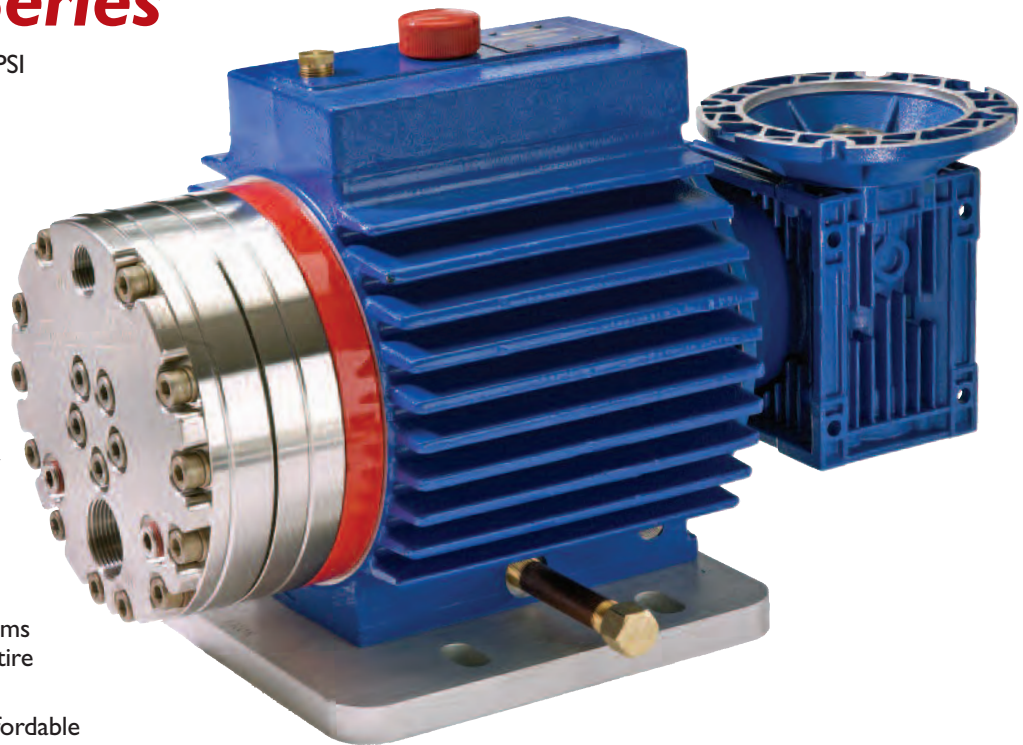


P500 Pump Series

Capacities to 426.0 GPH - Rated to 2500 PSI

Electronic Precision Metering

- Designed to handle a wide range of fluids from clear water to thick slurries
- Electronic flow control increases accuracy and reliability
- Multiple diaphragm design provides linear, virtually pulse-less flow
- Smaller footprint saves valuable space
- One pump covers a wide range of flows and pressures - reducing inventory requirements with fast, simple field conversion
- Duplexing option doubles capacity and equipment savings
- Hydraulically-actuated, balanced diaphragms provide superior performance across entire pressure range
- Rugged construction with a variety of affordable choices for liquid end, diaphragm and check valve materials



Hydra-Cell Metering Solutions meet or exceed API 675 performance standards for Steady-State Accuracy ($\pm 1\%$), Linearity ($\pm 3\%$), and Repeatability ($\pm 3\%$).

Performance

GPH Maximum Flow at Designated Pressure

100 PSI	GPH Metallic Pump Heads Only			Pump RPM	Gear Ratio	Motor RPM
	500 PSI	1500 PSI	2500 PSI			
11.74	11.26	10.25	9.47	18	100:1	
14.39	13.89	12.79	11.89	22.5	80:1	
18.82	18.27	17.02	15.92	30	60:1	
22.36	21.78	20.41	19.15	36	50:1	
27.67	27.03	25.49	23.99	45	40:1	
36.52	35.80	33.95	32.06	60	30:1	1800
43.60	42.81	40.73	38.52	72	25:1	
54.22	53.32	50.89	48.20	90	20:1	
71.93	70.84	67.82	64.34	120	15:1	
107.3	105.9	101.7	96.62	180	10:1	
142.7	140.9	135.5	128.9	240	7.5:1	
213.6	211.0	203.3	193.5	360	5:1	
284.4	281.1	271.0	258.0	480	7.5:1	3600
426.0	421.3	406.5	387.1	720	5:1	

