

P500

Doseringspump

P500MSGSSB15H PUMP WITH GEARBOX AND BASEPLATE



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

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.

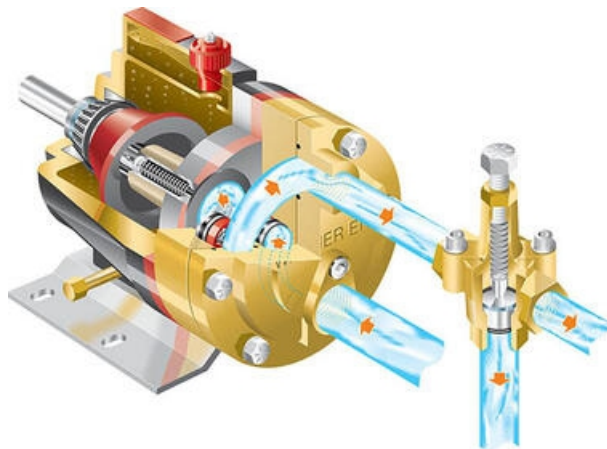
Pumparna har ingen genomgående axel med tätningar och mediet kommer aldrig i kontakt med mekanismen.

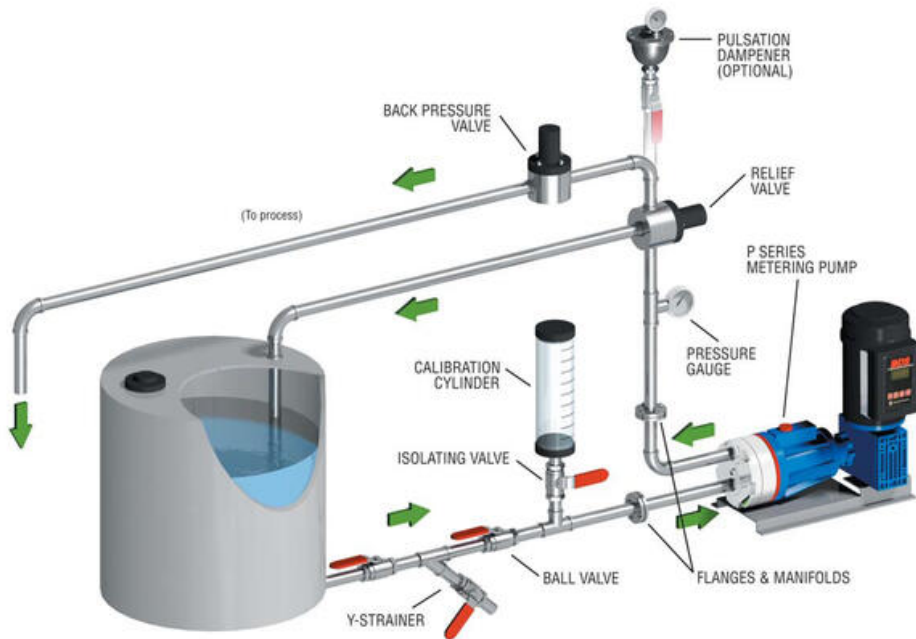
Membranen är avlastade med jämnt tryck över hela ytan, vilket ger dem mycket lång livslängd.

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.

Flöde max	267 l/h
Tryck max	172 bar
Systemtryck max	34 bar
Anslutning inlopp	1 1/4" BSPT
Anslutning utlopp	3/4" BSPT
Material Bottenplatta	Epoxlackerat stål
Material Fjäderhållare	Hastelloy C
Material Membran	FKM
Material Pumphus	SS 316L
Material Ventiler	Nitronic 50
Material Ventilfjädrar	Elgiloy
Material Ventilsäten	SS 316L
Axeldimension	Hållaxel 19 mm
Rotation	Valfri
Utväxling	15:1 - IEC 80-B5
Temperaturområde till	120 °C
Viskositet max	1500 cP
Olja	Livsmedelsolja H1 (K)
Oljevolym Hydrauldel	2,1 l
1098_Particle size (mm)	Max. 0,5mm
Vikt	88,5 kg

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L/hr Maximum Flow at Design Pressure						
Hydraulic Metalic Pump Heads Only			Pump	Ratio	Motor	
7 Bar	10 Bar	12 Bar	152 Bar	SPM	Ratio	Motor
25.1	35.5	42.7	7.2	25	60/1	
66.2	94.4	112	12	80/1		
79.1	113	135.9	15	100/1		
111.8	168.7	202.9	20	130/1		
133.9	198.0	238.2	22	160/1		1900
187.5	269.3	318.1	30	200/1		
225.5	296.9	358.5	40	250/1		
335.5	450	539.2	N/A	330/1		
445.5	630	748.8	N/A	440/1		
555.5	810	958.4	N/A	550/1		
665.5	N/A	N/A	N/A	660/1		
775.5	N/A	N/A	N/A	770/1		3000
Required Motor kW						
0.87	1.25	1.52	1.1	1.1	1.1	

