

## P500

### Doseringspump

#### P500MSGSSD10H PUMP WITH GEARBOX AND BASEPLATE

- Flöde 7 - 1600 l/h
- Tryck max. 172 bar
- Metallutförande
- Tätningslös och klarar torrkörning



HYDRA-CELL®  
 SEAL-LESS PUMP TECHNOLOGIES

### Produktinformation

Wanner HydraCell är en serie mycket robusta membranpumpar speciellt lämpade för dosering även vid höga tryck och svåra pumpmedier, som också kan vara slitande.

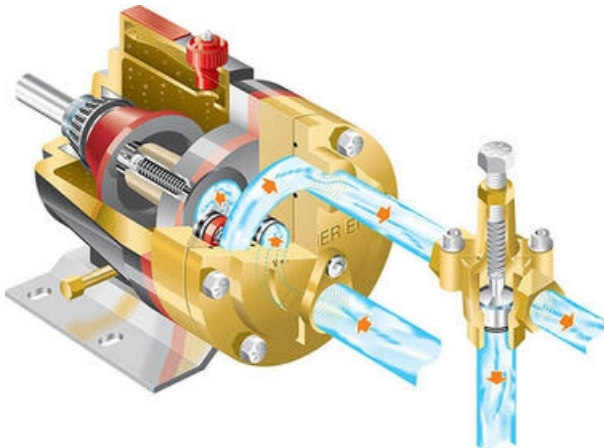
Pumparna har ingen genomgående axel med tätningar och mediet kommer aldrig i kontakt med mekanismen.

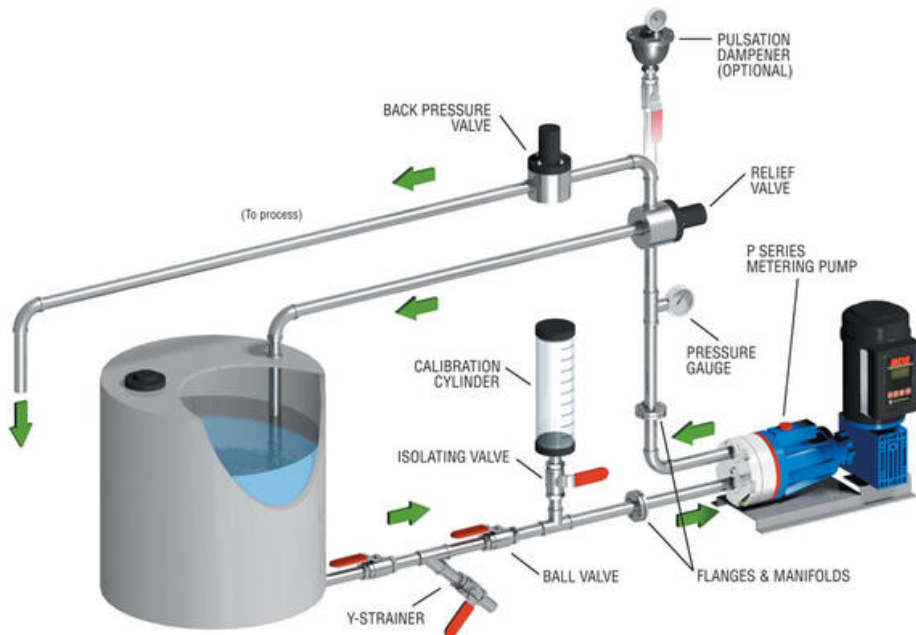
Membranen är avlastade med jämnt tryck över hela ytan, vilket ger dem mycket lång livslängd.

HydraCell-pumparna som arbetar enligt förträngningsprincipen, energisnåla och torrkörningssäkra.

Hydra-Cell pumparna möter de flesta och överträffar flara av kraven i standarden för doseringspumpar API 675.

De finns i många olika materialkombinationer och går även att få i ATEX-utförande för explosionsfarlig miljö.





