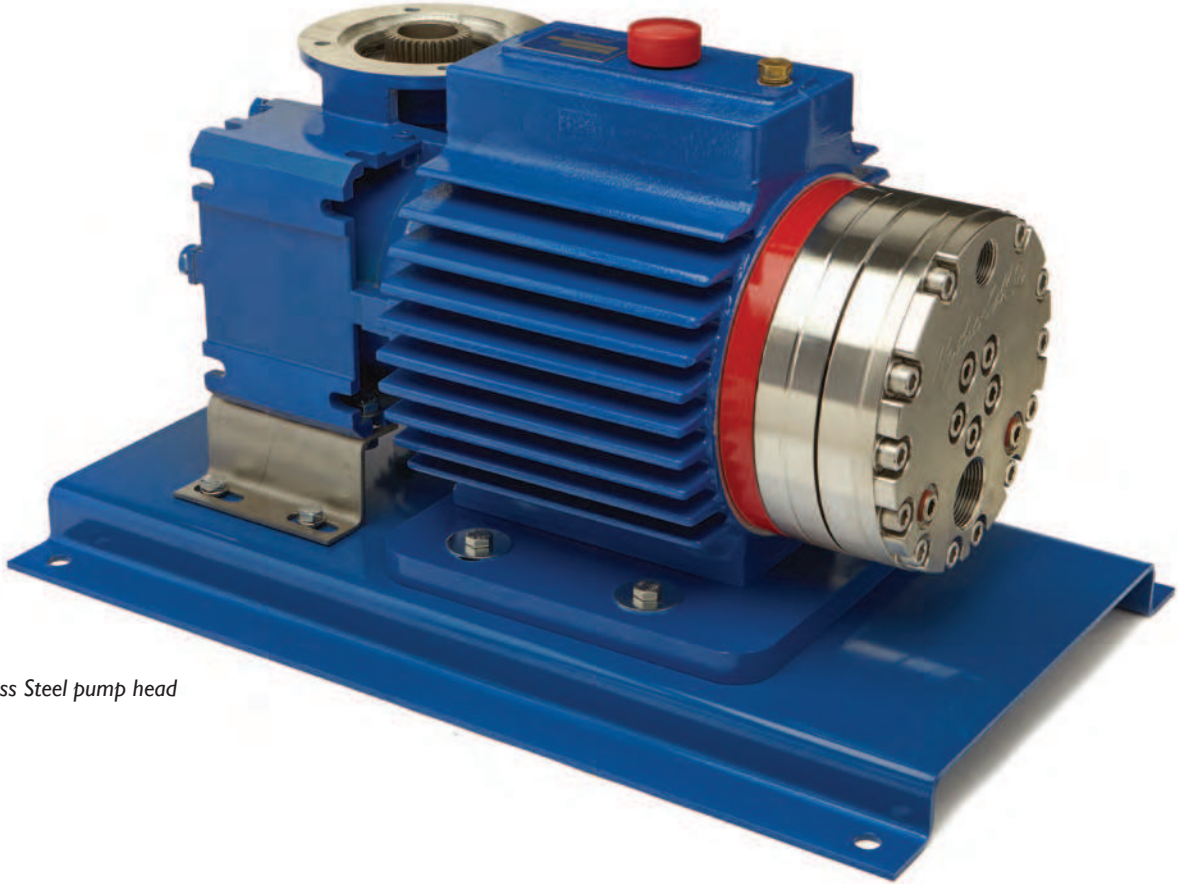


# P500 Series

Maximum Flow Rate: 1343.5 lph

Maximum Pressure: 2500 psi (172 bar) for Metallic Pump Heads



P500 with Stainless Steel pump head

## Performance Maximum Estimated Flow at Designated Pressure

Metallic Pump Heads Only (lph)				Pump rpm	Gear Ratio	Motor rpm
7 bar	34 bar	103 bar	172 bar			
55.14	53.50	49.66	45.641	25	60:1	1500
66.16	64.44	60.28	55.85	30	50:1	
83.25	81.16	76.32	71.50	37.5	40:1	
111.26	108.75	102.92	97.16	50	30:1	
133.66	130.82	124.19	117.69	60	25:1	
167.27	163.93	156.11	148.49	75	20:1	
223.28	219.11	209.29	199.81	100	15:1	
335.31	329.47	315.67	302.45	150	10:1	
447.33	439.83	422.05	405.10	200	7.5:1	
671.4	660.6	634.8	610.4	300	5:1	
895.4	881.3	847.6	815.7	400	7.5:1	3000
1343.5	1322.7	1273.1	1226.3	600	5:1	

