



Chemical Metering Pumps

www.sidewinderpumps.com



SOLAR CHEMICAL METERING PUMP GEN2 TIMER

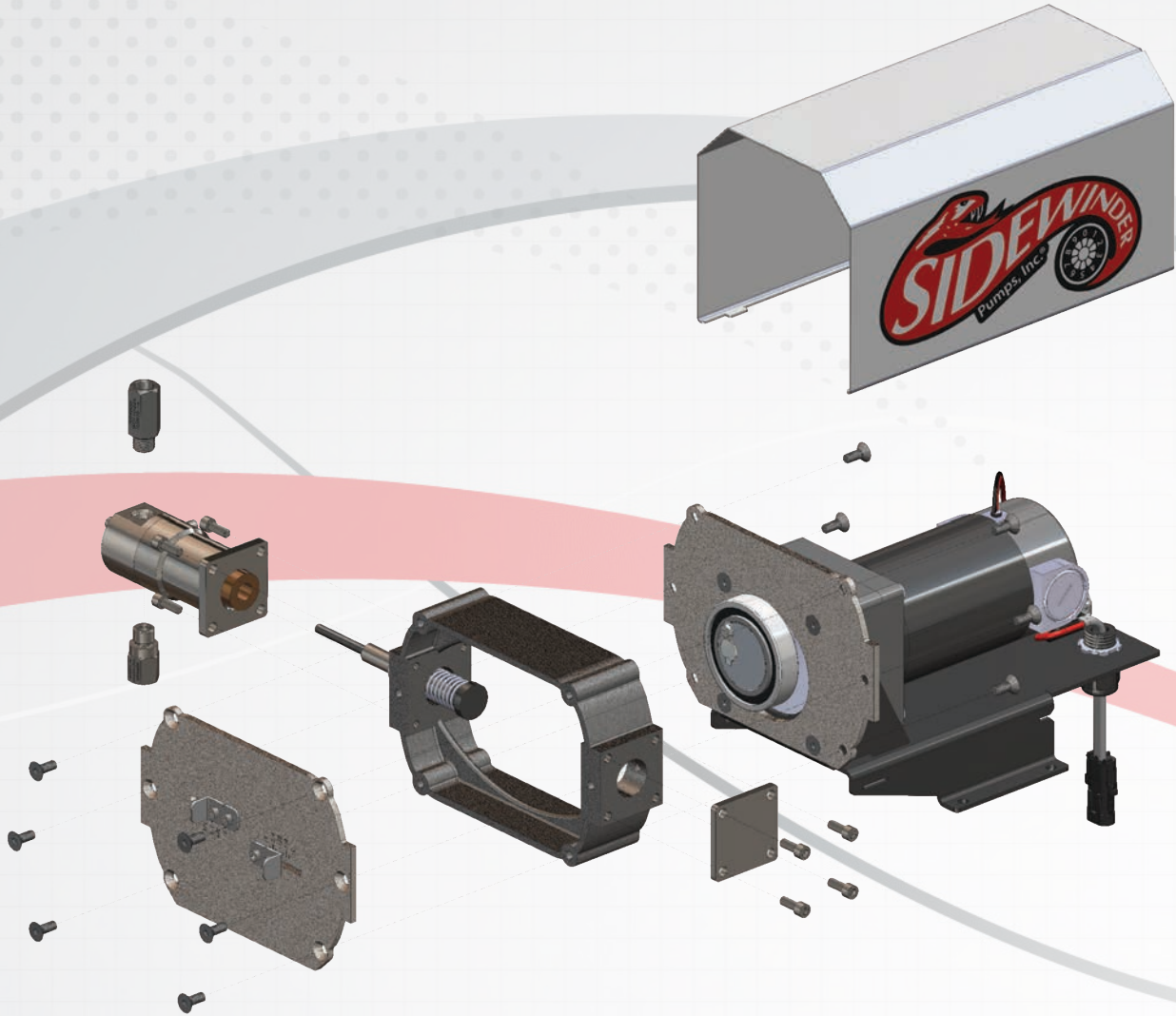
This document replaces any & all documents prior to this date.