Exempel på installation

Pumphus	Mässing, 316L, Hastelloy C
Membran O-ringar	Aflas, FKM, Buna-N
Ventilsäten	Nitronic 50, Hastelloy C, Tungstenkarbid
Ventiler	Nitronic 50, Hastelloy C, Tungstenkarbid
Fjäder	Elgiloy, Hastelloy C
Fjäderhållare	Hastelloy C
Flöde	3 - 1600 l/h
Tryck	Max. 173 bar
Inloppstryck	Max. 17 bar
Temperatur*	Max. +120 °C (Beroende på materialval m.m.)*
Partikelstorlek	Max. 0,4 mm
Viskositet**	Max. 1500 cP (Beroende på installation och varvtal)**
ATEX***	EEx II 2G k ia IIB T4 (max. mediatemp. 90 °C, omgivningstemp - 10 till 40 °C) EEx II 3G k IIC T4 (max. mediatemp. 90 °C, omgivningstemp - 10 till 40 °C)
Kel-Cell	Nej
Anslutningar (In/Ut)	1/2" BSPT / 3/8" BSPT (NPT eller flänsar på förfrågan)
Rotationsriktning	Valfri
Oljevolym hydrauldel	ca. 2,1 l (Oljenivån skall vara ca. 1 - 2 cm under helt fylld hydrauldel)
Vikt	73 kg

\* För applikationer där temperaturen går under +10 eller över +80°C kontakta oss.

\*\* Vid viskositeter över 500 cP kontakta oss.

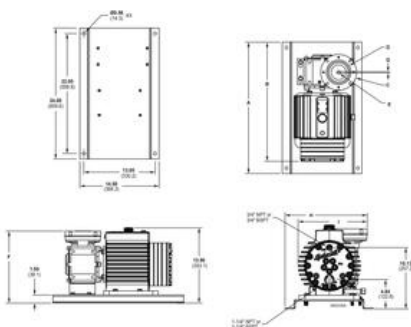
\*\*\* För applikationer i explosionsfarlig miljö kontakta oss.

# Teknisk data

Particle size	Max. 0,5mm mm
Vikt	88,5 kg
Material Membran	FKM
Rotation	Valfri
Material Ventilfjädrar	Elgiloy
Axeldimension	Hållaxel 28 mm
Temperaturområde till	120 °C
Olja	Livsmedelsolja H1 (K)
Material Ventilsiäten	SS 316L
Tryck max	172 bar
Flöde max	402 l/h
Viskositet max	1500 cP
Utväxling	10:1 - IEC 112-B14
Anslutning utlopp	3/4" BSPT
Material Ventiler	Nitronic 50
Systemtryck max	34 bar
Material Bottenplatta	Epoxylackerat stål
Oljevolym Hydrauldel	2,1 l
Anslutning inlopp	1 1/4" BSPT
Material Fjäderhållare	Hastelloy C
Material Pumphus	SS 316L

## P500 Dimensions

P500 Models with Metallic Pumping Head

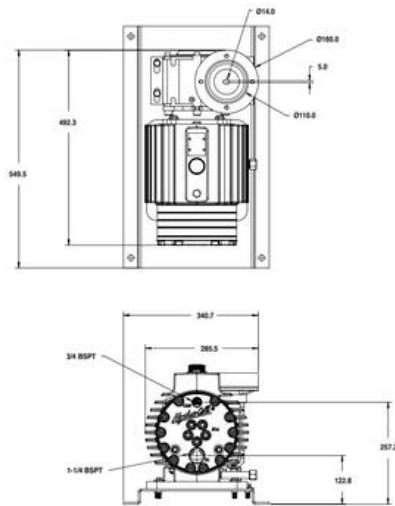


Dimensions in Inches (Millimeters)

