

## 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.

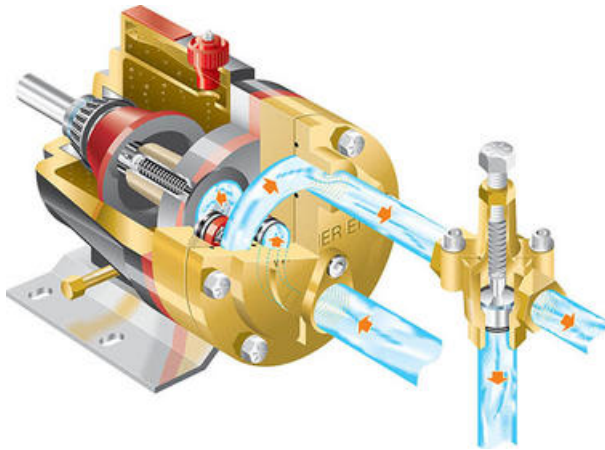
Pumparna har ingen genomgående axel med tätningar och mediet kommer aldrig i kontakt med mekanismen.

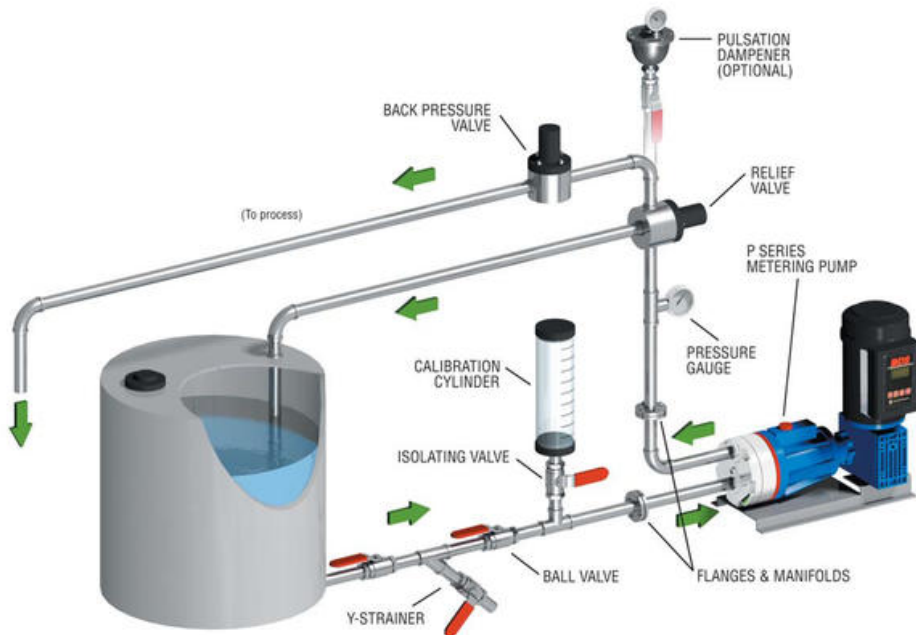
Membranen är avlastade med jämnt tryck över hela ytan, vilket ger dem mycket lång livslängd.

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***	Ex II 2G k ia IIB T4 (max. mediatemp. 90 °C, omgivningstemp - 10 till 40 °C) Ex 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.

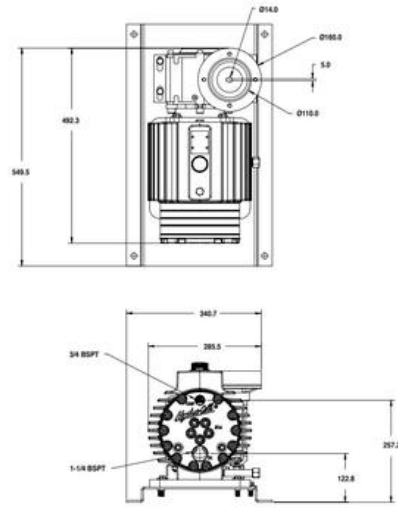
\*\* Vid viskositeter över 500 cP kontakta oss.

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



## 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	102 Bar	132 Bar			
55.1	55.5	49.7	41.4	25	60/1	1500
66.2	64.4	60.5	51.9	30	50/1	
81.3	81.2	74.4	67.4	37.5	40/1	
111.9	108.7	100.0	91.3	50	30/1	
133.7	130.8	124.2	117.7	60	25/1	
161.8	155.9	145.1	144.1	75	20/1	
223.3	219.3	209.5	199.6	100	15/1	
335.3	329.7	315.3	304.2	150	10/1	
447.3	439.9	423.0	409.0	200	7.5/1	
671.4	661.1	646.6	N/A	300	5/1	
805.4	801.1	N/A	N/A	400	3.5/1	3000
1345.1	1331.5	N/A	N/A	600	5/1	

Required Motor kW  
 0.18 0.27 0.36 0.75 1.1 1.8 3.0

- Notes:**
- The motor kW are based on ambient temperature conditions of 40°C. For ambient temperatures above 40°C, motor output ratings are reduced.
  - Capacity data is shown for pumps with elastomeric diaphragms. Consult factory for performance characteristics of pumps with PTFE diaphragms.
  - Consult factory for performance specifications.
  - Based on using 50% motor.
  - Maximum continuous motor speed is 1500 rpm at full pressure. Maximum continuous motor speed is 3000 rpm at full pressure.
  - The information is reduced pressure heads, please contact factory for more information.