4/06/2024



Chemical Metering Pumps
www.sidewinderpumps.com

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

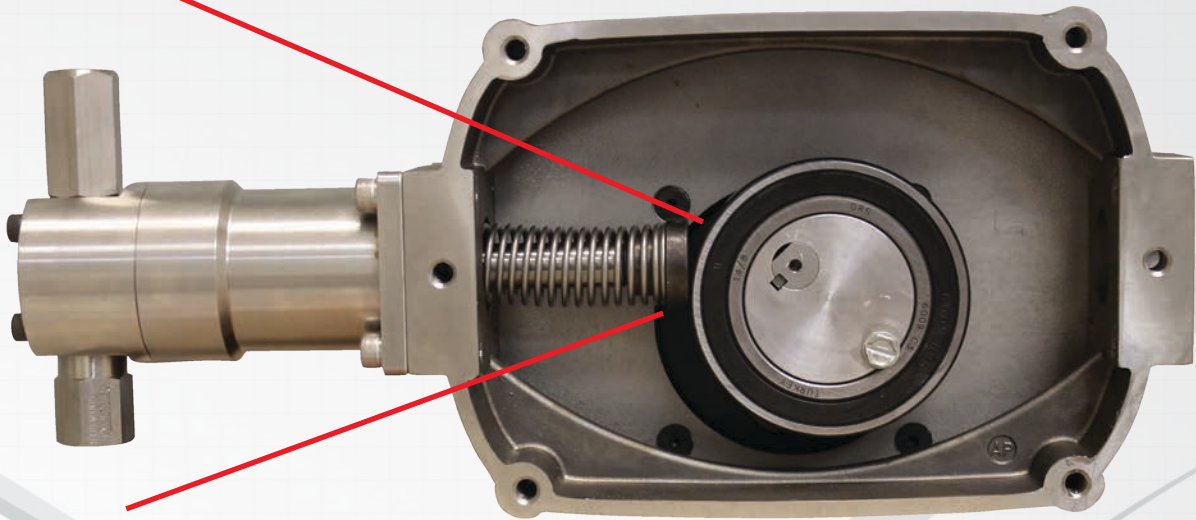


Our approach to designing a better pump resulted in less moving parts. Our direct drive plunger/cam arrangement eliminates the cross head and resulting alignment issues reducing plunger and seal wear. The cartridge style plunger head assembly & one piece plunger seal arrangement allows for ease of repair 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.



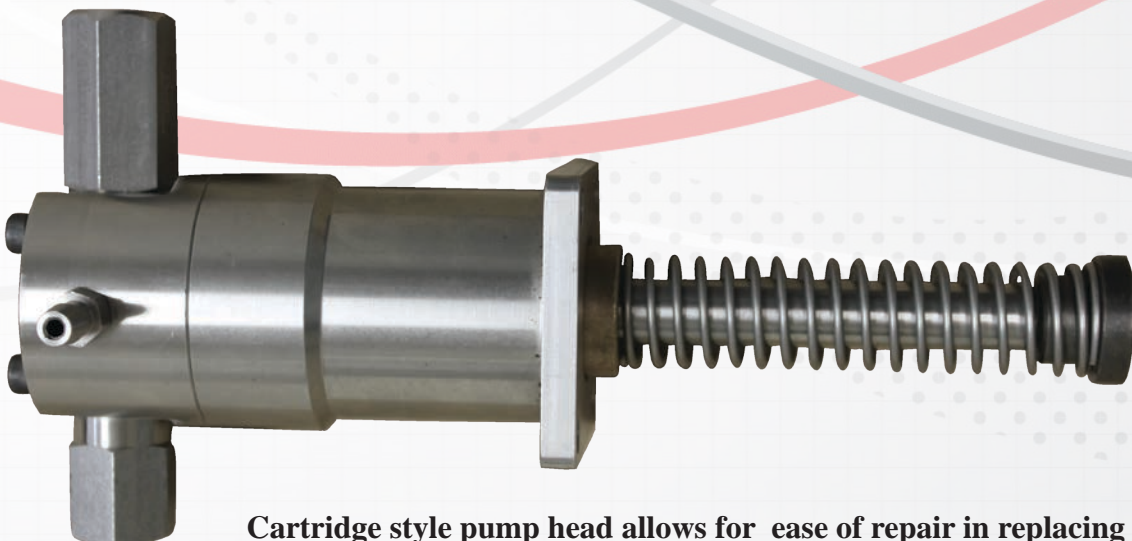
Chemical Metering Pumps
www.sidewinderpumps.com

