

P300

Doseringspump

P300MSGSSA10S
 PUMP WITH GEARBOX AND BASEPLATE



HYDRA-CELL®
 SEAL-LESS PUMP TECHNOLOGIES

- Flöde 1 - 300 l/h
- Tryck max. 172 bar
- Metallutförande
- Tätningslös och klarar torrkorning
- Finns i ATEX utförande



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.

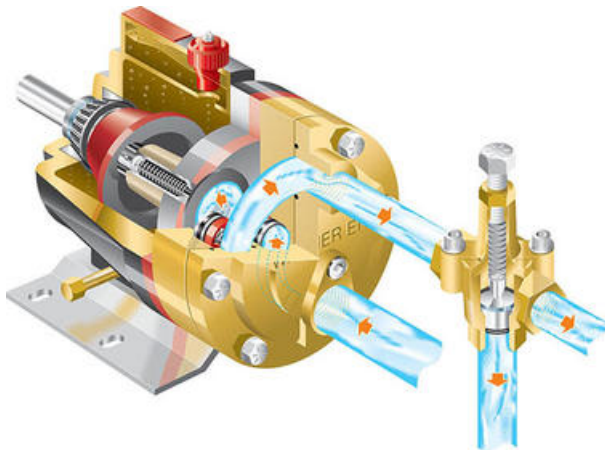
Pumparna har ingen genomgående axel med tätningar och mediet kommer aldrig i kontakt med mekanismen.

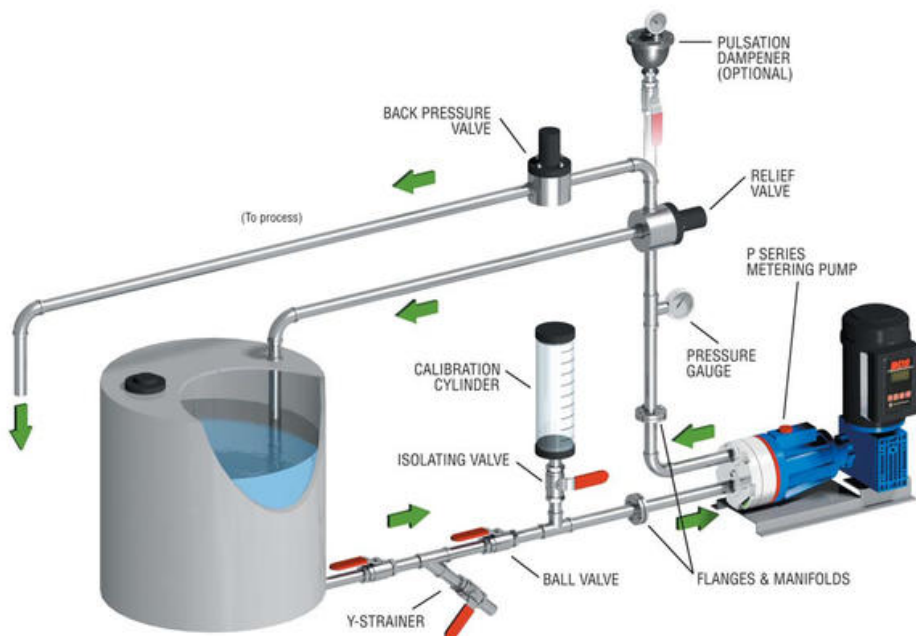
Membranen är avlastade med jämnt tryck över hela ytan, vilket ger dem mycket lång livslängd.

HydraCell-pumparna som arbetar enligt förträngningsprincipen, är självsugande, energisnåla och torrkorningssäkra.