Input Flange Size	A	B	C	D	E	F	G	H	I
1/2" NPT	11.75 (299.2)	14.25 (361.8)	17.50 (442.8)	21.00 (533.4)	24.50 (622.3)	28.00 (711.2)	31.50 (800.1)	35.00 (889.0)	38.50 (977.9)
3/4" NPT	13.75 (349.3)	16.25 (412.8)	19.50 (495.3)	23.00 (584.2)	26.50 (673.1)	30.00 (762.0)	33.50 (850.9)	37.00 (939.8)	40.50 (1028.7)
1" NPT	15.75 (400.3)	18.25 (462.8)	21.50 (545.3)	25.00 (634.2)	28.50 (723.1)	32.00 (812.0)	35.50 (900.9)	39.00 (989.8)	42.50 (1078.7)
1 1/2" NPT	19.75 (500.3)	22.25 (562.8)	25.50 (645.3)	29.00 (734.2)	32.50 (823.1)	36.00 (912.0)	39.50 (1000.9)	43.00 (1089.8)	46.50 (1178.7)
2" NPT	23.75 (600.3)	26.25 (662.8)	29.50 (745.3)	33.00 (834.2)	36.50 (923.1)	40.00 (1012.0)	43.50 (1100.9)	47.00 (1189.8)	50.50 (1278.7)
2 1/2" NPT	27.75 (700.3)	30.25 (762.8)	33.50 (845.3)	37.00 (934.2)	40.50 (1023.1)	44.00 (1112.0)	47.50 (1200.9)	51.00 (1289.8)	54.50 (1378.7)
3" NPT	31.75 (800.3)	34.25 (862.8)	37.50 (945.3)	41.00 (1034.2)	44.50 (1123.1)	48.00 (1212.0)	51.50 (1300.9)	55.00 (1389.8)	58.50 (1478.7)
3 1/2" NPT	35.75 (900.3)	38.25 (962.8)	41.50 (1045.3)	45.00 (1134.2)	48.50 (1223.1)	52.00 (1312.0)	55.50 (1400.9)	59.00 (1489.8)	62.50 (1578.7)
4" NPT	39.75 (1000.3)	42.25 (1062.8)	45.50 (1145.3)	49.00 (1234.2)	52.50 (1323.1)	56.00 (1412.0)	59.50 (1500.9)	63.00 (1589.8)	66.50 (1678.7)
4 1/2" NPT	43.75 (1100.3)	46.25 (1162.8)	49.50 (1245.3)	53.00 (1334.2)	56.50 (1423.1)	60.00 (1512.0)	63.50 (1600.9)	67.00 (1689.8)	70.50 (1778.7)
5" NPT	47.75 (1200.3)	50.25 (1262.8)	53.50 (1345.3)	57.00 (1434.2)	60.50 (1523.1)	64.00 (1612.0)	67.50 (1700.9)	71.00 (1789.8)	74.50 (1878.7)
5 1/2" NPT	51.75 (1300.3)	54.25 (1362.8)	57.50 (1445.3)	61.00 (1534.2)	64.50 (1623.1)	68.00 (1712.0)	71.50 (1800.9)	75.00 (1889.8)	78.50 (1978.7)
6" NPT	55.75 (1400.3)	58.25 (1462.8)	61.50 (1545.3)	65.00 (1634.2)	68.50 (1723.1)	72.00 (1812.0)	75.50 (1900.9)	79.00 (1989.8)	82.50 (2078.7)
6 1/2" NPT	59.75 (1500.3)	62.25 (1562.8)	65.50 (1645.3)	69.00 (1734.2)	72.50 (1823.1)	76.00 (1912.0)	79.50 (2000.9)	83.00 (2089.8)	86.50 (2178.7)
7" NPT	63.75 (1600.3)	66.25 (1662.8)	69.50 (1745.3)	73.00 (1834.2)	76.50 (1923.1)	80.00 (2012.0)	83.50 (2100.9)	87.00 (2189.8)	90.50 (2278.7)
7 1/2" NPT	67.75 (1700.3)	70.25 (1762.8)	73.50 (1845.3)	77.00 (1934.2)	80.50 (2023.1)	84.00 (2112.0)	87.50 (2200.9)	91.00 (2289.8)	94.50 (2378.7)
8" NPT	71.75 (1800.3)	74.25 (1862.8)	77.50 (1945.3)	81.00 (2034.2)	84.50 (2123.1)	88.00 (2212.0)	91.50 (2300.9)	95.00 (2389.8)	98.50 (2478.7)
8 1/2" NPT	75.75 (1900.3)	78.25 (1962.8)	81.50 (2045.3)	85.00 (2134.2)	88.50 (2223.1)	92.00 (2312.0)	95.50 (2400.9)	99.00 (2489.8)	102.50 (2578.7)
9" NPT	79.75 (2000.3)	82.25 (2062.8)	85.50 (2145.3)	89.00 (2234.2)	92.50 (2323.1)	96.00 (2412.0)	99.50 (2500.9)	103.00 (2589.8)	106.50 (2678.7)
9 1/2" NPT	83.75 (2100.3)	86.25 (2162.8)	89.50 (2245.3)	93.00 (2334.2)	96.50 (2423.1)	100.00 (2512.0)	103.50 (2600.9)	107.00 (2689.8)	110.50 (2778.7)
10" NPT	87.75 (2200.3)	90.25 (2262.8)	93.50 (2345.3)	97.00 (2434.2)	100.50 (2523.1)	104.00 (2612.0)	107.50 (2700.9)	111.00 (2789.8)	114.50 (2878.7)
10 1/2" NPT	91.75 (2300.3)	94.25 (2362.8)	97.50 (2445.3)	101.00 (2534.2)	104.50 (2623.1)	108.00 (2712.0)	111.50 (2800.9)	115.00 (2889.8)	118.50 (2978.7)
11" NPT	95.75 (2400.3)	98.25 (2462.8)	101.50 (2545.3)	105.00 (2634.2)	108.50 (2723.1)	112.00 (2812.0)	115.50 (2900.9)	119.00 (2989.8)	122.50 (3078.7)
11 1/2" NPT	99.75 (2500.3)	102.25 (2562.8)	105.50 (2645.3)	109.00 (2734.2)	112.50 (2823.1)	116.00 (2912.0)	119.50 (3000.9)	123.00 (3089.8)	126.50 (3178.7)
12" NPT	103.75 (2600.3)	106.25 (2662.8)	109.50 (2745.3)	113.00 (2834.2)	116.50 (2923.1)	120.00 (3012.0)	123.50 (3100.9)	127.00 (3189.8)	130.50 (3278.7)

