



ELECTRONIC PRECISION METERING™

# P400 Pump Series

## Pump Specifications

<b>Hydraulic Configuration</b>	Triplex
<b>Flow Control</b>	Electronic variable speed drive
<b>Steady State Accuracy</b>	± 1.0%
<b>Max Discharge Pressure</b>	
Metallic Head:	1000 PSI (70 bar)
Non-Metallic Head:	Polypropylene: 250 PSI (17 bar) Kynar: 350 PSI (24 bar)
<b>Max Inlet Pressure</b>	250 PSI (17 bar)
<b>Max Temperature</b>	
Metallic Heads:	250°F (121°C)
Non-Metallic Heads:	140°F (60°C)
<b>Inlet Port</b>	1 inch NPT, BSPT
<b>Discharge Port</b>	3/4 inch NPT, BSPT
<b>Weight (less motor)</b>	
Metallic Head:	62 lbs (28.1 kg)
Non-Metallic Head:	49 lbs (22.2 kg)



## Maximum Capacity\* (Gallons per Hour)

Motor RPM	Gear Ratio	Pump RPM	Metallic and Non-Metallic Head		Metallic Head Only	
			100 PSI (7 bar)	250 PSI (17 bar)	500 PSI (35 bar)	1000 PSI (70 bar)
1800	100:1	18	5.45	5.40	5.35	5.20
	80:1	22.5	6.45	6.40	6.35	6.20
	60:1	30	9.15	9.10	9.05	8.90
	50:1	36	11.00	10.95	10.90	10.70
	40:1	45	14.10	14.05	14.00	13.75
	30:1	60	19.90	19.80	19.65	19.05
	25:1	72	24.10	23.90	23.65	22.70
	20:1	90	30.30	30.00	29.60	28.60
	15:1	120	41.0	40.6	40.1	39.0
	10:1	180	60.3	59.9	59.4	58.2
	7.5:1	240	81.0	80.6	80.0	78.5
	5:1	360	121.0	120.5	119.9	118.0
3600	7.5:1	480	162.5	162.0	161.3	158.9
	5:1	720	243.0	242.5	241.5	238.0

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

Required Motor HP			
1/4	3/4	1-1/2	3
1/2	1	2	



**WANNER ENGINEERING INC**

For more information, visit our Website at: [www.epmpump.com](http://www.epmpump.com)

# P400 Pump Series

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

## P400 Pump Ordering Information

A complete pump order number contains thirteen characters based on the specified pump materials listed below.

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

**P400** For all P400 Pumps

### Pump Version (Digit 5)

**N** NPT ports  
**M** Metric (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  
**080** 80:1  
**060** 60:1  
**050** 50:1  
**040** 40:1  
**030** 30:1  
**025** 25:1  
**020** 20:1  
**015** 15:1  
**010** 10:1  
**007** 7.5:1  
**005** 5:1

### Base Plate (Digit 13)

**C** Carbon Steel (painted)  
**S** Stainless Steel

## Motors

### Description Model Number

1800 RPM, 3Ø, 230 VAC, 56C TENV  
1000 : 1 Turndown  
1/4 HP .....M25TE18-3P56C  
1/2 HP .....M50TE18-3P56C

1800 RPM, 3Ø, 230 VAC, 56C TEFC  
20 : 1 Turndown  
3/4 HP .....M75TE18-3P56C-P  
1 HP .....M100TE18-3P56C-P  
1-1/2 HP .....M150TE18-3P56C-P (\*)

3600 RPM, 3Ø, 230 VAC, 56C TEFC  
2 : 1 Turndown  
1 HP .....M100TE36-3P56C  
1-1/2 HP .....M150TE36-3P56C  
2 HP .....M200TE36-3P56C  
3 HP .....M300TE36-3P56C

(\*) Available in 2:1 turndown ratio only.

## Controllers

### Description Model Number

115VAC 1Ø Input / 230VAC 3Ø Output  
For up to 1 HP .....C100IP-1P3P-115

230VAC 1Ø Input / 230VAC 3Ø Output  
For up to 1/2 HP .....C50N1-1P3P-230  
For up to 1 HP .....C100N1-1P3P-230  
For up to 2 HP .....C200N1-1P3P-230  
For up to 3 HP .....C300N1-1P3P-230

230VAC 3Ø Input / 230VAC 3Ø Output  
For up to 1/2 HP .....C50N1-3P3P-230  
For up to 1 HP .....C100N1-3P3P-230  
For up to 2 HP .....C200N1-3P3P-230  
For up to 3 HP .....C300N1-3P3P-230

