rubber parts such as "O" rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty. Warranty does not cover liability resulting from performance of this equipment nor the labor to replace this equipment. Product abuse or misuse voids warranty. Knight products are not for use in potentially explosive environments. Any use of our equipment in such an environment is at the risk of the user. Knight does not accept any liability in such circumstances.

KNIGHT DISCLAIMER

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