



Chemical Metering Pumps

[www.sidewinderpumps.com](http://www.sidewinderpumps.com)



# SOLAR CHEMICAL METERING PUMP CLASS 1 DIVISION 2

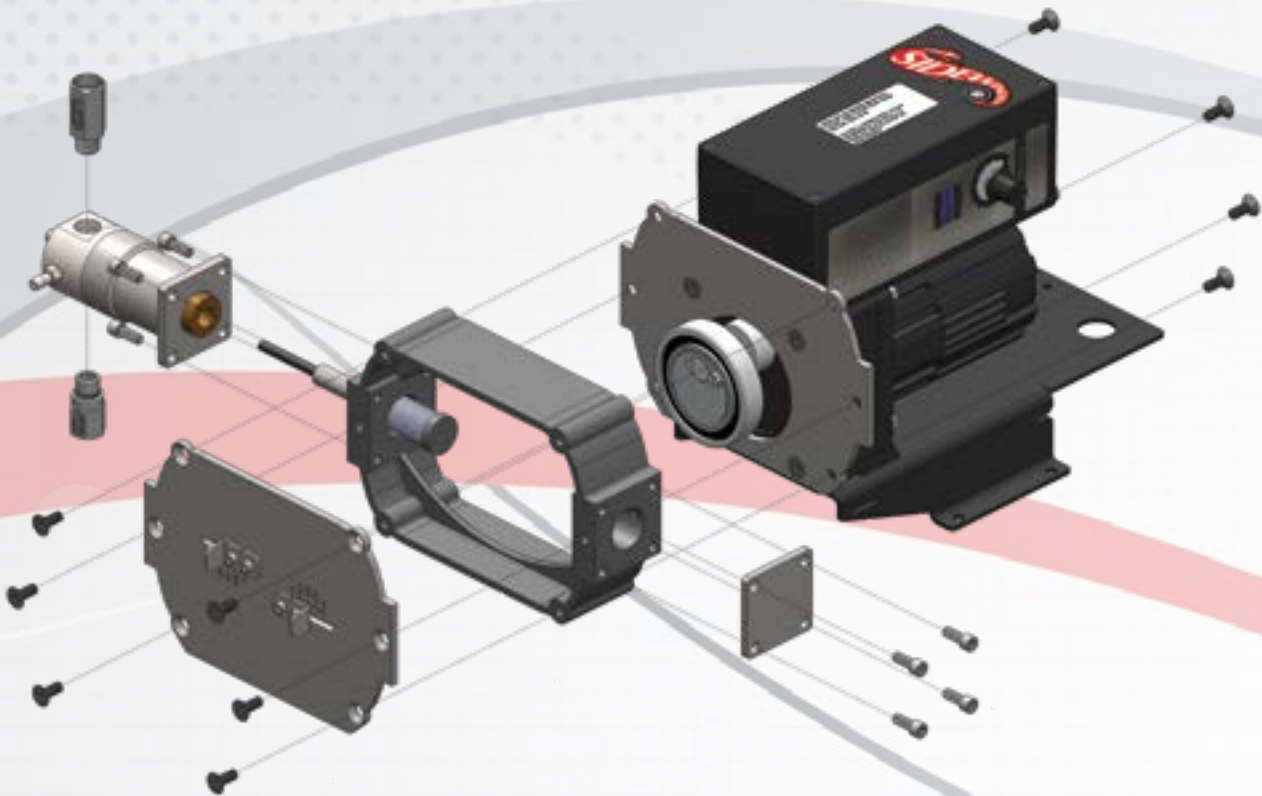
\*\*This document replaces any & all documents prior to this date.\*\*

08/25/2020



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**The Sidewinder Solar Powered Chemical Metering Pump, introducing innovation and simplicity for a more reliable, energy efficient pump that provides lower maintenance cost and ease of repair.**