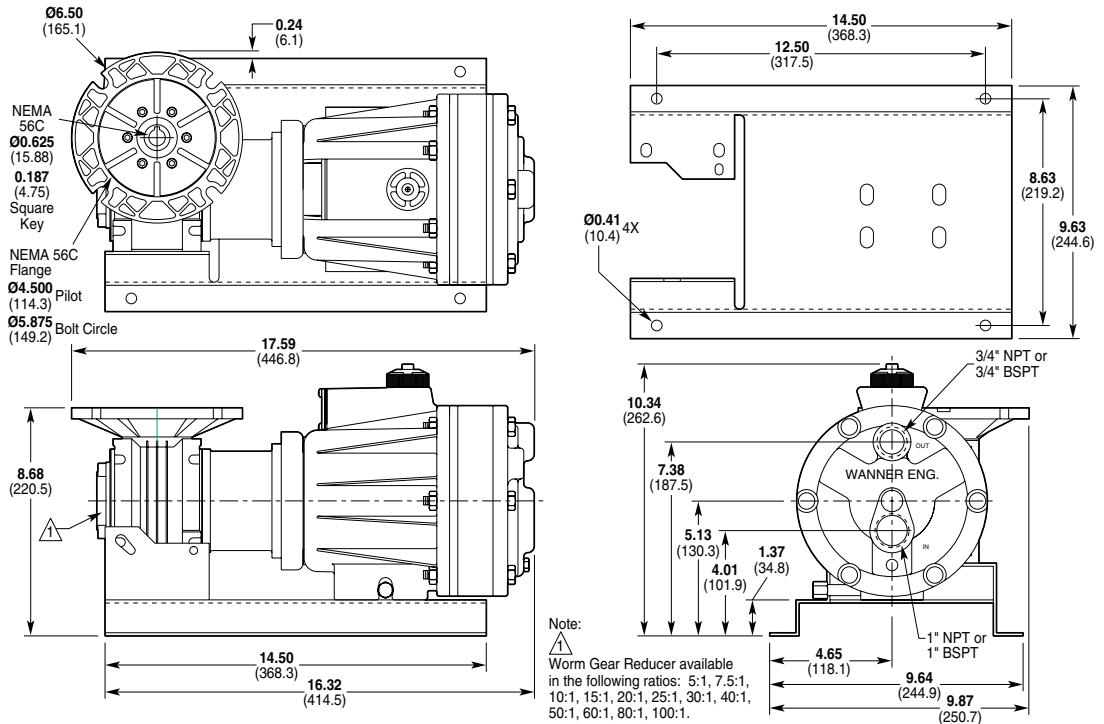
460VAC 3Ø Input / 460VAC 3Ø Output  
For up to 1 HP .....C100N1-3P3P-460  
For up to 2 HP .....C200N1-3P3P-460  
For up to 3 HP .....C300N1-3P3P-460

# P400 Pump Dimensions

## Models with Metallic Pumping Head

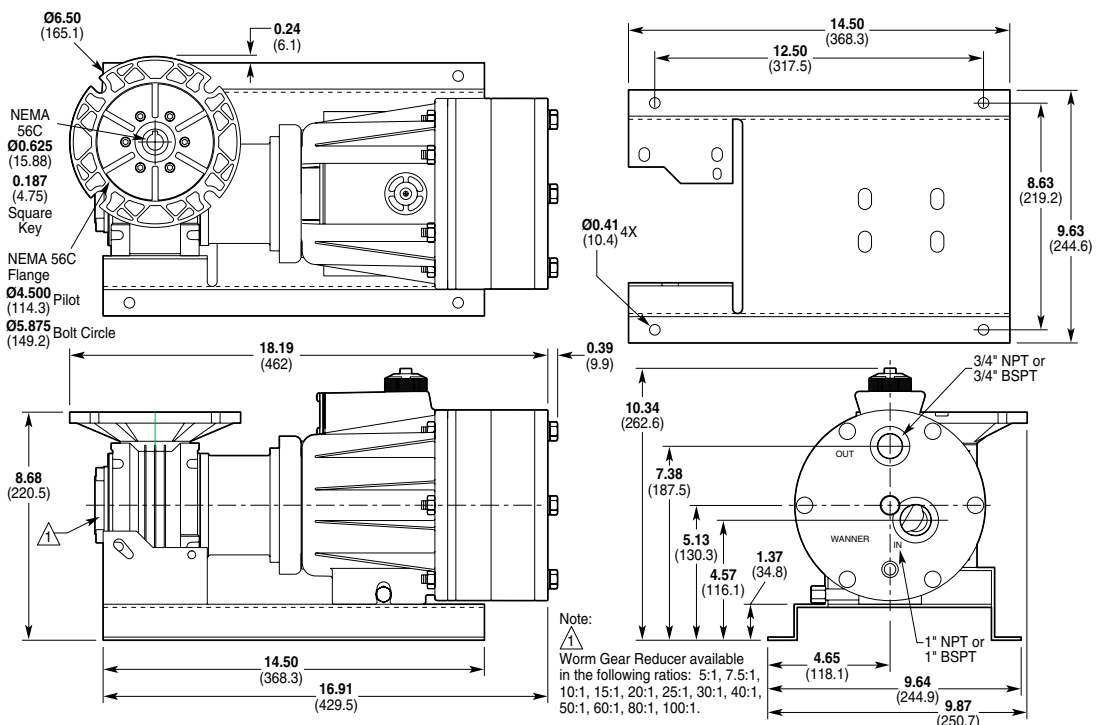
Inches  
(mm)