## Representative Drawings (mm)

### Metallic Pump Heads



## Performance - Flow Capacities and Pressure Ratings

For Synchronous Speed, Self-cooled Motors  
L/hr Maximum Flow at Designated Pressure

L/hr Metallic Pump Heads Only				Pump RPM	Gear Ratio	Motor RPM
7 Bar	34 Bar	103 Bar	132 Bar			
55.1	55.5	49.7	42.4	25	25	601
66.2	64.4	60.5	51.9	30	30	501
78.3	81.2	74.6	63.4	37.5	37.5	401
111.9	108.2	102.0	87.4	50	50	301
133.3	130.8	124.2	112.2	60	60	251
161.8	155.9	149.1	128.1	75	75	201
223.8	219.1	209.5	180.6	100	100	151
339.3	329.7	315.2	269.2	150	150	101
447.8	437.3	417.0	359.0	200	200	75.1
671.8	656.1	624.0	N/A	300	3.1	100
895.4	881.1	N/A	N/A	400	2.5:1	3000
1345.5	1313.5	N/A	N/A	600	5:1	

- Notes:**
- The motor kW are based on ambient temperature conditions of 40 °C. For ambient temperatures above 40 °C, lower motor power is required.
  - Capacity data is shown for pumps with elastomeric diaphragms. Contact factory for performance characteristics of pumps with PTFE diaphragms.
  - Contact factory for performance specifications.
  - Based on using 5:1 ratios.
  - Maximum continuous motor speed is 150 rpm at full pressure.
  - The maximum in reduced pressure ratings, please contact factory for performance.