Required Motor HP

1/4	1/2	3/4	1	1-1/2	2
3	5	7-1/2	10	15	

P500 Pump Series

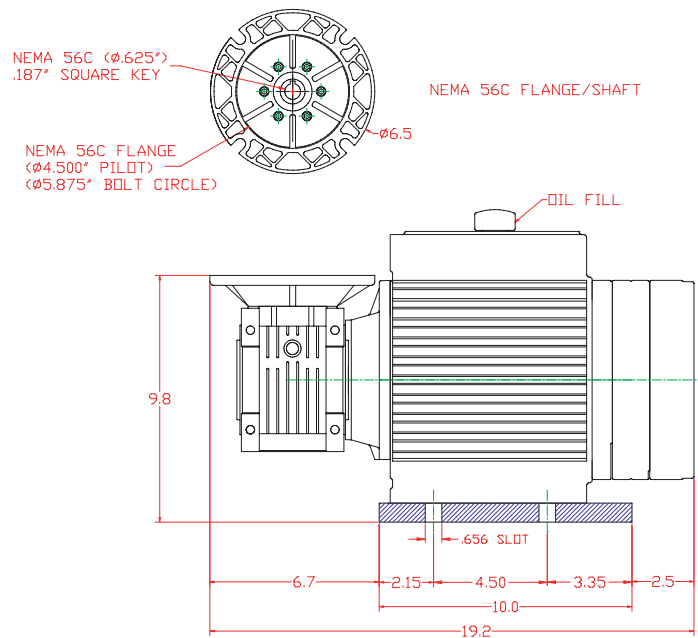
Pump Data

Diaphragms per Liquid End	5
Flow Control	Electronic variable speed drive
Maximum Discharge Pressure	
Metallic Head:	2500 PSI (173 bar)
Maximum Suction Pressure	500 PSI (35 bar)
Maximum Temperature	
Metallic Head:	250°F (121°C)*
Suction Port	1-1/4 inch NPT or BSPT
Discharge Port	3/4 inch NPT or BSPT
Weight (less motor)	
Metallic Head:	160 lbs (72.6 kg)
Dimensions (less motor)**	
Metallic Head:	19.2" W x 10.7" D x 12.4" H (488 mm W x 272 mm D x 315 mm H)

* Consult factory for correct component selection for fluid temperatures above 160°F (71°C).

** For 56C motor frame only. Consult factory for other motor frame sizes.

Representative Dimensional Drawings



Hydra-Cell Metering Solutions pump systems are available with back pressure and relief valves, calibration cylinders, pulsation dampeners (optional), manifolds and flanges, suction accumulators, custom controllers, strainers, a variety of actuating oils, witnessed and non-witnessed testing, drawing packages, and OEM paint and nameplate customization.

Pump Ordering Information

A complete pump order number contains 13 digits based on the specified pump materials listed below. Contact your Hydra-Cell sales representative for accompanying motor drive options.

1	2	3	4	5	6	7	8	9	10	11	12	13
P	5	0	0									

Pump Model Size (Digits 1-4)

P500 For all P500 Pumps

Pump Version (Digit 5)

N NPT Ports
M BSPT Ports

Pump Head Material (Digit 6)

S 316 Stainless Steel
T Hastelloy®C

Diaphragm & O-ring Material (Digit 7)*

G Viton®-XT ♦ See price list for different actuating oils available with these materials.
T Buna-N-XS

Check Valve Material (Digits 8-9) (Valve Spring / Valve & Seat)

SS 316 SST / 316 SST
TT Hastelloy®C / Hastelloy®C

Gearbox Ratio (Digits 10-12)

100	100:1	(56C Motor Frame)
080	80:1	(56C Motor Frame)
060	60:1	(56C Motor Frame)
050	50:1	(56C Motor Frame)
040	40:1	(56C Motor Frame)
A40	40:1	(143/145TC Motor Frame)
030	30:1	(56C Motor Frame)
A30	30:1	(143/145TC Motor Frame)
025	25:1	(56C Motor Frame)
A25	25:1	(143/145TC Motor Frame)
020	20:1	(56C Motor Frame)
A20	20:1	(143/145TC Motor Frame)
015	15:1	(56C Motor Frame)
A15	15:1	(143/145TC Motor Frame)
B15	15:1	(182/184TC Motor Frame)
010	10:1	(56C Motor Frame)
A10	10:1	(143/145TC Motor Frame)
B10	10:1	(182/184TC Motor Frame)
007	7.5:1	(56C Motor Frame)
A07	7.5:1	(143/145TC Motor Frame)
B07	7.5:1	(182/184TC Motor Frame)
C07	7.5:1	(213/215TC Motor Frame)
005	5:1	(56C Motor Frame)
A05	5:1	(143/145TC Motor Frame)
B05	5:1	(182/184TC Motor Frame)
C05	5:1	(213/215TC Motor Frame)
D05	5:1	(254/256TC Motor Frame)

Base Plate (Digit 13)

A Aluminum (Epoxy painted)
H Carbon Steel (Epoxy painted)
for B, C and D reducers

For information on the complete line of Hydra-Cell Metering Solutions pumps, contact us today.

 **Wanner Engineering, Inc.**

1204 Chestnut Avenue • Minneapolis, MN 55403 USA

Phone: 612-332-5681 • Fax: 612-332-6937

Toll-Free Fax (USA): 800-332-6812

Email: sales@wannereng.com • www.Hydra-Cell.com/metering