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	102 Bar	132 Bar			
55.1	55.5	49.7	41.4	25	60/1	1500
66.2	64.4	60.5	51.9	30	50/1	
81.3	81.2	74.4	67.4	37.5	40/1	
111.9	108.7	100.0	91.3	50	30/1	
133.7	130.8	124.2	117.7	60	25/1	
161.8	155.9	145.1	144.1	75	20/1	
223.3	219.3	209.5	199.6	100	15/1	
335.3	329.7	315.3	N/A	150	10/1	
447.3	439.9	N/A	N/A	200	7.5/1	
671.4	N/A	N/A	N/A	300	5/1	
805.4	N/A	N/A	N/A	400	3.5/1	3000
1345.1	N/A	N/A	N/A	600	5/1	

Required Motor kW  
 0.27 0.36 0.75 1.1 1.8 3.0

- Notes:**
- The motor kW are based on ambient temperature conditions of 40°C. For ambient temperatures above 40°C, motor output ratings are reduced. Motors may be required. Please contact factory for more information.
  - Capacity data is shown for pumps with elastomeric diaphragms. Consult factory for performance characteristics of pumps with PTFE diaphragms.
  - Consult factory for performance specifications.
  - Based on using 50% motor.
  - Maximum continuous motor speed is 1500 rpm at full pressure. Maximum continuous motor speed is 3000 rpm at full pressure.
  - The information is reduced pressure heads, please contact factory for more information.

See Page 4 for Recommended Flow Rate Controller

## P500 Specifications (Cont'd)

Performance Maximum Flow at Designated Pressure - Imperial \*

Metallic Pump Heads (gpm)				Pump RPM	Gear Ratio	Motor RPM
7 Bar	34 Bar	102 Bar	132 Bar			
1.46 (5.50)	1.50 (5.68)	1.33 (4.86)	1.10 (4.00)	25	60/1	1500
1.75 (6.50)	1.70 (6.10)	1.57 (5.60)	1.33 (4.80)	30	50/1	
2.17 (7.80)	2.13 (7.60)	1.97 (7.00)	1.77 (6.30)	37.5	40/1	
2.98 (10.7)	2.91 (10.5)	2.72 (9.80)	2.47 (8.80)	50	30/1	
3.57 (12.8)	3.47 (12.5)	3.26 (11.7)	3.00 (10.8)	60	25/1	
4.37 (15.7)	4.24 (15.3)	3.97 (14.3)	3.71 (13.3)	75	20/1	
5.93 (21.5)	5.78 (20.9)	5.44 (19.8)	5.17 (18.6)	100	15/1	
8.86 (32.0)	8.68 (31.3)	8.17 (29.8)	7.85 (28.3)	150	10/1	
11.9 (43.0)	11.6 (42.0)	10.9 (40.0)	10.3 (37.5)	200	7.5/1	
17.6 (63.5)	17.2 (62.5)	16.2 (59.5)	15.3 (55.5)	300	5/1	
26.5 (97.0)	25.9 (94.5)	24.5 (89.5)	23.4 (85.0)	400	3.5/1	3000
43.9 (159.0)	43.3 (157.0)	41.4 (149.5)	39.7 (143.0)	600	5/1	

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

Performance Maximum Flow at Designated Pressure - Metric \*

Metallic Pump Heads (gpm)				Pump RPM	Gear Ratio	Motor RPM
7 Bar	34 Bar	102 Bar	132 Bar			
0.14 (0.37)	0.14 (0.37)	0.12 (0.32)	0.10 (0.26)	25	60/1	1500
0.18 (0.69)	0.18 (0.69)	0.16 (0.62)	0.13 (0.51)	30	50/1	
0.23 (0.87)	0.22 (0.83)	0.20 (0.75)	0.18 (0.67)	37.5	40/1	
0.31 (1.18)	0.30 (1.12)	0.28 (1.05)	0.25 (0.93)	50	30/1	
0.38 (1.41)	0.37 (1.35)	0.35 (1.27)	0.32 (1.18)	60	25/1	
0.51 (1.90)	0.49 (1.81)	0.46 (1.72)	0.43 (1.61)	75	20/1	
0.69 (2.58)	0.67 (2.49)	0.63 (2.35)	0.60 (2.24)	100	15/1	
1.01 (3.75)	0.98 (3.58)	0.93 (3.40)	0.89 (3.26)	150	10/1	
1.35 (4.80)	1.31 (4.71)	1.25 (4.54)	1.19 (4.33)	200	7.5/1	
1.99 (7.18)	1.94 (7.00)	1.85 (6.70)	1.77 (6.40)	300	5/1	
2.91 (10.7)	2.85 (10.4)	2.73 (10.0)	2.63 (9.70)	400	3.5/1	3000
4.39 (15.9)	4.33 (15.6)	4.14 (14.9)	3.97 (14.3)	600	5/1	

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