



### Solenoid Valves for On/Off Control Accessories

Remotely start and stop with an in-line solenoid valve for the pump's air line.

Part No.	Description
13412-00-10	3/8" Ported Solenoid Valve, 110/50 VAC or 120/60 VAC, for use with A050, A075 and A100 Pumps*
13412-00-12	3/8" Ported Solenoid Valve, 12 VDC, for use with A050, A075 and A100 Pumps*
13412-00-20	3/8" Ported Solenoid Valve, 220/50 VAC or 240/60 VAC, for use with A050, A075 and A100 Pumps*
13412-00-24	3/8" Ported Solenoid Valve, 24 VDC, for use with A050, A075 and A100 Pumps*
13413-00-10	3/4" Ported Solenoid Valve, 110/50 VAC or 120/60 VAC, for use with A150, A200, and A300 Pumps
13413-00-12	3/4" Ported Solenoid Valve, 12 VDC, for use with A150, A200, and A300 Pumps
13413-00-20	3/4" Ported Solenoid Valve, 220/50 VAC or 240/60 VAC, for use with A150, A200, and A300 Pumps
13413-00-24	3/4" Ported Solenoid Valve, 24 VDC, for use with A150, A200, and A300 Pumps
13434-00	6' Cord with Din 43650B Female Plug, for use with A050, A075, A100, A150, A200, A300 Pumps
13465-00	Illuminated Connector with 6 foot cord for 110VAC/ 220VAC, A025 Metering Pumps
13466-00	Illuminated Connector with 6 foot cord for 12VDC/ 24VDC, A025 Metering Pumps
13840-26	3/8" Male to 1/4" Male Adapter

\* 3/8" to 1/4" Adapter Required



# CYCLE CONTROL FOR AIR OPERATED DOUBLE DIAPHRAGM PUMPS

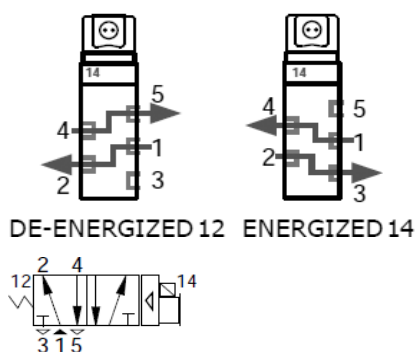
The A025, A050, and A100 can be configured with solenoid pulse control to enable metering and dispensing application. The solenoid is available in 4 voltages, 110VAC, 220VAC, 12VDC and 24VDC. All solenoid equipped pumps have a standard DIN 43650B male connector. The 1/4 inch A025 is available with an optional DIN 43650C male connector. See pump product manual for configuration codes.



A025 SOLENOID ELECTRICAL PROPERTIES				
Voltage +/- 10%	Current (Amps)		Resist. (OHMS @ 25° C)	Power (AC = VA, DC = Watts)
	Inrush	Holding		
110/50	.02	.02	2310	2.4
110/60				
220/50	.01	.01	9515	2.4
220/60				
12 VDC	.15	.15	78	2.0
24 VDC	.09	.09	283	2.0

A050, A075, A100, A200, A300 SOLENOID ELECTRICAL PROPERTIES				
Voltage +/- 10%	Current (Amps)		Resist. (OHMS @ 25° C)	Power (AC = VA, DC = Watts)
	Inrush	Holding		
110/50	.08	.05	840	6.9
110/60				
220/50	.04	.03	3310	6.4
220/60				
12 VDC	.38	.38	32	4.8
24 VDC	.20	.20	121	4.8

## Valve Operation



### 5/2 SINGLE

#### De-Energized:

Pressure from Port 1 to Port 2  
Exhaust from Port 4 to Port 5

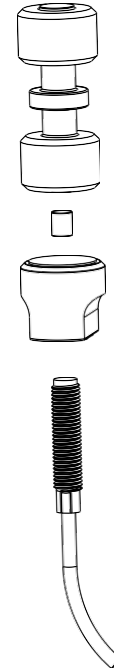
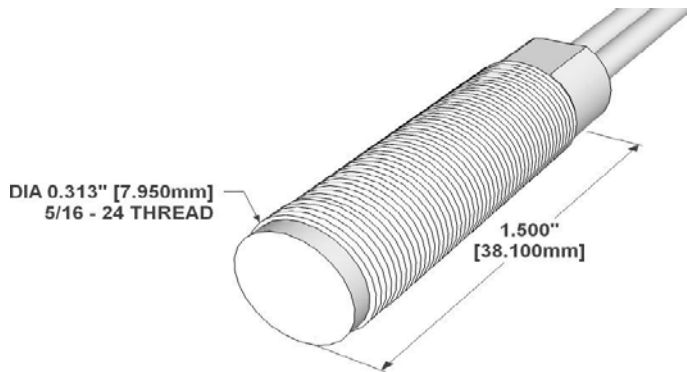
#### Energized:

Pressure from Port 1 to Port 4  
Exhaust from Port 2 to Port 3

# CYCLE COUNTER FOR AIR OPERATED DOUBLE DIAPHRAGM PUMPS

## OPERATIONAL DESCRIPTION:

The cycle counter model operates via a magnetically actuated proximity-switch installed into the main air-valve. The switch closes when the spool is in the down position, thus allowing open loop metering applications. This option is available on all pumps. See pump product manual for configuration codes.



Physical	Configuration*	SPST	
	Form*	A	
	Contact Position	CENTER	
	Glass L	14.50	mm
	Glass D	2.54	mm
	Total L*	46.00	mm
	Wire D	0.60	mm
	Gap Location	CENTER	
	Mount Spec*	THRU	
	Contact Material	RUTHENIUM	
	Max Vibration Resistance	10	G
	Max Shock Resistance	150	G
	Lead Tensile Strength	N/A	KG
	Operating	Pull in (+/- 2AT)*	15 - 23
Drop out*		7.5-17.5	AT
Operate Time		0.10	ms
Bounce Time		0.15	ms
Release Time		30	µs
Resonant Frequency		5100	Hz
Max Operating Frequency		N/A	Hz
Operating Temperature Range		-55 - 105	°C
Storage Temperature		N/A	°C
Electrical		DC Contact Rating	15
	AC Contact Rating	N/A	VA
	DC Switching Voltage	200	VDC
	AC Switching Voltage	140	VAC
	DC Switching Current	1.00	A
	AC Switching Current	1.00	A
	DC Max Carry Current	1.75	A
	AC Max Carry Current	1.75	A
	Min Breakdown Voltage	275	VDC
	Max Initial Contact Resistance	100	mOhm
	Typical Initial Contact Resistance	70	mOhm
	Max Contact Capacitance	0.30	pF
	Min Insulation Resistance	10 <sup>6</sup>	Ohm

\* Pre-processed, bare reed element

### Assembly Characteristics

Housing	2250
Housing Material	CELANEX 3316
Reed	1051
Configuration	SPST
Form	A

### Wire/Cable Characteristics

Type	WIRES
Length	6.0/152.4 in/mm
Conductor Count	2
Colors	BLK
Insulation Material & Description	PVC
Gauge	24 AWG
Stranded Copper	7 STR-TC
Maximum temperature	105 °C

### Standard Actuator/Minimum Make Distance

2250-4002-000 - Alnico 5 - Cylinder	.13/3.3	in/mm
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### Assembly Certifications

UL RECOGNIZED (File #: E102207)	Y	
RoHS	Y	