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	EPDM, FKM, PTFE, Buna-N
Ventilsäten	Nitronic 50, Hastelloy C, Tungstenkarbid
Ventiler	Nitronic 50, Hastelloy C, Tungstenkarbid
Fjäder	Elgiloy, Hastelloy C
Fjäderhållare	Hastelloy C
Flöde	1 - 300 l/h
Tryck	Max. 172 bar
Inloppstryck	Max. 34 bar
Temperatur*	Max. +120 °C (Beroende på materialval m.m.)*
Partikelstorlek	Max. 0,2 mm
Viskositet**	Max. 1000 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. 1 l (Oljenivån skall vara ca. 1 cm under helt fylld hydrauldel)
Vikt	23,3 kg

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

** Vid viskositeter över 500 cP kontakta oss.

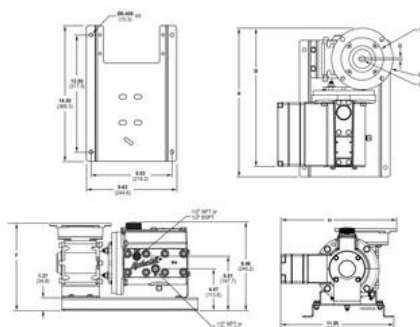
*** För applikationer i explosionsfarlig miljö kontakta oss.

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Teknisk data

Flöde max	76 l/h
Tryck max	172 bar
Systemtryck max	34 bar
Anslutning inlopp	1/2" BSPT
Anslutning utlopp	1/2" BSPT
Material Bottenplatta	Rostfritt stål
Material Fjäderhållare	Hastelloy C
Material Membran	FKM
Material Pumphus	SS 316L
Material Ventiler	Nitronic 50
Material Ventilfjädrar	Elgiloy
Material Ventilsåten	SS 316L
Axeldimension	Hållaxel 14 mm
Rotation	Valfri
Utväxling	10:1 - IEC 71-B5
Temperaturområde till	120 °C
Viskositet max	1000 cP
Olja	Livsmedelsolja H1 (K)
Oljevolym Hydrauldel	1,05 l
Partikelstorlek	Max. 0,2 mm
Vikt	24,7 kg

P300 Models with Metallic Pumping Head

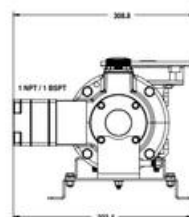
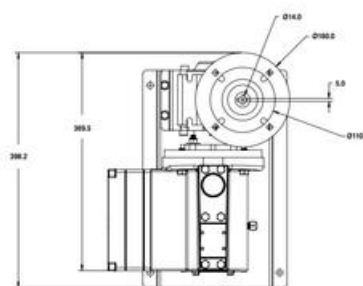


Dimensions in Inches (Millimeters)

Input Frame Size	A	B	C	D	E	F	G (Output Port)	H
NEMA 540	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)
NEMA 560	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)
IEC 53 BA	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)
IEC 53 BA	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)
IEC 53 BA	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)
IEC 53 BA	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)
IEC 53 BA	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)
IEC 53 BA	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)
IEC 53 BA	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)	16.75 (425.5)

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
10.2	10.2	5.5	25
11.8	11.8	5.5	25
13.4	13.4	5.5	25
15.0	15.0	5.5	25
16.6	16.6	5.5	25
18.2	18.2	5.5	25
19.8	19.8	5.5	25
21.4	21.4	5.5	25
23.0	23.0	5.5	25
24.6	24.6	5.5	25
26.2	26.2	5.5	25
27.8	27.8	5.5	25
29.4	29.4	5.5	25
31.0	31.0	5.5	25
32.6	32.6	5.5	25
34.2	34.2	5.5	25
35.8	35.8	5.5	25
37.4	37.4	5.5	25
39.0	39.0	5.5	25
40.6	40.6	5.5	25
42.2	42.2	5.5	25
43.8	43.8	5.5	25
45.4	45.4	5.5	25
47.0	47.0	5.5	25
48.6	48.6	5.5	25
50.2	50.2	5.5	25
51.8	51.8	5.5	25
53.4	53.4	5.5	25
55.0	55.0	5.5	25
56.6	56.6	5.5	25
58.2	58.2	5.5	25
59.8	59.8	5.5	25
61.4	61.4	5.5	25
63.0	63.0	5.5	25
64.6	64.6	5.5	25
66.2	66.2	5.5	25
67.8	67.8	5.5	25
69.4	69.4	5.5	25
71.0	71.0	5.5	25
72.6	72.6	5.5	25
74.2	74.2	5.5	25
75.8	75.8	5.5	25
77.4	77.4	5.5	25
79.0	79.0	5.5	25
80.6	80.6	5.5	25
82.2	82.2	5.5	25
83.8	83.8	5.5	25
85.4	85.4	5.5	25
87.0	87.0	5.5	25
88.6	88.6	5.5	25
90.2	90.2	5.5	25
91.8	91.8	5.5	25
93.4	93.4	5.5	25
95.0	95.0	5.5	25