For 10:1 Turndown, Self-cooled Motors  
L/hr Maximum Flow at Designated Pressure

L/hr Metallic Pump Heads Only				Pump RPM	Gear Ratio	Motor RPM
7 Bar	34 Bar	103 Bar	132 Bar			
55.1	55.5	49.7	42.4	25	25	601
66.2	64.4	60.5	51.9	30	30	501
78.3	81.2	74.6	63.4	37.5	37.5	401
111.9	108.2	102.0	87.4	50	50	301
133.3	130.8	124.2	112.2	60	60	251
161.8	155.9	149.1	128.1	75	75	201
223.8	219.1	209.5	180.6	100	100	151
339.3	329.7	315.2	269.2	150	150	101
447.8	437.3	417.0	N/A	200	3.5:1	
671.8	656.1	N/A	N/A	300	5:1	
895.4	N/A	N/A	N/A	400	2.5:1	
1345.5	N/A	N/A	N/A	600	5:1	

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## P500 Specifications (Cont'd)

Performance Maximum Flow at Designated Pressure - Imperial \*

Metallic Pump Heads Only				Pump RPM	Gear Ratio	Motor RPM
7 bar	34 bar	103 bar	132 bar			
55.1	55.5	49.7	42.4	25	25	601
66.2	64.4	60.5	51.9	30	30	501
78.3	81.2	74.6	63.4	37.5	37.5	401
111.9	108.2	102.0	87.4	50	50	301
133.3	130.8	124.2	112.2	60	60	251
161.8	155.9	149.1	128.1	75	75	201
223.8	219.1	209.5	180.6	100	100	151
339.3	329.7	315.2	269.2	150	150	101
447.8	437.3	417.0	N/A	200	3.5:1	
671.8	656.1	N/A	N/A	300	5:1	
895.4	N/A	N/A	N/A	400	2.5:1	
1345.5	N/A	N/A	N/A	600	5:1	

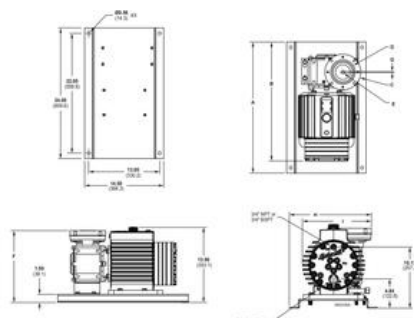
\*Capacity data shown is for pumps with elastomeric diaphragms. Contact factory for performance characteristics of pumps with PTFE diaphragms.

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7 bar	34 bar	103 bar	132 bar			
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66.2	64.4	60.5	51.9	30	30	501
78.3	81.2	74.6	63.4	37.5	37.5	401
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133.3	130.8	124.2	112.2	60	60	251
161.8	155.9	149.1	128.1	75	75	201
223.8	219.1	209.5	180.6	100	100	151
339.3	329.7	315.2	269.2	150	150	101
447.8	437.3	417.0	N/A	200	3.5:1	
671.8	656.1	N/A	N/A	300	5:1	
895.4	N/A	N/A	N/A	400	2.5:1	
1345.5	N/A	N/A	N/A	600	5:1	

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

## P500 Dimensions

P500 Models with Metallic Pumping Head

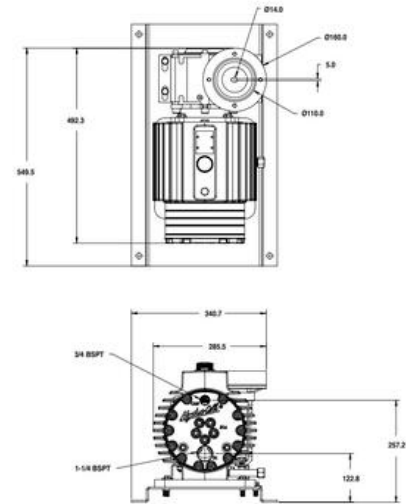


Dimensions in Inches (Millimeters)