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



No crosshead with pinned connections, no weak points for breakage

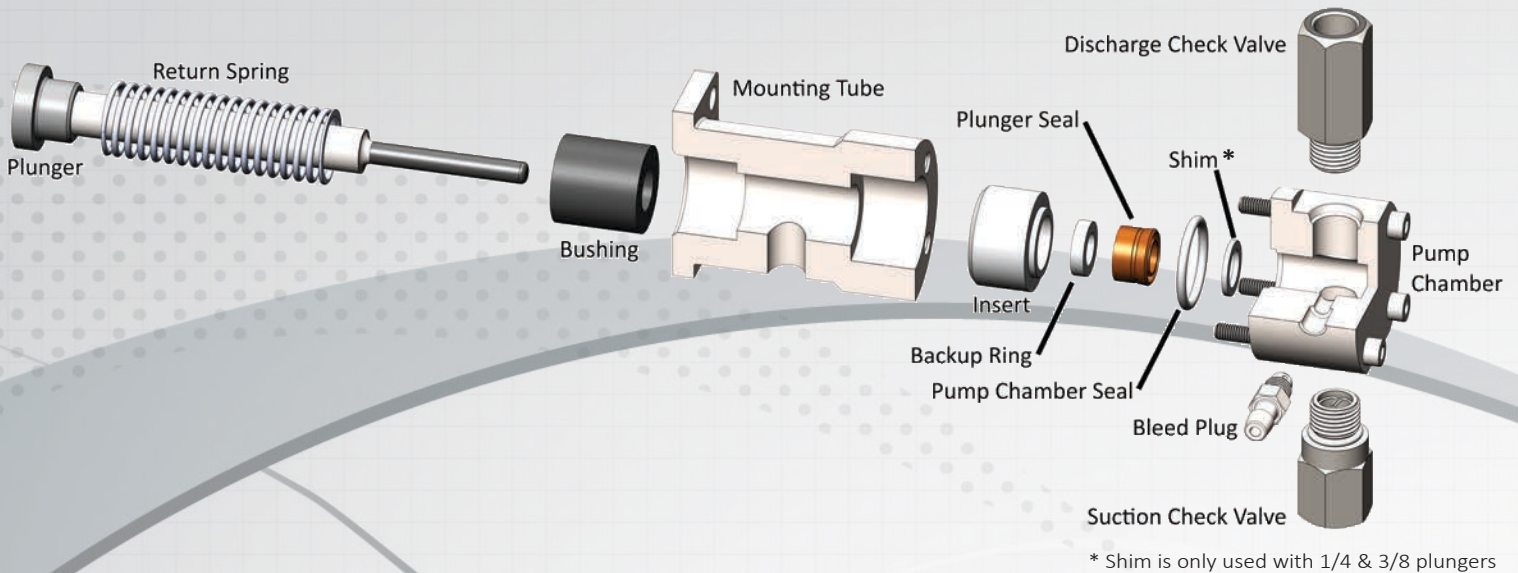
The unique pump base allows for mounting on surface of choice, whether direct to a skid or a pump stand. The pump base provides clearance and access to the check valves for tubing and repair without interference of the mounting surface



