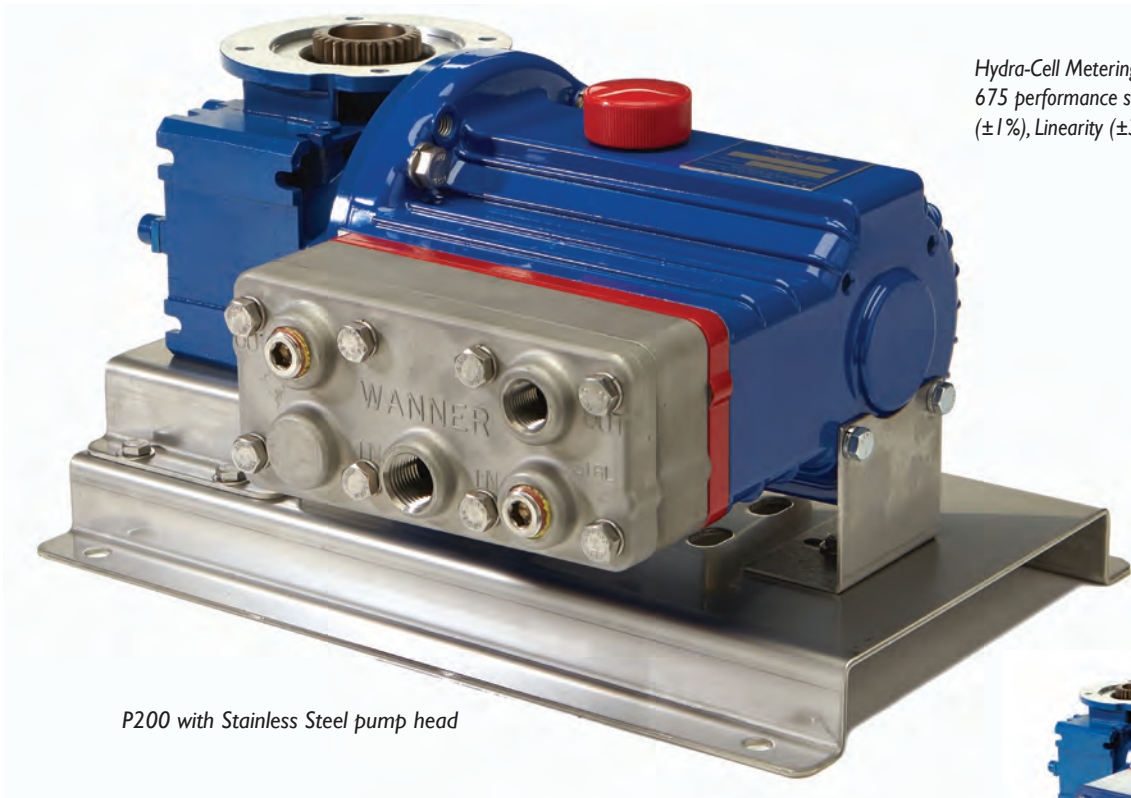


# Hydra·Cell<sup>®</sup>

## METERING SOLUTIONS™

### P200 Series

Maximum Flow Rate: 255.4 lph  
Maximum Pressure: 1000 psi (69 bar) for Metallic Pump Heads  
350 psi (24 bar) for Non-metallic Pump Heads



P200 with Stainless Steel pump head

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

### Metering Pumps with “Pulse-Free” Linear Flow

- Handles a wide range of fluids from clear water to thick slurries
- Electronic flow control increases accuracy and reliability
- 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
- Seal-less design means no seals, cups, or packing to leak or replace
- A replenishment valve in every piston assembly ensures optimum actuating oil on every stroke for continuous accuracy