- 1. The static test are based on ambient temperature conditions in the air at 20°C, the ambient temperature should be 20°C, please contact Wayne International.
- 2. Capacity data is shown for pumps with electronic diaphragms. Contact factory for performance characteristics of pumps with PTFE diaphragms.
- 3. Contact factory for performance specifications.
- 4. Based on using 50% duty.
- 5. Maximum continuous heater rated by rated size on full pressure.
- 6. Use maximum on isolated pressure status, please contact

- 1. The main WB are based on ambient temperature conditions up to 25 °C. For ambient temperatures above 25 °C, force control function may be required. Please contact Isocom International.
- 2. Capacity data is shown for pumps with aluminum diaphragms. Contact Isocom for performance characteristics of pumps with PTFE diaphragms.
- 3. Contact Isocom for performance specifications.
- 4. Based on using 100 micron.
- 5. Maximum continuous motor speed is only 1/3 of full pressure.
- 6. For intermittent or reduced pressure service, please contact Isocom International.

P500 Specifications (Cont'd)

Performance Maximum Flow at Designated Pressure - Imperial *

Metallic Pump Heads (gpi)		Pump		Gear		Motor
100 psi	150 psi	200 psi	250 psi	Ratio	rpm	
17.48 (202)	18.38 (222)	19.15 (232)	19.47 (232)	30	400	1000
20.97 (202)	21.43 (222)	21.75 (232)	22.07 (232)	30	400	
24.39 (202)	25.73 (232)	26.25 (232)	26.67 (232)	40	400	
28.27 (202)	29.47 (232)	30.00 (232)	30.42 (232)	50	400	
32.27 (202)	33.47 (232)	34.00 (232)	34.42 (232)	72	200	
36.27 (202)	37.47 (232)	38.00 (232)	38.42 (232)	90	200	
40.27 (202)	41.47 (232)	42.00 (232)	42.42 (232)	100	200	
44.27 (202)	45.47 (232)	46.00 (232)	46.42 (232)	120	100	
48.27 (202)	49.47 (232)	50.00 (232)	50.42 (232)	140	100	
52.27 (202)	53.47 (232)	54.00 (232)	54.42 (232)	160	100	
56.27 (202)	57.47 (232)	58.00 (232)	58.42 (232)	200	50	3000
60.27 (202)	61.47 (232)	62.00 (232)	62.42 (232)	240	50	
64.27 (202)	65.47 (232)	66.00 (232)	66.42 (232)	280	50	
68.27 (202)	69.47 (232)	70.00 (232)	70.42 (232)	320	50	
72.27 (202)	73.47 (232)	74.00 (232)	74.42 (232)	360	50	
76.27 (202)	77.47 (232)	78.00 (232)	78.42 (232)	400	50	
80.27 (202)	81.47 (232)	82.00 (232)	82.42 (232)	450	50	
84.27 (202)	85.47 (232)	86.00 (232)	86.42 (232)	500	50	
88.27 (202)	89.47 (232)	90.00 (232)	90.42 (232)	560	50	
92.27 (202)	93.47 (232)	94.00 (232)	94.42 (232)	630	50	

*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 *

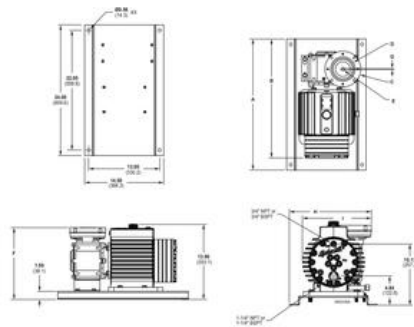
Metallic Pump Heads (gpi)		Pump		Gear		Motor
7 bar	10 bar	15 bar	20 bar	Ratio	rpm	
65.14 (80.27)	68.38 (83.76)	71.43 (88.15)	73.47 (90.56)	30	400	1000
76.19 (93.82)	79.43 (97.91)	82.48 (101.18)	84.47 (103.84)	30	400	
87.24 (106.89)	90.48 (111.58)	93.53 (115.25)	95.47 (118.31)	40	400	
98.29 (120.96)	101.48 (124.58)	104.53 (128.31)	106.42 (131.37)	50	400	
109.34 (135.03)	112.48 (138.65)	115.53 (142.38)	117.42 (145.44)	72	200	
120.39 (149.10)	123.48 (152.72)	126.53 (156.45)	128.42 (159.51)	90	200	
131.44 (163.17)	134.48 (166.79)	137.53 (170.52)	139.42 (173.58)	100	200	
142.49 (177.24)	145.48 (180.86)	148.53 (184.59)	150.42 (187.65)	120	100	
153.54 (191.31)	156.48 (194.93)	159.53 (198.66)	161.42 (201.72)	140	100	
164.59 (205.38)	167.48 (208.99)	170.53 (212.72)	172.42 (215.78)	160	100	
175.64 (219.45)	178.48 (223.06)	181.53 (226.79)	183.42 (229.84)	200	50	3000
186.69 (233.52)	189.48 (237.13)	192.53 (240.86)	194.42 (243.90)	240	50	
197.74 (247.59)	200.48 (251.19)	203.53 (254.92)	205.42 (257.96)	280	50	
208.79 (261.66)	211.48 (265.26)	214.53 (268.99)	216.42 (272.02)	320	50	
219.84 (275.73)	222.48 (279.33)	225.53 (283.06)	227.42 (285.08)	360	50	
230.89 (289.80)	233.48 (293.40)	236.53 (297.13)	238.42 (299.14)	400	50	
241.94 (303.87)	244.48 (307.47)	247.53 (311.20)	249.42 (314.20)	450	50	
252.99 (317.94)	255.48 (321.54)	258.53 (325.27)	260.42 (327.26)	500	50	
264.04 (332.01)	266.48 (335.61)	269.53 (339.34)	271.42 (340.32)	560	50	
275.09 (346.08)	277.48 (349.68)	280.53 (353.41)	282.42 (353.38)	630	50	