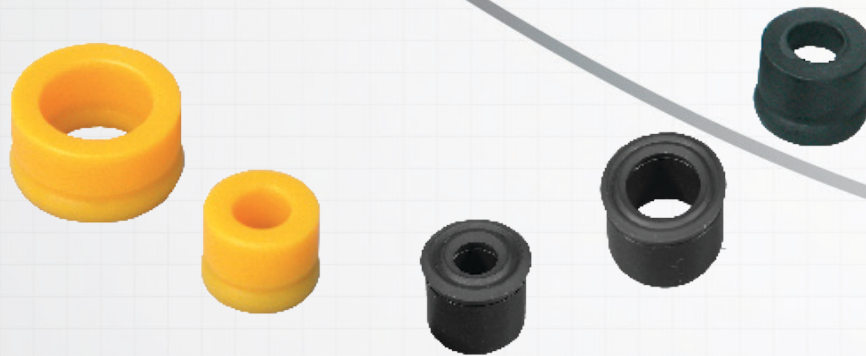
Cartridge style pump head allows for ease of repair in replacing plungers and seals. Plunger sizes can be changed in matter of minutes. System utilizes same packing elements as the Sidewinder pneumatic pumps



Chemical Metering Pumps
www.sidewinderpumps.com



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.

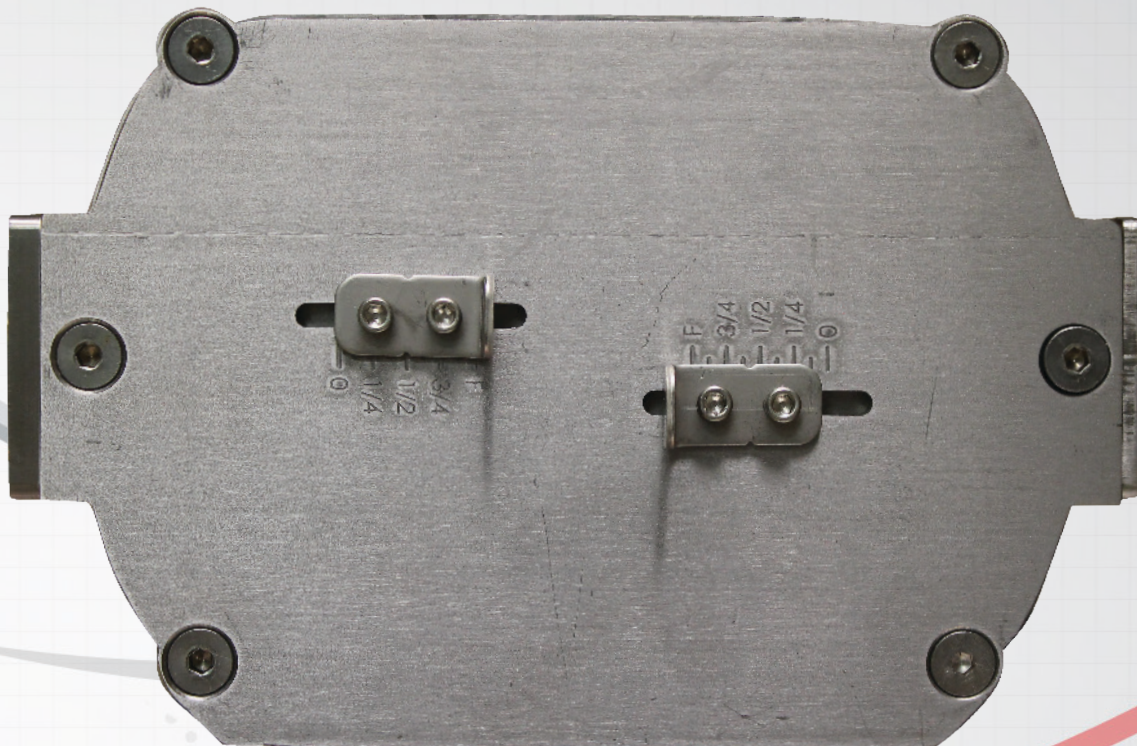


Sidewinder Solar pumps use the same seal arrangements as our pneumatic pumps. Chevron or adjustable style packing allows the operator to over tighten the packing creating excessive drag on the plunger, resulting in greater energy draw, which shortens battery life. With our innovative design, seals can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



Chemical Metering Pumps
www.sidewinderpumps.com

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.