Input Frame Size	A	B	C	D	E	F	G	H	I
600mm (23.6")	217.8 (8.58")	167.8 (6.61")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")
600mm (23.6")	217.8 (8.58")	167.8 (6.61")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")
600mm (23.6")	217.8 (8.58")	167.8 (6.61")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")
600mm (23.6")	217.8 (8.58")	167.8 (6.61")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")
600mm (23.6")	217.8 (8.58")	167.8 (6.61")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")
600mm (23.6")	217.8 (8.58")	167.8 (6.61")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")
600mm (23.6")	217.8 (8.58")	167.8 (6.61")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")
600mm (23.6")	217.8 (8.58")	167.8 (6.61")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")
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600mm (23.6")	217.8 (8.58")	167.8 (6.61")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")	42.5 (1.67")

## Representative Drawings (mm)

Metallic Pump Heads



## Performance - Flow Capacities and Pressure Ratings

For Synchronous Speed, Self-cooled Motors  
L/hr Maximum Flow at Designated Pressure

L/hr Metallic Pump Heads Only				Pump RPM	Gear Ratio	Motor RPM
7 Bar	34 Bar	103 Bar	132 Bar			
55.1	55.5	49.7	42.4	25	25	601
66.2	64.4	60.5	51.9	30	30	501
78.3	81.2	74.6	63.4	37.5	37.5	401
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447.8	437.3	417.0	N/A	200	3.5:1	
671.8	656.1	N/A	N/A	300	5:1	
895.4	881.1	N/A	N/A	400	2.5:1	
1345.5	1313.5	N/A	N/A	600	5:1	

- Notes:**
- The motor kW are based on ambient temperature conditions of 40 °C. For ambient temperatures above 40 °C, lower motor power is required.
  - Capacity data is shown for pumps with elastomeric diaphragms. Contact factory for performance characteristics of pumps with PTFE diaphragms.
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  - Based on using 5:1 ratios.
  - Maximum continuous motor speed is 150 rpm at full pressure.
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For 10:1 Turndown, Self-cooled Motors  
L/hr Maximum Flow at Designated Pressure

L/hr Metallic Pump Heads Only				Pump RPM	Gear Ratio	Motor RPM
7 Bar	34 Bar	103 Bar	132 Bar			
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66.2	64.4	60.5	51.9	30	30	501
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111.9	108.2	102.0	87.4	50	50	301
133.3	130.8	124.2	112.2	60	60	251
161.8	155.9	149.1	128.1	75	75	201
223.8	219.1	209.5	180.6	100	100	151
339.3	329.7	315.2	269.2	150	150	101
447.8	437.3	417.0	N/A	200	3.5:1	
671.8	656.1	N/A	N/A	300	5:1	
895.4	N/A	N/A	N/A	400	2.5:1	
1345.5	N/A	N/A	N/A	600	5:1	

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447.8	437.3	417.0	N/A	200	3.5:1	
671.8	656.1	N/A	N/A	300	5:1	
895.4	N/A	N/A	N/A	400	2.5:1	
1345.5	N/A	N/A	N/A	600	5:1	

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Metallic Pump Heads Only				Pump RPM	Gear Ratio	Motor RPM
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55.1	55.5	49.7	42.4	25	25	601
66.2	64.4	60.5	51.9	30	30	501
78.3	81.2	74.6	63.4	37.5	37.5	401
111.9	108.2	102.0	87.4	50	50	301
133.3	130.8	124.2	112.2	60	60	251
161.8	155.9	149.1	128.1	75	75	201
223.8	219.1	209.5	180.6	100	100	151
339.3	329.7	315.2	269.2	150	150	101
447.8	437.3	417.0	N/A	200	3.5:1	
671.8	656.1	N/A	N/A	300	5:1	
895.4	N/A	N/A	N/A	400	2.5:1	
1345.5	N/A	N/A	N/A	600	5:1	

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