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

1 Required Motor kW

P500 Dimensions

P500 Models with Metallic Pumping Head

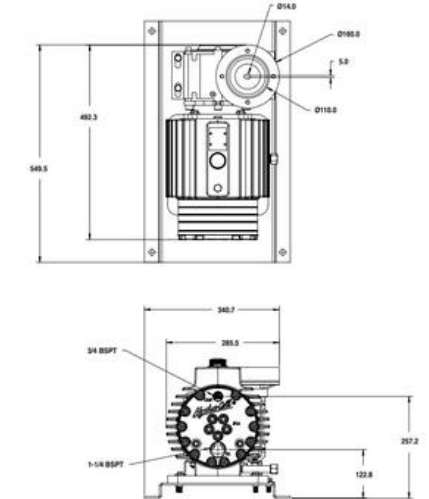


Dimensions in Inches (Millimeters)

Input Frame Size	A	B	C	D	E	F	G	H	I
100-150	17.19 (200.0)	18.00 (203.2)	18.50 (205.7)	18.50 (205.7)	18.50 (205.7)	18.50 (205.7)	18.50 (205.7)	18.50 (205.7)	18.50 (205.7)
150-200	18.00 (203.2)	18.50 (205.7)	19.00 (208.3)	19.00 (208.3)	19.00 (208.3)	19.00 (208.3)	19.00 (208.3)	19.00 (208.3)	19.00 (208.3)
200-250	19.00 (208.3)	19.50 (210.8)	20.00 (213.4)	20.00 (213.4)	20.00 (213.4)	20.00 (213.4)	20.00 (213.4)	20.00 (213.4)	20.00 (213.4)
250-300	20.00 (213.4)	20.50 (215.9)	21.00 (218.5)	21.00 (218.5)	21.00 (218.5)	21.00 (218.5)	21.00 (218.5)	21.00 (218.5)	21.00 (218.5)
300-350	21.00 (218.5)	21.50 (221.1)	22.00 (223.7)	22.00 (223.7)	22.00 (223.7)	22.00 (223.7)	22.00 (223.7)	22.00 (223.7)	22.00 (223.7)
350-400	22.00 (223.7)	22.50 (226.2)	23.00 (228.8)	23.00 (228.8)	23.00 (228.8)	23.00 (228.8)	23.00 (228.8)	23.00 (228.8)	23.00 (228.8)
400-450	23.00 (228.8)	23.50 (231.3)	24.00 (233.9)	24.00 (233.9)	24.00 (233.9)	24.00 (233.9)	24.00 (233.9)	24.00 (233.9)	24.00 (233.9)
450-500	24.00 (233.9)	24.50 (236.4)	25.00 (239.0)	25.00 (239.0)	25.00 (239.0)	25.00 (239.0)	25.00 (239.0)	25.00 (239.0)	25.00 (239.0)
500-550	25.00 (239.0)	25.50 (241.5)	26.00 (244.1)	26.00 (244.1)	26.00 (244.1)	26.00 (244.1)	26.00 (244.1)	26.00 (244.1)	26.00 (244.1)

Representative Drawings (mm)