Chemical Metering Pumps
www.sidewinderpumps.com



The Sidewinder Timer is practical and user friendly. It comes standard with temperature probe for Methanol applications and data com port. The timer can be programmed to run in multiple configurations according to injection requirements. Cycle length can be set in 1/2 second increments from 1/2 second to ten seconds. Number of cycles can be set in combination with cycle length to give up to 60 seconds continuous run time. **NOTE: Sidewinder Pumps recommends running the pump at no more than 40% of maximum run time (approximately 24 seconds) to avoid excessive drainage and damage to the battery.**

Specifications

Flow Rates

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

Simplex

29 QPD (7 GPD)
66 QPD (17 GPD)
117 QPD (29 GPD)

Duplex

58 QPD (14 GPD)
132 QPD (34 GPD)
234 QPD (58 GPD)

Pressure Ratings

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

1/15 HP Motor (30 RPM)

2,750 PSI
1,500 PSI
1,000 PSI

0.22 HP Motor (60 RPM)

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

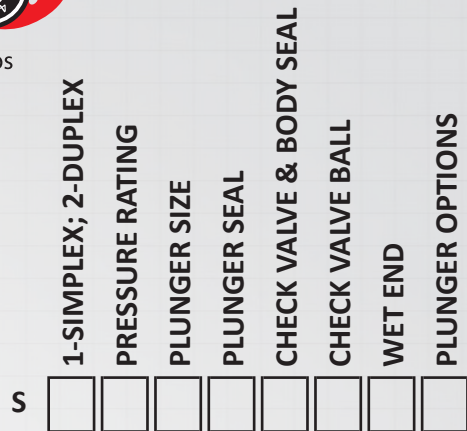




Chemical Metering Pumps
www.sidewinderpumps.com

PARTS LISTS: MAIN PUMP ASSEMBLY

Pump part number structure:



ITEM	CODE	DESCRIPTION
PRESSURE RATING	2	LP VERSION (UP TO 2000 PSI MAX) *limited quantities available
	3	MP VERSION (UP TO 2750 PSI MAX)
	4	HP VERSION (UP TO 5000 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 INSERT/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 STANDARD CERAMIC COATED
	0	17-4 STAINLESS STEEL

1/15 HP MOTOR (30 RPM) OUTPUT TABLE

APPROXIMATE QUARTS PER DAY AT VARIOUS ON-TIME / OFF-TIME SETTINGS

(ALWAYS VERIFY ACTUAL OUTPUT WITH A PUMP CALIBRATION GAUGE)

BATCH DOSING SETTINGS	PLUNGER DIAMETER	ON MIN	OFF MIN	SIMPLEX QTS / DAY	DUPLEX QTS / DAY	PLUNGER DIAMETER	ON MIN	OFF MIN	SIMPLEX QTS / DAY	DUPLEX QTS / DAY	PLUNGER DIAMETER	ON MIN	OFF MIN	SIMPLEX QTS / DAY	DUPLEX QTS / DAY
	1/4"	60	0	36.7	73.5	3/8"	60	0	82.7	165.3	1/2"	60	0	146.9	293.9
1/4"	55	5	33.7	67.3	3/8"	55	5	75.8	151.5	1/2"	55	5	134.7	269.4	
1/4"	50	10	30.6	61.2	3/8"	50	10	68.9	137.8	1/2"	50	10	122.4	244.9	
1/4"	45	15	27.6	55.1	3/8"	45	15	62.0	124.0	1/2"	45	15	110.2	220.4	
1/4"	40	20	24.5	49.0	3/8"	40	20	55.1	110.2	1/2"	40	20	98.0	195.9	
1/4"	35	25	21.4	42.9	3/8"	35	25	48.2	96.4	1/2"	35	25	85.7	171.4	
1/4"	30	30	18.4	36.7	3/8"	30	30	41.3	82.7	1/2"	30	30	73.5	146.9	
1/4"	25	35	15.3	30.6	3/8"	25	35	34.4	68.9	1/2"	25	35	61.2	122.4	
1/4"	20	40	12.2	24.5	3/8"	20	40	27.6	55.1	1/2"	20	40	49.0	98.0	
1/4"	15	45	9.2	18.4	3/8"	15	45	20.7	41.3	1/2"	15	45	36.7	73.5	
1/4"	10	50	6.1	12.2	3/8"	10	50	13.8	27.6	1/2"	10	50	24.5	49.0	
1/4"	5	55	3.1	6.1	3/8"	5	55	6.9	13.8	1/2"	5	55	12.2	24.5	
1/4"	1	59	0.6	1.2	3/8"	1	59	1.4	2.8	1/2"	1	59	2.4	4.9	