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
10.2	10.2	5.5	25
11.8	11.8	5.5	25
13.4	13.4	5.5	25
15.0	15.0	5.5	25
16.6	16.6	5.5	25
18.2	18.2	5.5	25
19.8	19.8	5.5	25
21.4	21.4	5.5	25
23.0	23.0	5.5	25
24.6	24.6	5.5	25
26.2	26.2	5.5	25
27.8	27.8	5.5	25
29.4	29.4	5.5	25
31.0	31.0	5.5	25
32.6	32.6	5.5	25
34.2	34.2	5.5	25
35.8	35.8	5.5	25
37.4	37.4	5.5	25
39.0	39.0	5.5	25
40.6	40.6	5.5	25
42.2	42.2	5.5	25
43.8	43.8	5.5	25
45.4	45.4	5.5	25
47.0	47.0	5.5	25
48.6	48.6	5.5	25
50.2	50.2	5.5	25
51.8	51.8	5.5	25
53.4	53.4	5.5	25
55.0	55.0	5.5	25
56.6	56.6	5.5	25
58.2	58.2	5.5	25
59.8	59.8	5.5	25
61.4	61.4	5.5	25
63.0	63.0	5.5	25
64.6	64.6	5.5	25
66.2	66.2	5.5	25
67.8	67.8	5.5	25
69.4	69.4	5.5	25
71.0	71.0	5.5	25
72.6	72.6	5.5	25
74.2	74.2	5.5	25
75.8	75.8	5.5	25
77.4	77.4	5.5	25
79.0	79.0	5.5	25
80.6	80.6	5.5	25
82.2	82.2	5.5	25
83.8	83.8	5.5	25
85.4	85.4	5.5	25
87.0	87.0	5.5	25
88.6	88.6	5.5	25
90.2	90.2	5.5	25
91.8	91.8	5.5	25
93.4	93.4	5.5	25
95.0	95.0	5.5	25

- 1. The motor RPM and based on ambient temperature conditions up to 40°C. For ambient temperatures above 40°C, please contact Motor Manufacturer.
- 2. Contact factory for performance specifications.
- 3. Based on using 40 bar.
- 4. Maximum continuous motor speed is also given in full pressure.
- 5. For maximum or reduced pressure duties, please contact Motor Manufacturer.

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- 2. Contact factory for performance specifications.
- 3. Based on using 40 bar.
- 4. Maximum continuous motor speed is also given in full pressure.
- 5. For maximum or reduced pressure duties, please contact Motor Manufacturer.

Mechanical Adjustment Controller for ATEX/Explosive Areas

All Max/Max flow rates in litres/hour

100 bar	172 bar	Pump Size	Model Number	Required Motor Size & Frame
10.2	11.8	1.1	1001	0.75kW / EC 71 / A 80a
13.4	15.0	1.5	1002	0.75kW / EC 71 / A 80a
16.6	18.2	2.0	1003	0.75kW / EC 71 / A 80a
19.8	21.4	2.5	1004	0.75kW / EC 71 / A 80a
23.0	24.6	3.0	1005	0.75kW / EC 71 / A 80a
26.2	27.8	3.5	1006	0.75kW / EC 71 / A 80a
29.4	31.0	4.0	1007	0.75kW / EC 71 / A 80a
32.6	34.2	4.5	1008	0.75kW / EC 71 / A 80a
35.8	37.4	5.0	1009	0.75kW / EC 71 / A 80a
39.0	40.6	5.5	1010	0.75kW / EC 71 / A 80a
42.2	43.8	6.0	1011	0.75kW / EC 71 / A 80a
45.4	47.0	6.5	1012	0.75kW / EC 71 / A 80a
48.6	50.2	7.0	1013	0.75kW / EC 71 / A 80a
51.8	53.4	7.5	1014	0.75kW / EC 71 / A 80a
55.0	56.6	8.0	1015	0.75kW / EC 71 / A 80a
58.2	59.8	8.5	1016	0.75kW / EC 71 / A 80a
61.4	63.0	9.0	1017	0.75kW / EC 71 / A 80a
64.6	66.2	9.5	1018	0.75kW / EC 71 / A 80a
67.8	69.4	10.0	1019	0.75kW / EC 71 / A 80a
71.0	72.6	10.5	1020	0.75kW / EC 71 / A 80a
74.2	75.8	11.0	1021	0.75kW / EC 71 / A 80a
77.4	79.0	11.5	1022	0.75kW / EC 71 / A 80a
80.6	82.2	12.0	1023	0.75kW / EC 71 / A 80a
83.8	85.4	12.5	1024	0.75kW / EC 71 / A 80a
87.0	88.6	13.0	1025	0.75kW / EC 71 / A 80a
90.2	91.8	13.5	1026	0.75kW / EC 71 / A 80a
93.4	95.0	14.0	1027	0.75kW / EC 71 / A 80a