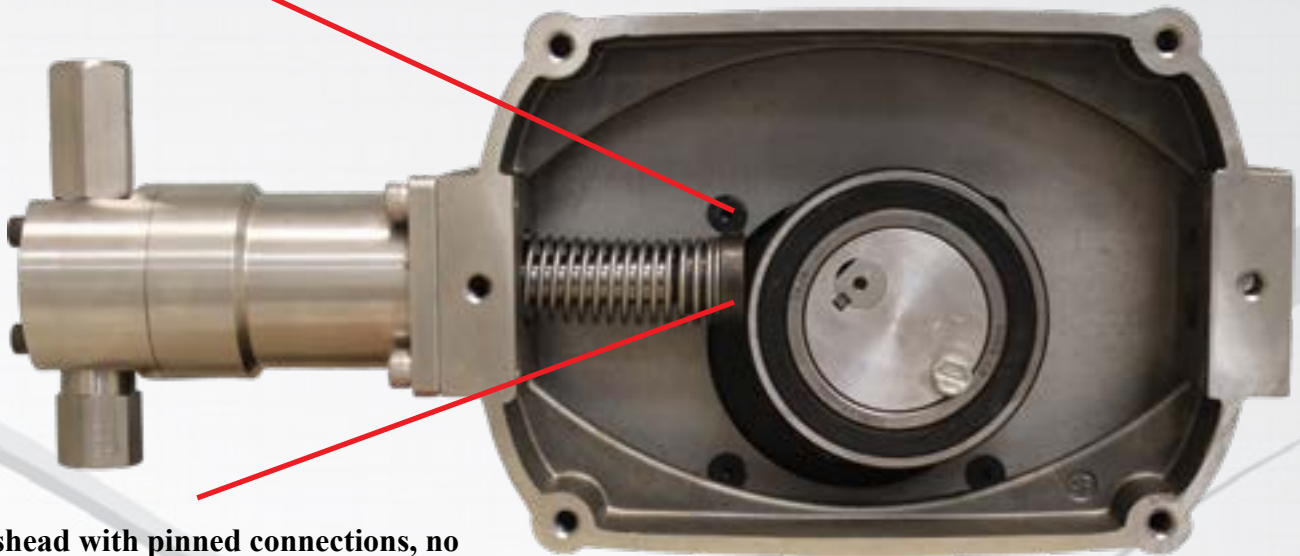


**Our approach to designing a better pump resulted in less moving parts. Our direct drive plunger/cam arrangement eliminates the cross head and resulting alignment issues reducing plunger and seal wear. The cartridge style plunger head assembly & one piece plunger seal arrangement allows for ease of repair and ease of changing plunger sizes in less than 10 minutes. The spring return eliminates the motor having to pull the plunger back in the cycle reducing the amount of energy required to complete a full cycle.**



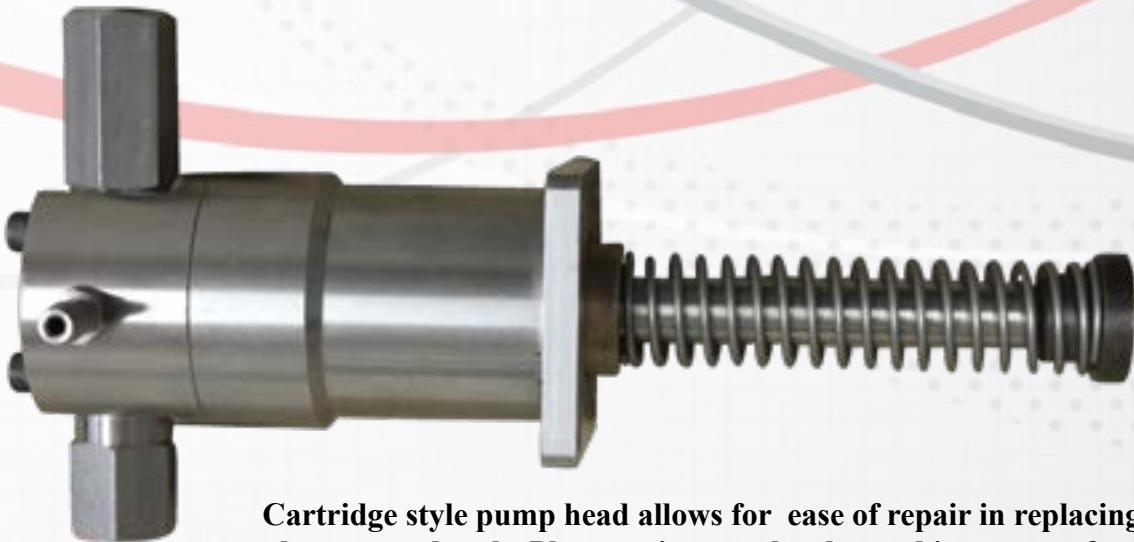
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**Direct cam drive eliminates crosshead and alignment issues resulting in longer plunger & seal life**



