



## P400 HYDRA-CELL METERING PUMPS

### Exceed your metering pump expectations ...for less!

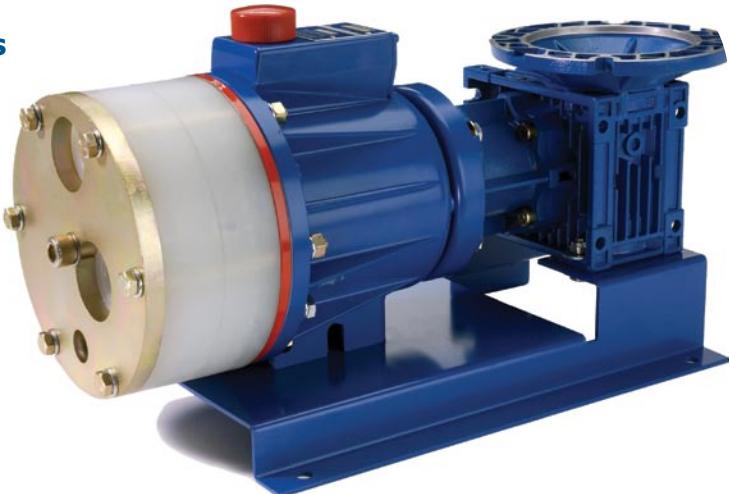
From clear water to thick slurry applications, seal-less Hydra-Cell® Metering Pumps are an extraordinary alternative metering solution:

- Electronic flow control achieves higher accuracy
- Smaller footprint saves valuable space
- Multiple diaphragm liquid end provides "pulse-free" linear flow
- One pump covers extremely wide range of flows and pressures, dramatically reducing inventory requirements with simple, fast field conversion capability
- Duplexing option doubles capacity and equipment savings
- Simple mechanical design reduces spares and maintenance costs
- Hydraulically-actuated, balanced diaphragms provide superior performance across entire pressure range
- Rugged, industrial construction increases reliability
- Affordable choices for liquid end, diaphragm and check valve materials

### Performance Characteristics\*

<b>Steady State Accuracy</b>	±1% or better
<b>Linearity</b>	±3% or better
<b>Repeatability</b>	±3% or better

\*Meets or exceeds API 675 performance standards.



### The tradition continues...

Hydra-Cell® Pumps are renowned for their simplicity and versatility – excelling in wide-ranging and challenging fluid flow applications for nearly four decades. As the platform for our complete line of Hydra-Cell Metering Solutions pumps, they dramatically out-perform ordinary metering pumps with more features and lower costs of ownership.

### The bottom line:

Switching to the most revolutionizing concept for metered flow on the market doesn't mean compromising performance for cost; *it means increasing your bottom line through technology. With Hydra-Cell Metering Solutions, you just get more for less!*

### Performance\* - GPH Maximum Flow at Designated Pressure

GPH All Pumps		GPH Metallic Pump Heads Only		Pump RPM	Gear Ratio	Motor RPM
100 PSI	250 PSI	500 PSI	1000 PSI			
5.45	5.40	5.35	5.20	18	100:1	
6.45	6.40	6.35	6.20	22.5	80:1	
9.15	9.10	9.05	8.90	30	60:1	
11.00	10.95	10.90	10.70	36	50:1	
14.10	14.05	14.00	13.75	45	40:1	
19.90	19.80	19.65	19.05	60	30:1	
24.10	23.90	23.65	22.70	72	25:1	
30.30	30.00	29.60	28.60	90	20:1	
41.0	40.6	40.1	39.0	120	15:1	
60.3	59.9	59.4	58.2	180	10:1	
81.0	80.6	80.0	78.5	240	7.5:1	
121.0	120.5	119.9	118.0	360	5:1	
162.5	162.0	161.3	158.9	480	7.5:1	
243.0	242.5	241.5	238.0	720	5:1	

1800

3600

## Pump Data

<b>Diaphragms per Liquid End</b>	3
<b>Flow Control</b>	Electronic variable speed drive
<b>Maximum Discharge Pressure</b>	
Metallic Head:	1000 PSI (70 bar)
Non-Metallic Head:	Polypropylene- 250 PSI (17 bar) Kynar- 350 PSI (24 bar)
<b>Maximum Suction Pressure</b>	250 PSI (17 bar)
<b>Maximum Temperature</b>	
Metallic Head:	250°F (121°C)*
Non-Metallic Head:	140°F (60°C)
<b>Suction Port</b>	1 inch NPT or BSPT
<b>Discharge Port</b>	3/4 inch NPT or BSPT
<b>Weight (less motor)</b>	
Metallic Head:	62 lbs (28.1 kg)
Non-Metallic Head:	49 lbs (22.2 kg)
<b>Dimensions (less motor)**</b>	
Metallic Head:	17.59" W x 9.87" D x 10.34" H (447 mm W x 251 mm D x 263 mm H)
Non-Metallic Head:	18.19" W x 9.87" D x 10.34" H (462 mm W x 251 mm D x 263 mm H)

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

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

*P400 Series Pumps are just one part of a complete Hydra-Cell Metering Solution.*

Contact your Hydra-Cell Sales Representative or visit our website at [www.hydra-cell.com/metering](http://www.hydra-cell.com/metering) for complete information on all of our metering solution products...



**Motors, Motor Adapters, VFDs**



**Pressure Relief and Back Pressure Valves**

## P400 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 and drive options.

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

**Pump Model Size (Digits 1-4)**  
**P400** For all P400 Pumps

**Pump Version (Digit 5)**

N	NPT Ports
M	BSPT Ports

**Pump Head Material (Digit 6)**

C	Cast Iron
M	Kynar®
P	Polypropylene
S	316 Stainless Steel
T	Hastelloy® C

**Diaphragm & O-ring Material (Digit 7)**

E	EPDM
G	Viton®-XT
J	PTFE
P	Neoprene
T	Buna-N-XS

**Check Valve Material (Digits 8-9)**

**(Valve Spring / Valve & Seat)**

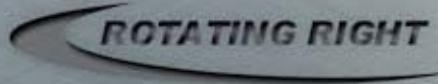
SS	316 SST / 316 SST
TT	Hastelloy® C / Hastelloy® C
SC	316 SST / Ceramic
TC	Hastelloy® C / Ceramic

**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)
030	30:1 (56C Motor Frame)
025	25:1 (56C Motor Frame)
020	20:1 (56C Motor Frame)
015	15:1 (56C Motor Frame)
010	10:1 (56C Motor Frame)
007	7.5:1 (56C Motor Frame)
A07	7.5:1 (143/145TC Motor Frame)
005	5:1 (56C Motor Frame)
A05	5:1 (143/145TC Motor Frame)

**Base Plate (Digit 13)**

C	Carbon Steel (Epoxy painted)
S	Stainless Steel



**Head Office:**  
6120 Davies Road  
Edmonton, AB  
T6E 4M9

Phone: (780) 485-2010 • Toll Free: (866) 707-7867  
Fax: (780) 485-1938  
• Calgary • Drayton Valley • Lethbridge  
[www.rotatingright.com](http://www.rotatingright.com)