Metallic Pump Heads



Performance - Flow Capacities and Pressure Ratings

For Synchronous Speed, Self-cooled Motors

Ltr Maximum Flow at Designated Pressure

Ltr Metallic Pump Heads Only		Pump		Gear		Motor
7 bar	10 bar	15 bar	20 bar	Ratio	rpm	
55.1	58.5	61.9	63.5	30	400	1000
65.2	68.6	72.0	73.6	30	400	
75.3	78.7	82.1	83.7	40	400	
85.4	88.8	92.2	93.8	50	400	
95.5	98.9	102.3	103.9	72	200	
105.6	109.0	112.4	114.0	90	200	
115.7	119.1	122.5	124.1	100	200	
125.8	129.2	132.6	134.2	120	100	
135.9	139.3	142.7	144.3	140	100	
146.0	149.4	152.8	154.4	160	100	
156.1	159.5	162.9	164.5	200	50	3000
166.2	169.6	173.0	174.6	240	50	
176.3	179.7	183.1	184.7	280	50	
186.4	189.8	193.2	194.8	320	50	
196.5	199.9	203.3	204.9	360	50	
206.6	210.0	213.4	215.0	400	50	
216.7	220.1	223.5	225.1	450	50	
226.8	230.2	233.6	235.2	500	50	
236.9	240.3	243.7	245.3	560	50	
247.0	250.4	253.8	255.4	630	50	

For 10:1 Turndown, Self-cooled Motors

Ltr Maximum Flow at Designated Pressure

Ltr Metallic Pump Heads Only		Pump		Gear		Motor
7 bar	10 bar	15 bar	20 bar	Ratio	rpm	
55.1	58.5	61.9	63.5	30	400	1000
65.2	68.6	72.0	73.6	30	400	
75.3	78.7	82.1	83.7	40	400	
85.4	88.8	92.2	93.8	50	400	
95.5	98.9	102.3	103.9	72	200	
105.6	109.0	112.4	114.0	90	200	
115.7	119.1	122.5	124.1	100	200	
125.8	129.2	132.6	134.2	120	100	
135.9	139.3	142.7	144.3	140	100	
146.0	149.4	152.8	154.4	160	100	
156.1	159.5	162.9	164.5	200	50	3000
166.2	169.6	173.0	174.6	240	50	
176.3	179.7	183.1	184.7	280	50	
186.4	189.8	193.2	194.8	320	50	
196.5	199.9	203.3	204.9	360	50	
206.6	210.0	213.4	215.0	400	50	
216.7	220.1	223.5	225.1	450	50	
226.8	230.2	233.6	235.2	500	50	
236.9	240.3	243.7	245.3	560	50	
247.0	250.4	253.8	255.4	630	50	

Required Motor kW

0.38	0.57	0.76	0.95	1.14	1.33	1.52	1.71	1.90	2.09
0.57	0.76	0.95	1.14	1.33	1.52	1.71	1.90	2.09	2.28
0.76	0.95	1.14	1.33	1.52	1.71	1.90	2.09	2.28	2.47
0.95	1.14	1.33	1.52	1.71	1.90	2.09	2.28	2.47	2.66
1.14	1.33	1.52	1.71	1.90	2.09	2.28	2.47	2.66	2.85
1.33	1.52	1.71	1.90	2.09	2.28	2.47	2.66	2.85	3.04
1.52	1.71	1.90	2.09	2.28	2.47	2.66	2.85	3.04	3.23
1.71	1.90	2.09	2.28	2.47	2.66	2.85	3.04	3.23	3.42
1.90	2.09	2.28	2.47	2.66	2.85	3.04	3.23	3.42	3.61
2.09	2.28	2.47	2.66	2.85	3.04	3.23	3.42	3.61	3.80

P500 Specifications (Cont'd)

Performance Maximum Flow at Designated Pressure - Imperial *

Metallic Pump Heads (gpi)				Pump		Gear		Motor
100 psi	150 psi	200 psi	250 psi	rpm	Ratio	rpm		
17.48 (202)	18.38 (222)	19.15 (232)	19.47 (232)	30	40	1200	1000	
20.97 (202)	21.43 (222)	21.75 (232)	22.07 (232)	36	50	1440		
24.39 (202)	25.73 (232)	24.20 (232)	24.67 (232)	40	40	1600		
28.27 (202)	34.47 (232)	32.65 (232)	33.06 (232)	60	30	1800		
32.27 (202)	41.47 (232)	37.11 (232)	37.51 (232)	72	25	2160		
36.27 (202)	51.97 (232)	49.49 (232)	49.89 (232)	80	20	2400		
40.27 (202)	60.48 (232)	60.35 (232)	60.74 (232)	120	15	1800		
106.5 (302)	104.4 (302)	100.5 (312)	98.88 (312)	180	10	1800		
141.8 (302)	139.4 (302)	133.8 (312)	128.4 (312)	240	7.5	1800		
212.8 (312)	208.4 (302)	201.2 (276)	195.3 (302)	360	5	1800		
283.6 (312)	278.4 (302)	263.2 (276)	258.4 (302)	480	3.5	1800		
354.4 (312)	349.4 (302)	334.2 (276)	329.4 (302)	600	3	3600		