P200 with Polypropylene pump head



P200 with Brass pump head

## Performance\* Maximum Estimated Flow at Designated Pressure

| All Pumps (lph) |        | Metallic Pump Heads Only (lph) |        | Pump rpm | Gear Ratio | Motor rpm |
|-----------------|--------|--------------------------------|--------|----------|------------|-----------|
| 7 bar           | 17 bar | 34 bar                         | 69 bar |          |            |           |
| 10.65           | 10.48  | 10.25                          | 9.868  | 25       | 60:1       | 1500      |
| 12.81           | 12.60  | 12.34                          | 11.91  | 30       | 50:1       |           |
| 16.00           | 15.82  | 15.48                          | 14.98  | 37.5     | 40:1       |           |
| 21.32           | 21.09  | 20.68                          | 20.04  | 50       | 30:1       |           |
| 25.57           | 25.31  | 24.83                          | 24.09  | 60       | 25:1       |           |
| 31.96           | 31.63  | 31.07                          | 30.17  | 75       | 20:1       |           |
| 42.59           | 42.17  | 41.46                          | 40.29  | 100      | 15:1       |           |
| 63.87           | 63.25  | 62.23                          | 60.55  | 150      | 10:1       |           |
| 85.15           | 84.34  | 83.01                          | 80.80  | 200      | 7.5:1      |           |
| 127.7           | 126.5  | 124.6                          | 121.3  | 300      | 5:1        |           |
| 170.3           | 168.7  | 166.1                          | 161.8  | 400      | 7.5:1      | 3000      |
| 255.4           | 253.0  | 249.2                          | 242.8  | 600      | 5:1        |           |

\* Capacity data is shown for pumps with elastomeric diaphragms. Consult factory for performance characteristics of pumps with PTFE diaphragms.

## Required Motor kW

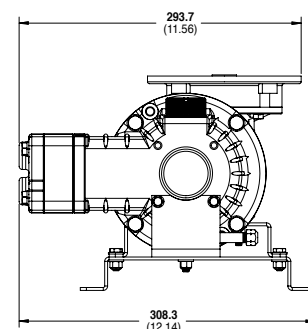
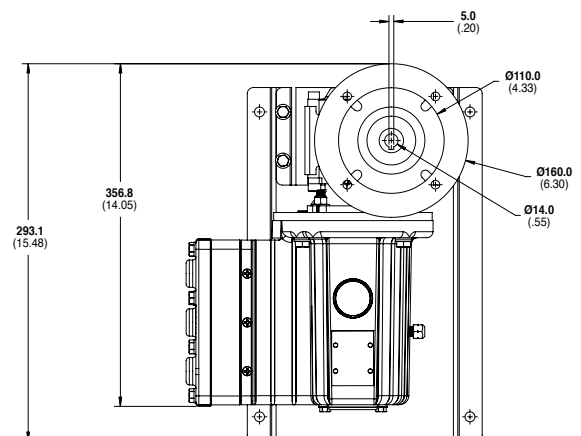
|      |      |      |      |
|------|------|------|------|
| 0.18 | 0.37 | 0.55 | 0.75 |
|------|------|------|------|

## Pump Data

|                               |   |
|-------------------------------|---|
| Diaphragms per Liquid End     | 3   |
| Flow Control                  | Electronic variable speed drive   |
| Maximum Discharge Pressure    |   |
| Metallic Heads:               | 1000 psi (69 bar)   |
| Non-metallic Heads:           | PVDF- 350 psi (24 bar)<br>Polypropylene- 250 psi (17 bar)               |
| Maximum Inlet Pressure        | 250 psi (17 bar)  |
| Maximum Operating Temperature |   |
| Metallic Heads:               | 250 °F (121 °C)*  |
| Non-metallic Heads:           | 140 °F (60 °C)  |
| Inlet Port                    | 1/2 inch NPT or BSPT  |
| Discharge Port                | 3/8 inch NPT or BSPT  |
| Weight (less motor)           |   |
| Metallic Heads:               | 41.8 lbs (19.0 kg)  |
| Non-metallic Heads:           | 32.8 lbs (14.9 kg)  |
| Dimensions (less motor)       |   |
| Metallic Heads:               | 15.59" W x 11.68" D x 8.97" H<br>(396.1 mm W x 296.7 mm D x 227.8 mm H) |
| Non-metallic Heads:           | 15.59" W x 12.06" D x 8.97" H<br>(396.1 mm W x 306.3 mm D x 227.8 mm H) |

\* Consult factory for correct component selection for temperatures from 160 °F (71 °C) to 250 °F (121 °C).