INTERMITTENT FLOW SETTINGS	PLUNGER DIAMETER	ON SEC	OFF SEC	SIMPLEX QTS / DAY	DUPLEX QTS / DAY	PLUNGER DIAMETER	ON SEC	OFF SEC	SIMPLEX QTS / DAY	DUPLEX QTS / DAY	PLUNGER DIAMETER	ON SEC	OFF SEC	SIMPLEX QTS / DAY	DUPLEX QTS / DAY
	1/4"	60	0	36.7	73.5	3/8"	60	0	82.7	165.3	1/2"	60	0	146.9	293.9
1/4"	55	5	33.7	67.3	3/8"	55	5	75.8	151.5	1/2"	55	5	134.7	269.4	
1/4"	15	3	30.6	61.2	3/8"	15	3	68.9	137.8	1/2"	15	3	122.4	244.9	
1/4"	12	4	27.6	55.1	3/8"	12	4	62.0	124.0	1/2"	12	4	110.2	220.4	
1/4"	6	3	24.5	49.0	3/8"	6	3	55.1	110.2	1/2"	6	3	98.0	195.9	
1/4"	7	5	21.4	42.9	3/8"	7	5	48.2	96.4	1/2"	7	5	85.7	171.4	
1/4"	8	8	18.4	36.7	3/8"	8	8	41.3	82.7	1/2"	8	8	73.5	146.9	
1/4"	7	10	15.1	30.3	3/8"	7	10	34.0	68.1	1/2"	7	10	60.5	121.0	
1/4"	6	12	12.2	24.5	3/8"	6	12	27.6	55.1	1/2"	6	12	49.0	98.0	
1/4"	4	12	9.2	18.4	3/8"	4	12	20.7	41.3	1/2"	4	12	36.7	73.5	
1/4"	2	10	6.1	12.2	3/8"	2	10	13.8	27.6	1/2"	2	10	24.5	49.0	
1/4"	2	22	3.1	6.1	3/8"	2	22	6.9	13.8	1/2"	2	22	12.2	24.5	
1/4"	1	59	0.6	1.2	3/8"	1	59	1.4	2.8	1/2"	1	59	2.4	4.9	

MAXIMUM PRESSURES: MP: 1/4" - 2750 PSI, 3/8" - 1500 PSI, 1/2" 1000 PSI

Pump Output Table

(NOTE: Output rates less than 0.6 Qts/day can be achieved by setting "ON TIME" to seconds and "OFF TIME" to minutes. Contact the factory for more information.)

0.22 HP MOTOR (60 RPM) OUTPUT TABLE

APPROXIMATE QUARTS PER DAY AT VARIOUS ON-TIME / OFF-TIME SETTINGS

(ALWAYS VERIFY ACTUAL OUTPUT WITH A PUMP CALIBRATION GAUGE)