**No crosshead with pinned connections, no weak points for breakage**

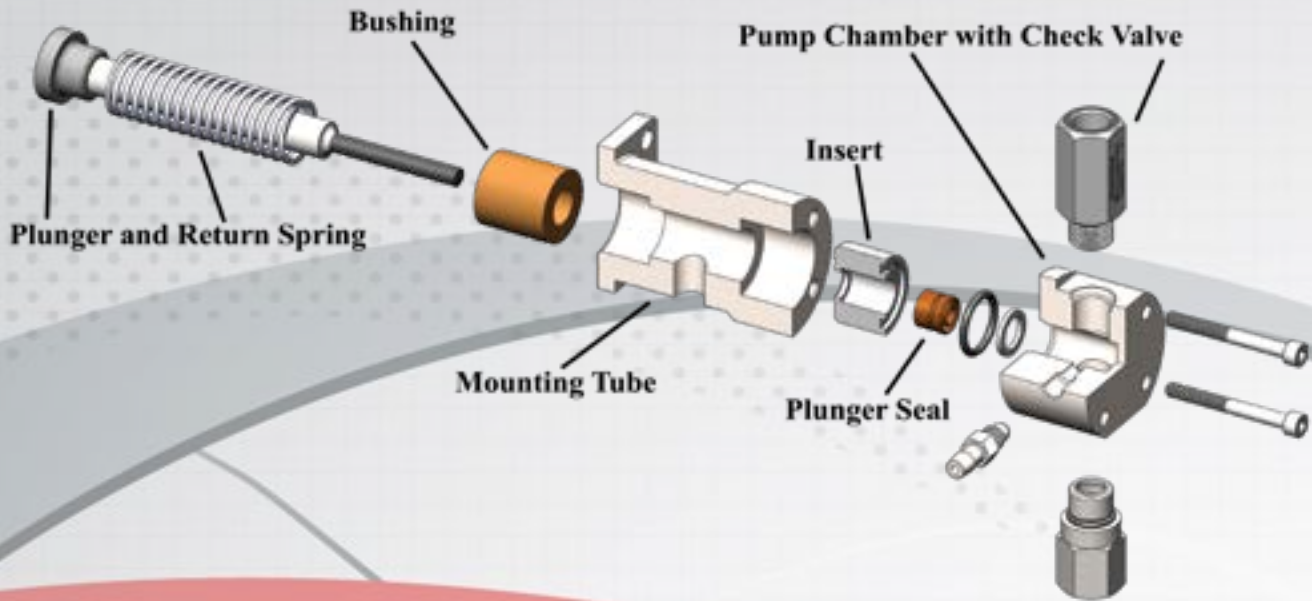
**The unique pump base allows for mounting on surface of choice, whether direct to a skid or a pump stand. The pump base provides clearance and access to the check valves for tubing and repair without interference of the mounting surface**



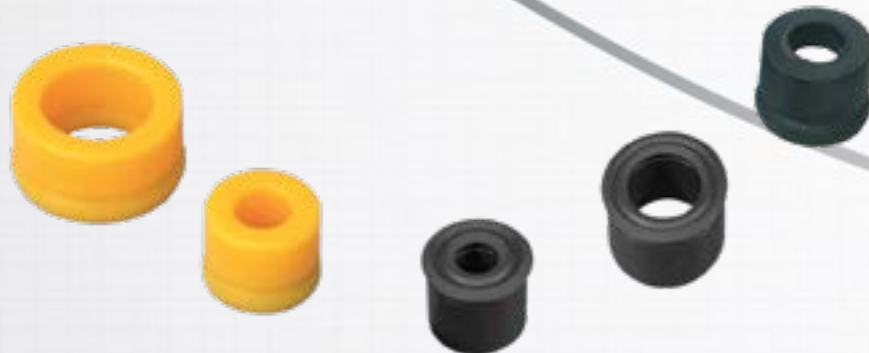
**Cartridge style pump head allows for ease of repair in replacing plungers and seals. Plunger sizes can be changed in matter of minutes. System utilizes same packing elements as the Sidewinder pneumatic pumps**