## Required Motor kW

0.18	0.37	0.55	0.75	1.1
1.5	2.2	3.7	5.5	7.5

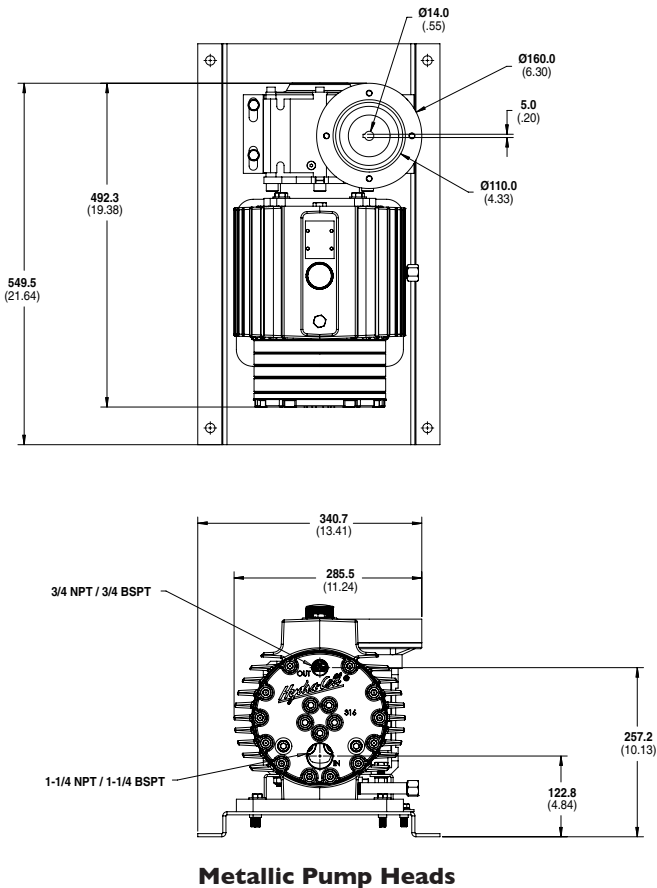
## Pump Data

Diaphragms per Liquid End	5
Flow Control	Electronic variable speed drive
Maximum Discharge Pressure	
Metallic Heads:	2500 psi (172 bar)
Maximum Inlet Pressure	500 psi (34 bar)
Maximum Operating Temperature	
Metallic Heads:	250 °F (121 °C)*
Inlet Port	1-1/4 inch NPT or BSPT
Discharge Port	3/4 inch NPT or BSPT
Weight (less motor)**	
Metallic Heads:	192.1 lbs (88.5 kg)
Dimensions (less motor)**	
Metallic Heads:	14.5" W x 24.0" D x 13.9" H (368.3 mm W x 609.6 mm D x 353.1 mm H)

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

\*\* For 71 B5 motor frame only. Consult factory for other motor frame sizes.

## Representative Drawings mm (Inches)



**Metallic Pump Heads**

For accessories, options, and a system installation example, see page 138.

## 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	5	0	0									

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

**P500** For all P500 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  
**S** 316L Stainless Steel / Hastelloy C  
**T** Hastelloy C / Hastelloy C

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

**A** Atlas / PTFE O-rings (Synthetic oil)  
**X** FKM (Synthetic oil)  
**T** Buna-N (Synthetic oil)

<sup>▲</sup> See price list for different actuating oils available with these materials.

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

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

**SS** Elgiloy / Nitronic 50 / Nitronic 50  
**TT** Hastelloy C / Hastelloy C / Hastelloy C  
**SD** Elgiloy / Tungsten Carbide / Tungsten Carbide  
**TD** Hastelloy C / Tungsten Carbide / Tungsten Carbide

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

<b>A60</b>	60:1	(71 B5 Motor Frame)
<b>B60</b>	60:1	(80 B5 Motor Frame)
<b>A50</b>	50:1	(71 B5 Motor Frame)
<b>B50</b>	50:1	(80 B5 Motor Frame)
<b>A40</b>	40:1	(71 B5 Motor Frame)
<b>B40</b>	40:1	(80 B5 Motor Frame)
<b>A30</b>	30:1	(71 B5 Motor Frame)
<b>B30</b>	30:1	(80 B5 Motor Frame)
<b>B25</b>	25:1	(80 B5 Motor Frame)
<b>C25</b>	25:1	(90 B5 Motor Frame)
<b>B20</b>	20:1	(80 B5 Motor Frame)
<b>C20</b>	20:1	(90 B5 Motor Frame)
<b>B15</b>	15:1	(80 B5 Motor Frame)
<b>C15</b>	15:1	(90 B5 Motor Frame)
<b>B10</b>	10:1	(80 B5 Motor Frame)
<b>C10</b>	10:1	(90 B5 Motor Frame)
<b>D10</b>	10:1	(110/112 B14 Motor Frame)
<b>B07</b>	7.5:1	(80 B5 Motor Frame)
<b>C07</b>	7.5:1	(90 B5 Motor Frame)
<b>D07</b>	7.5:1	(110/112 B14 Motor Frame)
<b>B05</b>	5:1	(80 B5 Motor Frame)
<b>C05</b>	5:1	(90 B5 Motor Frame)
<b>D05</b>	5:1	(110/112 B14 Motor Frame)

### Base Plate (Digit 13)

**H** Carbon Steel (Epoxy painted) size 75