BATCH DOSING SETTINGS	PLUNGER DIAMETER	ON MIN	OFF MIN	SIMPLEX QTS / DAY	DUPLEX QTS / DAY	PLUNGER DIAMETER	ON MIN	OFF MIN	SIMPLEX QTS / DAY	DUPLEX QTS / DAY	PLUNGER DIAMETER	ON MIN	OFF MIN	SIMPLEX QTS / DAY	DUPLEX QTS / DAY
	1/4"	60	0	73.5	146.9	3/8"	60	0	165.3	330.6	1/2"	60	0	293.9	587.8
1/4"	55	5	67.3	134.7	3/8"	55	5	151.5	303.1	1/2"	55	5	269.4	538.8	
1/4"	50	10	61.2	122.4	3/8"	50	10	137.8	275.5	1/2"	50	10	244.9	489.8	
1/4"	45	15	55.1	110.2	3/8"	45	15	124.0	248.0	1/2"	45	15	220.4	440.8	
1/4"	40	20	49.0	98.0	3/8"	40	20	110.2	220.4	1/2"	40	20	195.9	391.8	
1/4"	35	25	42.9	85.7	3/8"	35	25	96.4	192.9	1/2"	35	25	171.4	342.9	
1/4"	30	30	36.7	73.5	3/8"	30	30	82.7	165.3	1/2"	30	30	146.9	293.9	
1/4"	25	35	30.6	61.2	3/8"	25	35	68.9	137.8	1/2"	25	35	122.4	244.9	
1/4"	20	40	24.5	49.0	3/8"	20	40	55.1	110.2	1/2"	20	40	98.0	195.9	
1/4"	15	45	18.4	36.7	3/8"	15	45	41.3	82.7	1/2"	15	45	73.5	146.9	
1/4"	10	50	12.2	24.5	3/8"	10	50	27.6	55.1	1/2"	10	50	49.0	98.0	
1/4"	5	55	6.1	12.2	3/8"	5	55	13.8	27.6	1/2"	5	55	24.5	49.0	
1/4"	1	59	1.2	2.4	3/8"	1	59	2.8	5.5	1/2"	1	59	4.9	9.8	

INTERMITTENT FLOW SETTINGS	PLUNGER DIAMETER	ON SEC	OFF SEC	SIMPLEX QTS / DAY	DUPLEX QTS / DAY	PLUNGER DIAMETER	ON SEC	OFF SEC	SIMPLEX QTS / DAY	DUPLEX QTS / DAY	PLUNGER DIAMETER	ON SEC	OFF SEC	SIMPLEX QTS / DAY	DUPLEX QTS / DAY
	1/4"	60	0	73.5	146.9	3/8"	60	0	165.3	330.6	1/2"	60	0	293.9	587.8
1/4"	55	5	67.3	134.7	3/8"	55	5	151.5	303.1	1/2"	55	5	269.4	538.8	
1/4"	15	3	61.2	122.4	3/8"	15	3	137.8	275.5	1/2"	15	3	244.9	489.8	
1/4"	12	4	55.1	110.2	3/8"	12	4	124.0	248.0	1/2"	12	4	220.4	440.8	
1/4"	6	3	49.0	98.0	3/8"	6	3	110.2	220.4	1/2"	6	3	195.9	391.8	
1/4"	7	5	42.9	85.7	3/8"	7	5	96.4	192.9	1/2"	7	5	171.4	342.9	
1/4"	8	8	36.7	73.5	3/8"	8	8	82.7	165.3	1/2"	8	8	146.9	293.9	
1/4"	7	10	30.3	60.5	3/8"	7	10	68.1	136.1	1/2"	7	10	121.0	242.0	
1/4"	6	12	24.5	49.0	3/8"	6	12	55.1	110.2	1/2"	6	12	98.0	195.9	
1/4"	4	12	18.4	36.7	3/8"	4	12	41.3	82.7	1/2"	4	12	73.5	146.9	
1/4"	2	10	12.2	24.5	3/8"	2	10	27.6	55.1	1/2"	2	10	49.0	98.0	
1/4"	2	22	6.1	12.2	3/8"	2	22	13.8	27.6	1/2"	2	22	24.5	49.0	
1/4"	1	59	1.2	2.4	3/8"	1	59	2.8	5.5	1/2"	1	59	4.9	9.8	

MAXIMUM PRESSURES: LP: 1/4" - 2000 PSI, 3/8" - 850 PSI, 1/2" 500 PSI; HP: 1/4" - 5000 PSI, 3/8" - 2500 PSI, 1/2" - 1250 PSI

Pump Output Table (NOTE: Output rates less than 1.2 Qts/day can be achieved by setting "ON TIME" to seconds and "OFF TIME" to minutes. Contact the factory for more information.)