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**Innovation is the name of the game, and Sidewinder is leading the way with our plunger and seal design. Sidewinder uses an insert that holds the plunger seal. To change plunger sizes, simply change the insert, plunger and plunger seal. Plungers come Ceramic coated as standard, providing excellent chemical resistance and wear life. The entire assembly is mounted to the drive housing using only 4 fasteners, and can be removed in matter of minutes.**

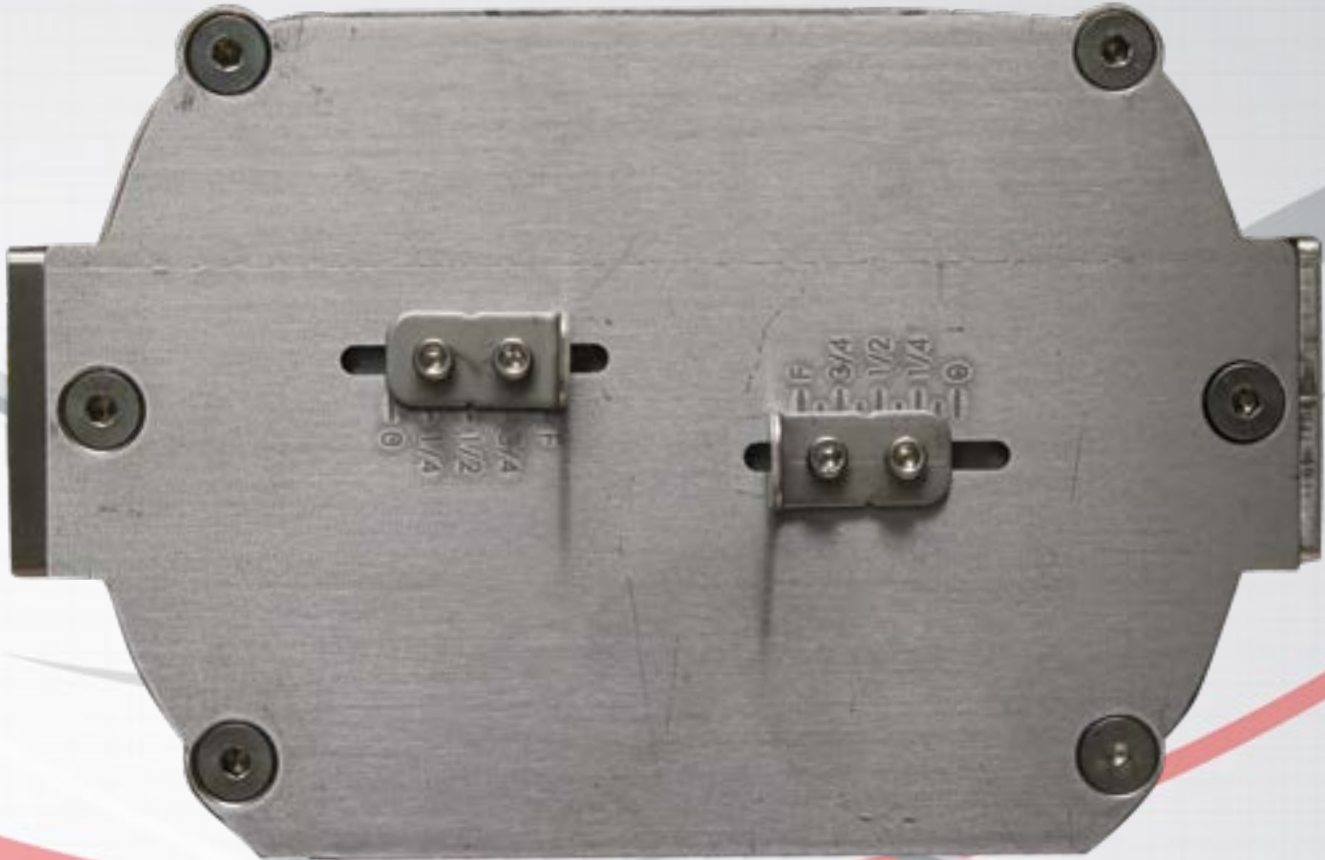


**Sidewinder Solar pumps use the same seal arrangements as our pneumatic pumps. Chevron or adjustable style packing allows the operator to over tighten the packing creating excessive drag on the plunger, resulting in greater energy draw, which shortens battery life. With our innovative design, seals can be changed in matter of minutes without having to dig them out with tools that can mar or damage the seal gland.**