P300 Specifications (Cont'd)

Performance Maximum Flow at Designated Pressure - Imperial

Metallic Pump Heads (gph)				Pump rpm	Gear Ratio	Motor rpm	
100 psi	500 psi	1500 psi	2500 psi				
3.221 (5)	3.183 (5)	3.014 (5)	2.741 (5)	30	60:1	1800	
3.895 (5)	3.849 (5)	3.655 (5)	3.350 (5)	36	50:1		
4.839 (5)	4.802 (5)	4.607 (5)	4.272 (5)	45	40:1		
6.039 (5)	6.048 (5)	6.194 (5)	5.786 (5)	60	30:1		
7.999 (5)	7.881 (5)	7.463 (5)	6.998 (5)	72	25:1		
10.04 (5)	9.880 (5)	9.368 (5)	8.815 (5)	90	20:1		
13.44 (5)	13.21 (5)	12.54 (5)	11.84 (5)	120	15:1		
20.24 (5)	19.88 (5)	18.89 (5)	17.90 (1)	180	10:1		
27.03 (5)	26.54 (5)	25.24 (5)	23.96 (1)	240	7.5:1		
40.63 (5)	39.87 (5)	37.93 (1)	36.08 (1)	360	5:1		
54.23 (5)	53.20 (5)	50.63 (1)	48.19 (1)	480	7.5:1		3600
81.42 (5)	79.85 (1)	76.02 (2)	72.43 (3)	720	5:1		

() Required Motor hp

Performance Maximum Flow at Designated Pressure - Metric

Metallic Pump Heads (lph)				Pump rpm	Gear Ratio	Motor rpm	
7 bar	34 bar	103 bar	172 bar				
10.16 (0.18)	10.04 (0.18)	9.51 (0.25)	8.648 (0.55)	25	60:1	1500	
12.29 (0.18)	12.14 (0.18)	11.53 (0.25)	10.57 (0.55)	30	50:1		
15.58 (0.18)	15.40 (0.18)	14.53 (0.37)	13.47 (0.55)	37.5	40:1		
20.94 (0.18)	20.66 (0.18)	19.54 (0.37)	18.25 (0.55)	50	30:1		
25.23 (0.18)	24.86 (0.18)	23.54 (0.37)	22.07 (0.76)	60	25:1		
31.66 (0.18)	31.17 (0.18)	29.55 (0.37)	27.81 (0.76)	75	20:1		
42.39 (0.18)	41.68 (0.25)	39.56 (0.55)	37.36 (0.75)	100	15:1		
63.83 (0.18)	62.70 (0.25)	60.59 (0.55)	56.47 (0.75)	150	10:1		
85.28 (0.18)	83.72 (0.25)	79.61 (0.55)	75.58 (1.1)	200	7.5:1		
128.2 (0.18)	125.8 (0.37)	119.7 (0.75)	113.8 (1.5)	300	5:1		
171.1 (0.55)	167.8 (0.75)	159.7 (1.1)	152.0 (1.5)	400	7.5:1		3000
256.8 (0.55)	251.9 (0.75)	239.8 (1.5)	226.5 (1.5)	600	5:1		

() Required Motor kW