PUMP SETTINGS IN SHADED AREAS MAY REQUIRE MORE FREQUENT SEAL REPLACEMENTS

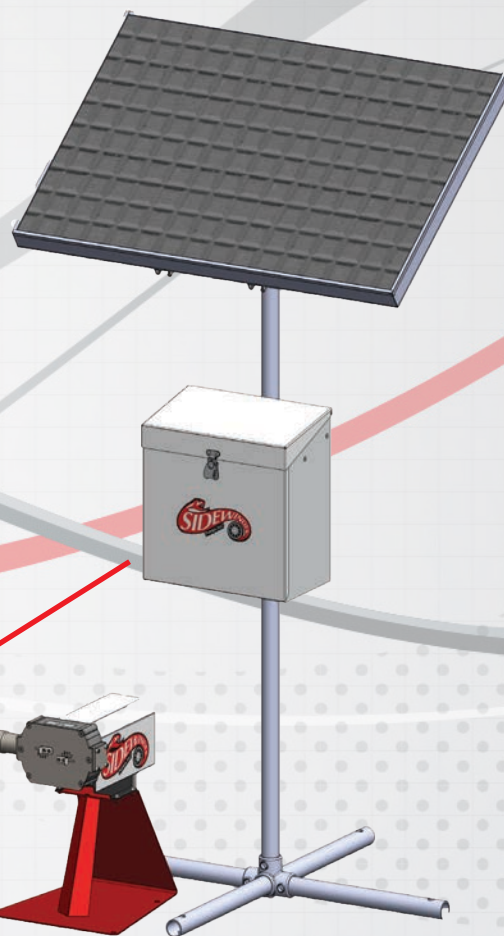
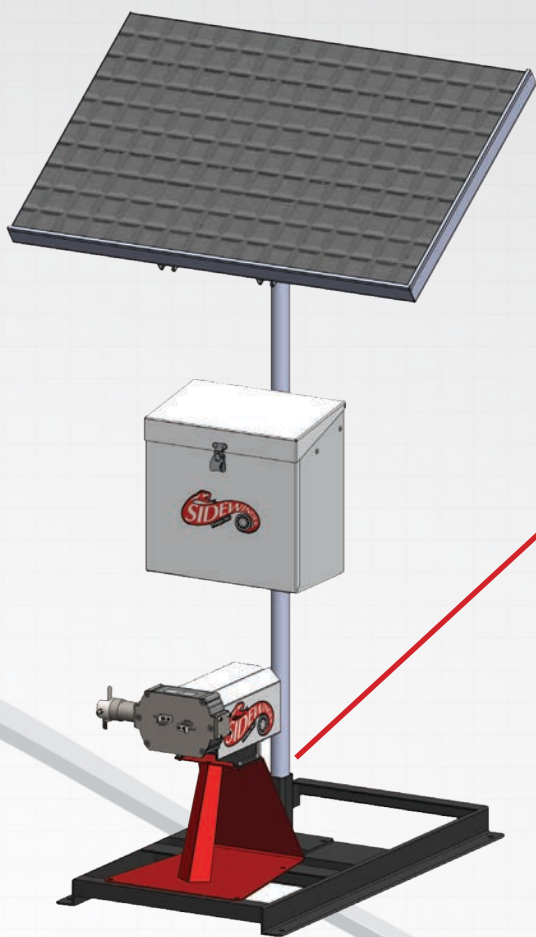




Chemical Metering Pumps

www.sidewinderpumps.com

Optional Skid Mount Package System with 50/55W panel, single battery control box, mast & standard Sidewinder pump stand mounted to skid



Standard Package System with 50/55W panel, single battery control box, mast with quad leg stand, standard Sidewinder pump stand



Chemical Metering Pumps

www.sidewinderpumps.com

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

Sidewinder Pumps, Inc.

Pneumatic Chemical Metering Pumps

Solar Powered Chemical Metering Pumps

Electric Powered Chemical Metering Pumps

P.O. Box 80769, Lafayette, LA 70598-0769

107 Commission Blvd, Lafayette, LA 70508

www.sidewinderpumps.com

info@sidewinderpumps.com

Phone: 337-235-9838 • Fax: 337-235-9852