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## Stroke Length Adjuster



**Sidewinder Pumps introduces our new Stroke Length Adjuster for AC / Solar Pump lines. The innovative design allows for 0-100% adjustment while pump is running. This provides accurate flow control options especially on duplex pumps with different size plungers. Setting the Stroke Adjuster to 0 will allow maintenance to be done to that pump without having to take pump out of service. The Stroke Adjuster can be retrofitted to existing pumps.**



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Sidewinder's Variable Speed DC pump features a 12 VDC motor that is rated for use in Class 1 Division 2, Groups A, B, C, & D areas. The variable speed control provides adjustable flow rates from approximately 4 quarts per day (1 gallon per day) to 264 quarts per day (66 gallons per day). The pump features Sidewinder's field serviceable pump head. This allows for plunger size changes (1/4", 3/8", 1/2" plungers) in the field with minimal down time and cost. Sidewinder's exclusive stroke limiter provides precise volume control. The control dial references an approximate percentage of maximum cycles per minute (30 CPM). Sidewinder recommends use of a pump setting gauge to accurately verify flow rates.

**NOTE:** The Sidewinder C1D2 pump must be installed by a certified electrician. All conduit, connections, and wiring must meet local C1D2 code.

**NOTE:** The pump must be connected to a 12 VDC source and will not run on alternate voltages.

**NOTE:** It is the responsibility of the installer to verify all components meet local C1D2 code and the electrician is certified to local C1D2 code.

## Specifications

### Max Flow Rates

1/4"  
3/8"  
1/2"

### Simplex

29 QPD (7 GPD)  
69 QPD (17 GPD)  
132 QPD (33 GPD)

### Duplex

58 QPD (14 GPD)  
138 QPD (36 GPD)  
264 QPD (66 GPD)

### Max Pressure Ratings

1/4"  
3/8"  
1/2"

### 0.22 HP Motor

5,000 PSI  
2,500 PSI  
1,250 PSI

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## PARTS LIST: MAIN PUMP ASSEMBLY

Pump part number structure

S	<input type="text"/>	<input type="text" value="5"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	1-SIMPLEX; 2-DUPLEX	PRESSURE RATING	PLUNGER SIZE	PLUNGER SEAL	CHECK VALVE / BODY SEAL	CHECK VALVE BALL	WET END	PLUNGER OPTIONS

ITEM	CODE	DESCRIPTION
PRESSURE RATING	5	HAZARDOUS DUTY (UP TO 5,000 PSI MAX)
PLUNGER SIZE	4	1/4"
	6	3/8"
	8	1/2"
PLUNGER SEAL OPTIONS	0	TEFLON GRAPHITE UNISEAL
	1	TECHNO UNISEAL (POLYIMIDE)
	4	TEFLON UNISEAL
	4A	TEFLON UNISEAL W/ AFLAS O-RING INSERT
	4B	TEFLON UNISEAL W/ BUNA O-RING INSERT
	4V	TEFLON UNISEAL W/ VITON O-RING INSERT
	8	POLYBLEND UNISEAL
	8V	POLYBLEND UNISEAL W/ VITON INSERT
	9	CUSTOMER SPECIFIED MATERIAL
	V	VITON EPT Z-LIP/CARBON TEFLON UNISEAL
CHECK VALVE / BODY SEAL OPTIONS	2	VITON O-RING
	3	BUNA O-RING
	5	CHEMRAZ O-RING
	6	HITEC O-RING (AFLAS)
	7	VIRGIN TEFLON O-RING
CHECK VALVE BALL OPTIONS	2	316 STAINLESS STEEL
	4	CERAMIC
WET END	2	316 STAINLESS STEEL
PLUNGER OPTIONS		LEAVE BLANK FOR STD. CERAMIC COATED
	0	17-4 STAINLESS STEEL



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*“Dedicated to providing state of the art metering solutions for all your chemical treatment needs.”*

### Sidewinder Pumps, Inc.

**Electric Powered Chemical Metering Pumps**

**Pneumatic Chemical Metering Pumps**

**Solar Powered Chemical Metering Pumps**

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