## Representative Drawings mm (Inches)



**Metallic Pump Heads**

## How to Order

A complete pump order number contains 13 digits based on the specified pump materials listed below.

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

### Pump Model Size (Digits 1-4)

**P200** For all P200 Pumps (Non Kel-Cell)

### Pump Version (Digit 5)

**N** NPT Ports (NEMA motors only)  
**M** BSPT Ports (IEC motors only)  
**X** ATEX BSPT Ports (IEC motors only)

### Pump Head / Retainer Material (Digit 6)

**B** Brass / Hastelloy C  
**M** PVDF / PVDF  
**P** Polypropylene / Polypropylene  
**S** 316L Stainless Steel / Hastelloy C  
**T** Hastelloy C / Hastelloy C

### Diaphragm & O-ring Material / Oil (Digit 7)▲

**A** Aflas / PTFE O-rings (Synthetic oil)  
**M** Aflas / PTFE O-rings & FKM drive case elastomers (Mesamoll oil)  
**E** EPDM (EPDM-compatible oil)  
**X** FKM (Synthetic oil)  
**J** PTFE (Food-contact oil)  
**P** Neoprene (Synthetic oil)  
**T** Buna-N (Synthetic oil)

▲ See price list for different actuating oils available with these materials.

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

#### (Valve Spring / Valve Seat / Valve)

**SS** Elgiloy / 316L SST / Nitronic 50  
**TT** Hastelloy C / Hastelloy C / Hastelloy C  
**SC** Elgiloy / Ceramic / Ceramic  
**TC** Hastelloy C / Ceramic / Ceramic

### Gearbox Ratio (Digits 10-12) IEC Motors

|            |       |                     |
|------------|-------|---------------------|
| <b>060</b> | 60:1  | (63 B5 Motor Frame) |
| <b>050</b> | 50:1  | (63 B5 Motor Frame) |
| <b>040</b> | 40:1  | (63 B5 Motor Frame) |
| <b>030</b> | 30:1  | (63 B5 Motor Frame) |
| <b>025</b> | 25:1  | (63 B5 Motor Frame) |
| <b>020</b> | 20:1  | (63 B5 Motor Frame) |
| <b>015</b> | 15:1  | (63 B5 Motor Frame) |
| <b>A15</b> | 15:1  | (71 B5 Motor Frame) |
| <b>010</b> | 10:1  | (63 B5 Motor Frame) |
| <b>A10</b> | 10:1  | (71 B5 Motor Frame) |
| <b>B10</b> | 10:1  | (80 B5 Motor Frame) |
| <b>007</b> | 7.5:1 | (63 B5 Motor Frame) |
| <b>A07</b> | 7.5:1 | (71 B5 Motor Frame) |
| <b>B07</b> | 7.5:1 | (80 B5 Motor Frame) |
| <b>005</b> | 5:1   | (63 B5 Motor Frame) |
| <b>A05</b> | 5:1   | (71 B5 Motor Frame) |
| <b>B05</b> | 5:1   | (80 B5 Motor Frame) |

### Base Plate (Digit 13)

**C** Carbon Steel (Epoxy painted)  
**S** 316L Stainless Steel

## Accessories, Options & Services

Consult the Hydra-Cell Metering Solutions catalog for complete details about available accessories and options as well as special services.

- Manifolds and Flanges
- Multiplexing Capability
- Different Gearbox Ratios
- Oil Systems and Kits
- Actuating Oils
- Motors (Standard/Explosion-proof)
- Controllers
- Control Freak Touch-screen Metering Controller
- SmartDrive Motor-Controller
- Calibration Cylinders
- Back Pressure Valves
- Pressure Relief Valves
- Pulsation Dampeners
- Demonstration (Cutaway) Units
- Testing Services
- System Components, Priming Kits and Plugs
- Replacement Part Kits and Tool Kits
- Customization Services



Hydra-Cell Metering Solutions demonstration unit complete with the Control Freak™ touch-screen metering controller.

# Hydra•Cell<sup>®</sup>

## METERING SOLUTIONS™

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