**316 Stainless Steel**  
**Cast Iron**  
**Hastelloy® C**



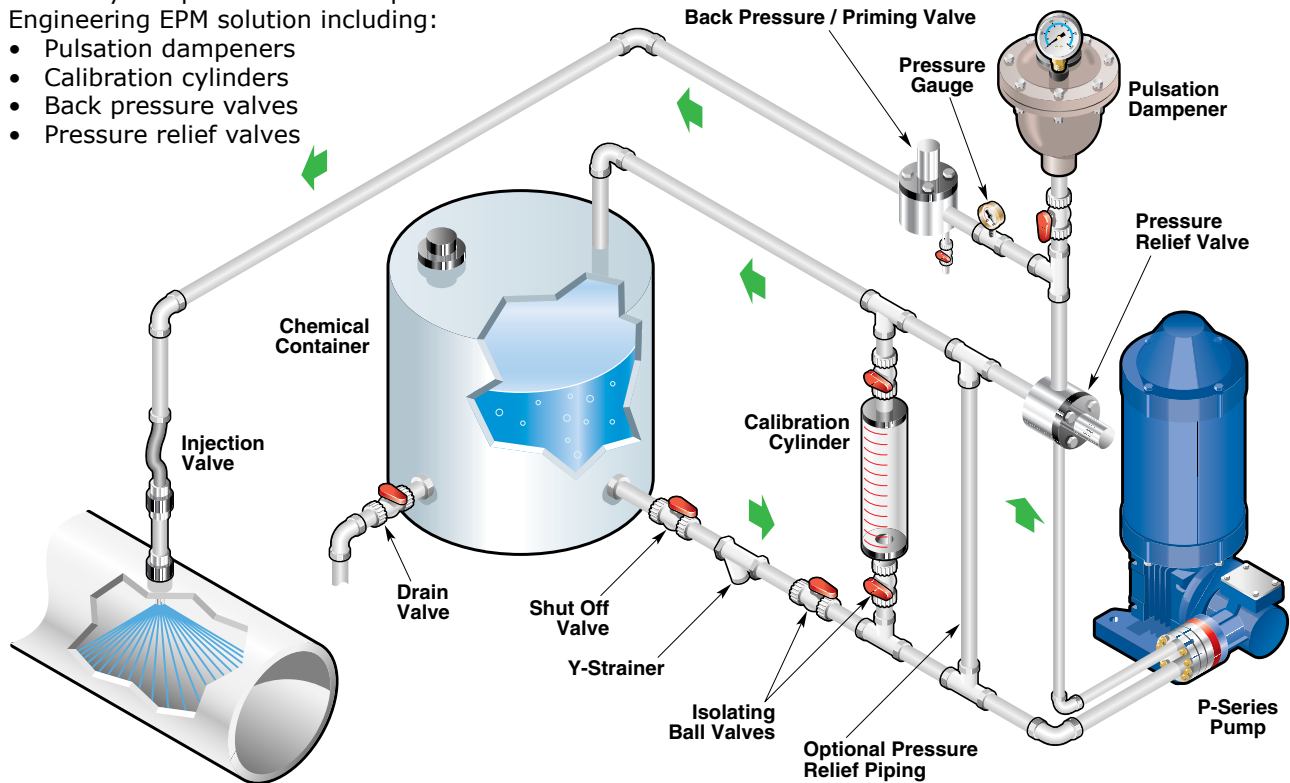
## Models with Non-Metallic Pump Head

**Kynar**  
**Polypropylene**



P Series Pumps and Controls are just one of the many components of a complete Wanner Engineering EPM solution including:

- Pulsation dampeners
- Calibration cylinders
- Back pressure valves
- Pressure relief valves



**Contact Your Wanner Sales Representative or visit our website at [www.epmpump.com](http://www.epmpump.com) for complete information on our other EPM solution products...**

**Pulsation Dampeners**



**Calibration Cylinders**



**Pressure Relief and Back Pressure Valves**



 **Wanner Engineering, Inc.**  
 1204 Chestnut Avenue, Minneapolis, MN 55403 USA  
 (612) 332-5681 FAX (612) 332-6937  
 Toll Free FAX (USA only) (800) 332-6812  
 Email: [sales@wannereng.com](mailto:sales@wannereng.com)  
 Website: [www.epmpump.com](http://www.epmpump.com)

 **Wanner International Ltd.**  
 Units 8 & 9, Fleet Business Park  
 Sandy Lane  
 Church Crookham, Hampshire GU52 8BF, England  
 Tel +(44) 01252 816847  
 FAX Tel +(44) 01252 629242  
 Email: [sales@wannerint.com](mailto:sales@wannerint.com)